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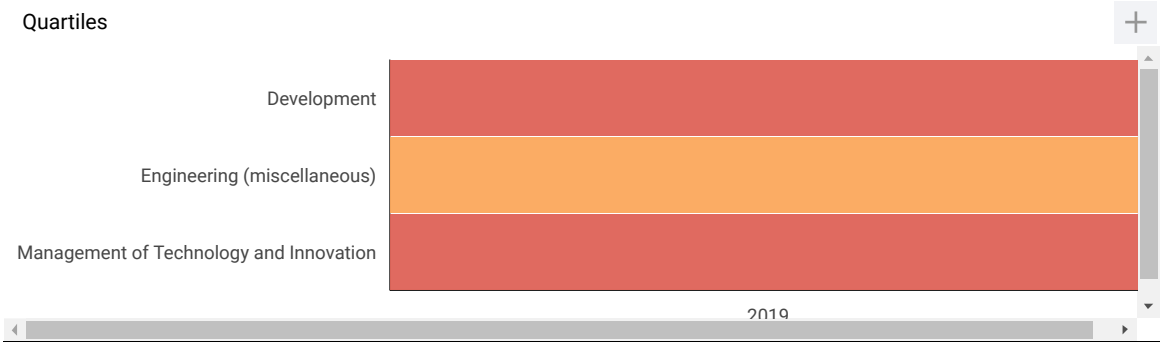

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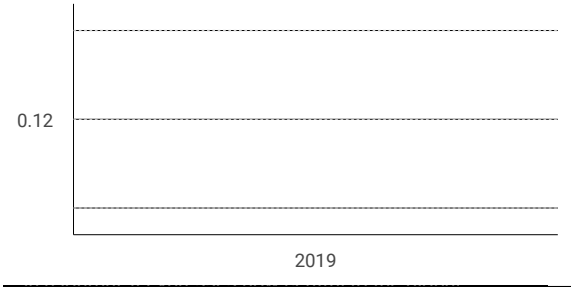

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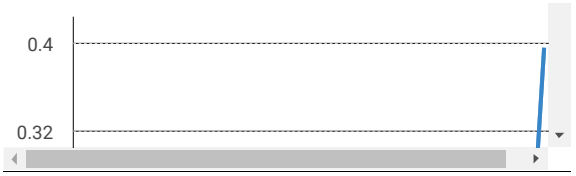

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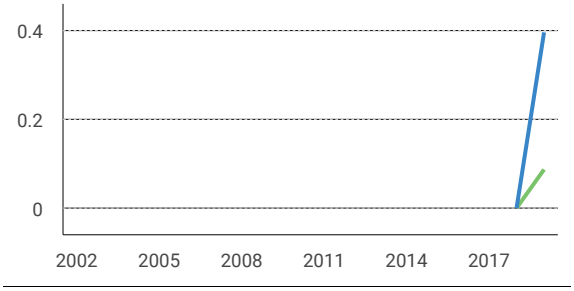

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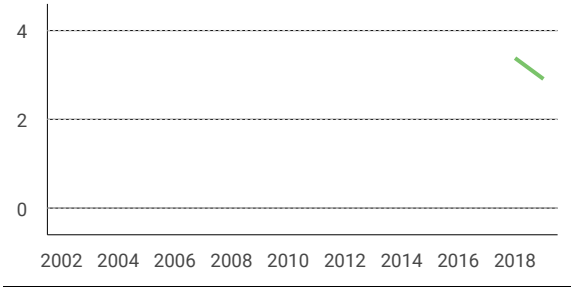

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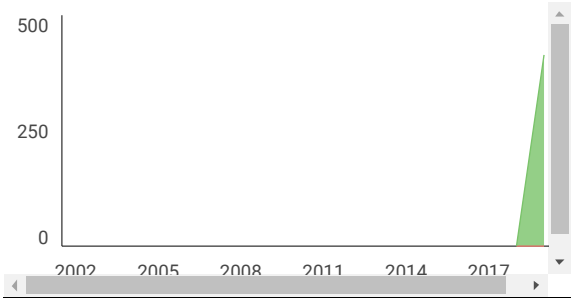

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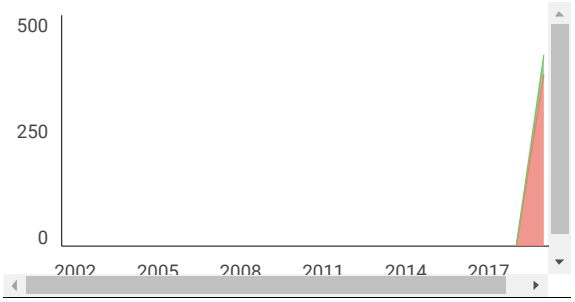

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Work Performance Of Teacher On Ambon State High School Indonesia

Johny Urbanus Lesnussa

The purpose of the study is to find out that work performance can be influenced by compensation, work motivation and discipline. Methods in collecting research data using questionnaires, interviews and documentation. The sample in this study were 66 teachers at Ambon State High School . The method of data analysis uses descriptive methods and quantitative methods, namely by using multiple linear regression which is used to measure work performance with the influence of human resources consisting of compensation, work motivation and teacher job discipline. The results of the study are based on the F test of predetermined independent variables namely compensation, work motivation and work discipline jointly have a positive and significant effect on the dependent variable (teacher's work performance). Through testing the correlation coefficient, it was found that the level of correlation or relationship between compensation, work motivation and work discipline towards increasing teacher work performance in Ambon State High School . And the compensation variable is the dominant factor in influencing teacher work performance in Ambon State High School.

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Protection Of Indonesian Domestic Workers: A Study Of Law No. 13 Of 2003 Concerning Labor

Adnan Hamid

The existence of domestic helpers or commonly referred to as household assistants or also known as domestic workers is increasingly needed at this time. However, the increasing need for domestic workers is not followed by the policy of providing protection for domestic workers themselves. Even the existence of domestic workers tends to be underestimated and even leads to forms of exploitation. The number of cases affecting domestic workers shows that protection for domestic workers can no longer be postponed. Meanwhile in Indonesia the existence of Law No. 13 of 2003 concerning Labor is considered still not providing protection to domestic workers itself because the relationship between domestic workers and employers is not a work relationship as referred to in the Act. The employment relationship referred to in the Manpower Act is the relationship between employers and workers, while the Entrepreneur referred to in the Act is the person who runs the company. Therefore the employer in the household sector that makes a work agreement to do work with domestic workers cannot be categorized as an entrepreneur. Because the relationship between domestic workers and employers, does not include employment relations as regulated in the Manpower Act. The policies that regulate the protection of domestic workers are outlined in the Minister of Manpower Regulation (Permenker). Permanaker, which regulates the protection of domestic workers, is felt to be not good enough because in terms of legislation the position is weak, while in terms of material protection provided it seems only exists and has not specifically provided protection for domestic workers. On the other hand, the draft protection law for domestic workers that has been prepared since 2004, has not yet been discussed in the National Legislation Program. Therefore, it is time for the government as an Executive institution together with the DPR as a Legislative institution to be encouraged to truly realize the draft law on the protection of domestic workers into law.

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Conflicts: Their Types, And Their Negative And Positive Effects On

Organizations

Abdul Fattah Farea Hussein, Yaser Hasan Salem Al-Mamary

In the past, many researchers and writers thought that conflict has only negative and harm impact on the organization. Most of previous studies show only the negative view of Conflicts. This study aims to highlight the different types of conflicts, and shows positive and negative effects of conflict in organizations.

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The Effect Of Leadership And Diversity On Organizational Commitments In BRI Bank Bondowoso

Nurul Setianingrum, Handriyono

Banking is an intermediary institution that collects and distributes funds, and sells other services. Therefore banks are increasingly aware of the importance of service, the better the service, the bank will progress and develop. Service is very closely related to human resources or labor. The diversity of human resources in it greatly determines the success of the company. The manager's role is to unite the diversity of existing human resources so that the workforce can do its job and feel part of the organization and commit not to leave the organization. This study aims to analyze the influence of leadership and diversity on organizational commitment at BRI Bank Bondowoso. This research was conducted with employees of BRI Bank Bondowoso. Data collection by observation, while determining the respondents with purposive sampling method. Data analysis used multiple linear regression analysis.

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The Level Of Student Engagement Based On Gender And Grade On History Subject Of Senior High School Students In Jember Regency

Fernanda Prasky Hartono, Nurul Umamah, Sumarno, Rully Putri Nirmala Puji

The study aims to analyze the student engagement level based on gender and class on history subjects of high school students in Jember. Student engagement theory refers to Frederick, Blumenfeld, and Paris that consists

of three main components, namely behavioral engagement, emotional engagement, and cognitive engagement. Moreover, 354 students of class X, class XI, and class XII in Social Sciences majors from five State Senior High Schools in Jember involved as the reasearch sample. Data were analyzed by usng two-way Multivariate Analysis of Variance (MANOVA) using the SPSS 23 for Windows program. The findings indicated that there was a significant difference in student engagement level based on gender (0.05> 0,000) and grade (0.05> 0,000). The score of student engagement of female students (mean = 3.66) was higher than that of male students (mean = 3.46). Student engagement score in grade X (mean = 3.71) was higher than in grade XI (mean = 3.53) and grade XII (mean = 3.43). Researchers suggested the educators to do the right learning planning by paying attention to differences of student characteristics to achieve historical learning goal. For further researcher, it recommends to examine the factors causing female students and other students who are in the lower classes to have a higher level of student engagement.

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Features Of Staff Motivation In The Field Of Information Technology

Lyudmyla Krupelnytska, Vsevolod Zelenin, Nataliia Ortikova, Viktoriia Sytnyk, Olga Emishyants

A total of 120 respondents participated, of which 41 people were mid-level programmers, 27 respondents were high-level professionals (architects and project managers), and 52 persons were system administrators working in public organizations. In the study, OCAI methods, the methods of diagnosing the socio-psychological attitudes of the individual in the motivational and need-based field by O.F. Potemkina, the projective test "A man picking apples from a tree" were used. Differences in the value-motivational sphere of the individual, attitudes towards themselves, the company and its corporate culture among specialists in the field of information technology were found. Thus, middle-level programmers perceive corporate culture as bureaucratic and market-oriented, are motivated by the labor process, outcome, freedom, and the work itself. The world is perceived as a resource, one of the leading values is career growth. High-level programmers perceive the corporate culture of their IT companies as market and adhocratic, and are motivated to achieve results. The world is perceived as a resource,

in need of technical transformation and a place for creative expression. System administrators are motivated by process, altruism and freedom, do not pay special attention to the features of corporate culture and perceive the world as a source of stability.

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Trigonometry Learning Device Based Guided Discovery For High School Students Of Class X

Armiati, Yerizon, Reni Oktaviani Hersika

Guided discovery based learning is one of the instructional models suggested in the 2013 curriculum, as this learning is excellent in assisting the development of students' cognitive abilities. But in practice many teachers have difficulty to implement the learning. This condition is also experienced by teachers of mathematics, whereas of the eight objectives of mathematics learning contained in the curriculum of 2013 four of them related to the cognitive abilities of students. Difficulties occur because most teachers are already comfortable with conventional learning that is generally routine. Conventional learning usually begins with the giving of concepts by the teacher, giving examples of concepts, giving practice according to the next example providing a home task that is also similar to the example. In addition, learning-based learning tools based on discovery of guided learning for mathematics have not been developed. This paper presents guided learning-based mathematics learning materials for trigonometric materials for high school students of class X. This device is obtained through a development study using the Plomp model consisting of three stages: preliminary research stage, development stage and assessment stage. Based on all the steps that have been obtained, the learning tools based on the discovery of guided for trigonometric material for high school students of class X are valid, practical and effective.

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Government Expenditure, Poverty And Income Inequality In Indonesia: New Evidence From Village Funds

Dian Dewi Rachma, Rafael Purtomo Somaji, Alwan Sri Kustono

This research measures the impact of the contribution of government policy to the paradigm of 'developing Indonesia from the periphery', namely village fund contributions, economic growth and the Human Development Index for poverty alleviation and village income inequality in Indonesia. In addition, it sought the effectiveness of government policies in channeling village funds to alleviate poverty and income inequality in the village. Third, look for a policy response to the contribution of village funds to reducing poverty and income inequality in the village. This study uses the estimated Least Square Panel (PLS) with quarterly panel data from 2015Q1 to 2017Q4. The results of the analysis found that the contribution of village fund policies had a significant impact on poverty and village income inequality. Economic growth has a significant impact on alleviating poverty and income inequality in the village. And the human development index alleviates poverty and income inequality in the village.

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Abdullah Munshi As The Captured Character In His Own Autobiography

Rahimah Hamdan, Arba&#65533;ie Sujud, Nik Nur Hasmiru Husna Bahari

This paper was aimed at identifying the captive attitude of Abdullah Munshi in his work and to analyse how the West came to recognise him as &#65533;The Father of Modern Malay Literature&#65533;. Abdullah Munshi&#65533;s courage in challenging the existing literary conventions and in introducing a Western style of writing to Malay audiences earned him this title. This recognition made him the most credible Malay literary figure from the perspective of the Western colonialists, especially with his first autobiographical work titled Hikayat Abdullah. His reputation continued to rise until several scholars began to dispute his credibility by arguing that he did not deserve to be recognised as such. Abdullah Munshi was labelled as an individual who was captivated by everything concerning his Western benefactors, as illustrated in his magnum opus. With this phenomenon in mind, this study applied the text analysis method to the first Malay autobiography, the Hikayat Abdullah, based on Syed Hussein Alatas&#65533; concept of a captive character. The findings of the study revealed that Abdullah Munshi conformed to five criteria in this concept of a captive character, namely, a person who copies the activities of Westerners and regards them as beneficial; a person who is unable to raise new questions

in life; a person who regards Western knowledge to be the best; a person who accepts the suggestions of Westerners without objection; and a person who thinks so highly of the West that he fails to realize that he himself has become a captive. This means that Abdullah Munshi was a person who was a captive of the West, as he himself revealed through his autobiography. To summarize, it can be proven that the recognition accorded to Abdullah Munshi as ﷺThe Father of Modern Malay Literatureﷺ, which led to the separation of Malay literature into two periods, was the best agenda by the West to ensure the relevance of their presence in the colonies, particularly in the Malay World.

[View Full Paper] [Download] [References] **43-49**

Lip Feature Extraction And Movement Recognition Methods: A Review

Priyanka P. Kapkar, S.D.Bharkad

Research on methods of biometric has gained attention in recent yearﷺs and brought an increase in security concepts. In the day-to-day developed world attitude towards terrorism has influenced people and their government bodies to take action and more alertness in the security issues. For this purpose, many biometric techniques are developed and been improved with the most successful security applications. Lip reading is one of the biometric like fingerprint, iris etc. Lip feature extraction and lip movement recognition are the challenging task. Many researchers proposed methods for feature extraction and lip movement recognition. In this paper a detail survey of existing feature extraction and feature classification algorithms are presented. Lip reading is basically converting the lip movement into some information. This can be used as text or unique feature for biometrics. It is still under developing the technology of lip reading. Researchers are still finding the new methods to increase the efficiency of the lip reading systems.

[View Full Paper] [Download] [References] **50-55**

Measurment Of Costumer Satisfaction Using Self-Management And Emotional Intelegence

Suharto, Ngaliman, Bambang Satriawan

The aim of this research was to determine

the effect of self-management. emotional intelligence. customer satisfaction. The quantitative approach is implemented in this research. Methods of research surveys on 160 customers were taken by accidental sampling and questionnaires as research instruments. The findings indicate that: self-management has a positive direct effect on emotional intelligence. self-management directly positive effect on customer satisfaction. emotional intelligence has a direct positive effect on customer satisfaction

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Improvement On Service Quality Of Automobile Service Center

Ashish Jain, Dr. Devendra S. Verma

For an organization customer satisfaction is very important factor. The main aim of this research is measured after sales service performance of the Automobile service center to increase the satisfaction level of customers. In this research, preventive maintenance service of 100-110cc Bike segments in an automobile dealership have been considered for increased satisfaction level of customers. This research uses SERVQUAL model to measure satisfaction level of the customers linked with Quality Function Deployment to translate Voice of the Customers into Technical Requirements and House of Quality is used to compare the Voice of Customers with the Technical Requirements to determine their respective relationships for Service Quality improvement. Improvement on Service quality in the automobile sector on 100-110cc Bike Segments are not constantly practiced. In the current situation the demand of 100-110cc bike is higher so service quality is extremely important. To achieve higher customer satisfaction level, we will have to provide excellent quality as well as high grade preventive maintenance services.

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Financing, Cash Flow, Risk, Profitability And Islamic Social Responsibility Of Islamic Banks In Indonesia

Dwi Indriani Fidiastutik, Ahmad Roziq

This study aims to examine the effect of financing, cash flow on Islamic social responsibility with financing risk, profitability

asintervening variables in sharia commercial banks in Indonesia for the period 2015-2018. This type of research is explanatory research. The population during the observation period is 14 Islamic Commercial Banks registered with the Financial Services Authority. The sampling technique is purposive sampling and obtained 8 Islamic Commercial Banks. The analysis technique uses path analysis with SmartPLS 3. The test results show that financing does not have a significant effect on financing risk, financing risk has no significant effect on profitability while cash flow has a significant effect on financing risk, and profitability has a significant effect on Islamic social responsibility. Companies are advised to pay more attention to cash flow management in order to overcome the risk of financing and do more disclosures so as to attract investors to invest more in the company.

[View Full Paper] [Download] [References] **69-74**

Celebrities And Celebgrams Of Cosmetics: The Mediating Effect Of Opinion Leadership On The Relationship Between Instagram Profile And Consumer Behavioral Intention

Firda Istania, Intan Putri Pratiwi, Mizla Felia Yasmine, Artha Sejati Ananda

Instagram is increasingly becoming popular among Indonesian consumers as a source of reference, thereby leading to the emergence of online influencers such as “celebrities” and “celebgrams”. The research purpose is to study if characteristics of an influencer’s Instagram account affect the influencer’s opinion leadership as well as its consequences on the behavioral intention of Indonesian cosmetic product consumers. The study uses a quantitative survey conducted on 250 Instagram users who follow selected celebgrams or celebrities who endorse cosmetic products. A hypothesized model is built to analyze the antecedents and consequences of the opinion leadership of the two types of influencer. As for opinion leadership antecedents, both models show that originality of the Instagram account is crucial in building up the opinion leadership, while quality and quantity of the Instagram posts are not significant factors. Perceived uniqueness of the account seems to affect the opinion leadership only for celebrity accounts and not for the celebgrams”. Further, findings suggest that opinion leadership affect consumer behavioral intentions, namely intentions to interact, recommend, and follow

advice. Finally, the account's perceived fit with personal interest is not affecting the relationship between opinion leadership and the intention to follow advice for both celebrity and celebgram. The findings suggest some important implications for cosmetic companies in utilizing opinion leaders as their promoters, and also for micro-influencers that are beauty gurus who wish to learn the important key factors to attract more Instagram followers and build their social media communities.

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The Role Of Food Bloggers In Branding Activities For Traditional Food

Benny Susanto, Ulani Yunus

Indonesia is rich for its traditional food. In addition, in this modern era, social media has been evolving rapidly. There is a tendency where certain people posting the food that they have tasted. They post it to their social media. These people are usually known as food bloggers. The purpose of this research is to find out (1) how food bloggers play their role in branding the traditional food (2) how is the process of branding the traditional food by food bloggers. The method that is used in this research is interviewing people that like to go to restaurants that offer Indonesian traditional food. The result of this research is; it is found that food bloggers play their role in branding Indonesian traditional food to their followers. The process of traditional food branding starts with coming to the restaurants and post the picture of the food to social media and thus resulting feedback from their followers.

[View Full Paper] [Download] [References] **87-90**

The Development Of Asset Liquidity Management Learning Based On Online Research And Trade As A Financial Inclusion Strategy For Students

Nurul Setianingrum - Nur Hidayat

The aim of this study was to study research-based learning and online trading by utilizing virtual laboratories as literacy learning models for liquidity management (ALMA) and capital markets in the Indonesia Stock Exchange. The research sample was 169 students from the IAIN Jember Faculty of

Economics and Islamic Business who were and had taken the ALMA and Capital Market Courses. The analytical method with a behavioral approach adopts the use of Technology Acceptance Models (TAM) and descriptive statistical analysis techniques. The results of this study showed that students were easy to use, easy to learn, and quickly became proficient and easier than theory (more than 50%), consequently, the learning became more interesting, it is not boring and effective to motivate the research and capital market certification.

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Creating Equitable Farmland Pawning Regulation (Case In Indonesia)

Nurhayati. A

This research aims to know find out factors creating equitable farmland pawning regulation. This type of research is the study of normative law and supported by sociological (empirical) writing. The location of this research is the Labuhan Batu Utara Regency, North Sumatera, Indonesia. The results of the study concluded that the regulations regarding the pledge of agricultural land formed by the Government were less socialized. This has an impact on rural communities who do not know that the Government has established/issued regulations on pawns of new agricultural land, which can more or less complete the pledge of agricultural land according to Customary Law. So far, they only know and are guided by regulations regarding pawning of agricultural land, which is Customary Law. Many land pawns last a very long time, many years, decades and some are continued by pawner heirs and pawnbrokers because the pawners are unable to redeem their land again and this is very detrimental to their lives the pawners. To the extent that at present there are people who have not been able to redeem the agricultural land that they pawned before Indonesia's independence.

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Scaling Of Student T-Distribution And Properties Of L€vy-Student Processes

K.W.S.N. Kumari

The Student t-distribution can be applied in financial studies as heavy-tailed substitute to

the normal distribution. The aim of this study is to explore the properties of Student t-distribution and L$\hat{e}$vy -Student processes under finance. For a suitable modification of the L$\hat{e}$vy measure of Student t-distribution, an explicit expression of its Fourier transform was calculated. It was shown that how the Fourier inversion of this function, which yields the density of the L$\hat{e}$vy measure. Further, L$\hat{e}$vy-student process is derived that nests the Brownian motion with subordinated by GIG distribution as parameters special case.

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Application Of Queuing Theory On A Food Chain

Abhishek Yadav , Dr. Nagendra Sohani

In their daily life people go to many places such as hotels, hospitals, banks etc. to avail some kinds of services and the biggest problem that they face there is the formation of long queues and high waiting time. It affects customer in a negative way and harms the growth of business. To grow in today's competitive market a firm always need to improve its services and should focus on satisfying customer$\hat{e}$s needs in best possible way and apply a strategy that suits the firm. To pursue quality education students living out of station depends on food services for their food requirement and as the population of students is very high it causes load on food chains and they always run out of capacity and often fails to provide a quality service. This paper studies and evaluates queuing system and operating characteristics of a food chain by applying queuing theory. It focuses on queuing modeling of the system and finding ways to improve service and reduce waiting time by calculating arrival, departure, queue length etc. It also aims at finding a balance between cost of providing service and loss due to high waiting time, so that system can operate at an optimized minimum possible cost. The study shows that the food chain needs to increase seating capacity and instead of the current m/m/1 queuing model, a multi-server model will best suit the food chain. The study also consists of a survey to find potential customers that can join the food chain if waiting time of the system decreases. The survey also aims to find problems in the food chain that are the reasons behind high waiting time and eliminate them.

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Employee Relations In Micro, Small And Medium Enterprises In India

Mithun S Ullal, Dr. Iqbal Thonse Hawaldar, Dr. Vishal Samartha

This research article looks at all the facets of employee relations over the years and its impact on firm's productivity. The paper investigates literature on employee relations along with case studies and other related articles. It identifies positioning of consultations, collective bargaining and representational aspects of employee relations. The article finds that employee relations is different from what it was a decade ago. Trade unions in India have fallen on the wayside as companies prefer bargaining based on competition rather than negotiation, consultations and collective bargaining with unions. The changes in employee relations has mainly due to reference being the enterprise over industry. The rise of Micro, Small and Medium enterprises in Indian Tier-3 cities has given rise to importance shifting towards collective interests of employers in these organisations. This has resulted in employee relations becoming more relative to employers than employees in the last decade.

[View Full Paper] [Download] [References] 117-121

Development Of Product Oriented Modules On Learning Building Materials For Civil Engineering Students

Kinanti Wijaya, Ganefri, Fahmi Rizal, Syafiatun Siregar

This study aims to produce learning modules that are valid, effective and practical for learning product oriented building materials. The type of this research is R&D using the ADDIE development model. The form of data is in qualitative and quantitative data obtained through questionnaires. Data analysis techniques used descriptive statistics and reliability testing using Cronbach alpha with SPSS. The results of the study indicate that the module developed meets the demands of validity based on expert judgment analyzed using the Aiken index coefficient. Module practicality is also fulfilled through positive responses from the lecturers and students as users. The ability of lecturers and students to produce products in the field of building materials is very good. In addition, student learning outcomes are included in the very satisfying category showing that the modules developed meet the effective criteria. Then the product-oriented

module that is developed is feasible to be used for civil engineering students in an effort to improve students' cognitive abilities and skills.

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Evaluation Of Travel Delay Cost Associated With The Traffic In Metro-Infrastructure Project

Mayank K. Nawhal, Smita V. Pataskar

Infrastructure project has direct positive impact on the growth of nation and local economy of the country. Despite of this fact, infrastructure projects especially in the urban areas generates serious environmental nuisances for the surrounding communities and have unintentional adverse impact on their surrounding environment. These adverse impacts on the neighboring communities are known as social cost. Social cost is widely acknowledge but are rarely considered in design, planning or bid evaluation phases of construction projects in India. It is difficult to quantify in monetary terms but some attempts are made, which gives a very significant value of total social cost and is consumed by travel delay only. This paper focuses on the evaluation of significant percentage of travel delay cost associated with Pune Metro Infrastructure Project. A study is conducted for a span from PaudPhata to Nal Stop and Nal stop to Khandoba Chowk, where an attempt is made to quantify the social cost associated with travel delay for four wheelers and two wheelers only. The results shows that the traffic flowing from PaudPhata to Nal Stop and vice versa, had generate nearly up to 7.02% of social cost, whereas for the span from Nal Stop to Khandoba Chowk and vice versa have given value of 5.22 % to the total cost of construction for the estimated construction period of 3 years. This social cost is born by communities travelling through the study span, so to minimize the social cost some measures are to be taken.

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Students' Learning Differences Contextual To Conventional Approach In Entrepenuership Course At University Of PGRI Palembang

Boby Agus Yusmiono, Januardi, Riswan Aradea

The contextual approach and conventional

approach have the same goal, namely to improve and optimize student learning outcomes. Both of these approaches will be conducted by the researcher in the learning process at the PGRI Palembang University in the Social Sciences Department on entrepreneurship courses, fourth semester students in the 2016/2017 academic year. The method in this study is an experiment carried out with the intention to determine the difference between the learning outcomes of students who learn through the application of the contextual approach of 4th semester students of the Accounting Study Program with the conventional approach of 4th semester students of the Geography Study Program at the University of Palembang. Based on the results of data analysis and discussion, it can be concluded from the research that has been done, namely; (1) The average value of student learning outcomes in the class using a contextual approach is 8.3, with the number of students with Very Good (A) scores as many as 18 students from 50 students with a percentage of 36%. Whereas in the class that learns using the conventional approach, the average value of students is 8.4, with the number of students who have Very Good (A) scores as many as 17 students from 42 students with a percentage of 40.48%. (2) Based on the results of research that has been done, it is known that there are differences in student learning outcomes through the application of contextual approaches to conventional approaches to entrepreneurship courses. This can be seen from the results of the t test, the difference seen is t hitung = 3.561 and t table = 1.990 then Ho is rejected and accepted Ha. (3) Based on the analysis of the results of the research that has been conducted, it can be seen that learning using the conventional approach is slightly better than learning using a contextual approach to entrepreneurship courses.

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Numerical Modelling And Solution Of Microstrip Antenna By Using Caupto Time Fraction RDT Method

R. K. Chaurasia, Ranjan Mishra, Raj Gaurav Mishra, Deepak Kumar, Amit Kumar Shrivastava

A mathematical model for the second-order one-dimensional time fractional differential equation for a microstrip line feed microstrip antenna is presented in this paper. Along with it, a mathematical equation is presented that is solved by caupto time fractional reduced differential transformation methodology (RDTM). The fractional derivative has shown

in Caupto sense. The fractional reduced differential transform method (FRDTM) is a very modern and effective method to find an approximate solution of a partial differential and differential equation. The FRDTM method comes to be a useful mathematical tool for resolving problems arising in electrical circuits, microwave, RF field, communication systems, and science and technology fields. Two numerical examples has solved also here to check the validity and effectiveness of FRDTM method.

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The Application Of Sustainable Competitive Advantage As A Culinary Business Strategy "Depot Ayam Gephok Pak Giek" In Jember - East Java

Setiyo Adi, Diah YuliSetiarini, Asrid Juniar

The purpose of this study was to analyze the application of Sustainable Competitive Advantage (SCA) in "Depot Ayam Gephok Pak Giek" which is a restaurant that serves fried chicken food plus srundeng and sambal and drinks in the form of tea, mineral water and ice Manado. The location of restaurants on Jalan Mastrip I No.19A, Jember City, East Java Province. Along with the development of Jember City, there are new businessmen in the culinary field of Gephok chicken cuisine, of course this will be a new competitor. The analysis technique uses SWOT analysis. The results of the analysis, namely the application of the concept of Sustainable Competitive Advantage (SCA), is necessary and continues to be carried out by "Depot Ayam Gephok Pak Giek" if he wants to survive his existence. The constraints faced are limited parking lava and vulnerable locations due to road widening. Opportunities that still exist are service hours not optimal, on the other hand consumer demand is still quite large.

[View Full Paper] **[Download]** **[References]** **139-142**

Analysis Of Implementation Of Promotion Mix Fruit Tea Activities In Maintaining Growth Stage On Product Life Cycle

Shintia Wijaya, Maria Anggia Widyakusumastuti

The purpose of this research is to know the description of marketing mix and promotion mix activity in maintaining Fruit Tea at Growth stage in product life cycle. The type

of research used is qualitative descriptive with case study research method. Based on the analysis and the results achieved, the product description evolves from the packaging and flavour variants, the price that prioritizes value for money and competitive, the place that distributes in Modern Outlet and General Trade, promotion can be seen in promotion mix activity. Ad description using TVC and product placement, sales promotion using special sampling and promo, direct marketing using media vending machine and online shopping category, Public Relations use event activities, personal selling using manpower such as Sales Promotion Girl and interactive media using website as media for promotion. The conclusion of this research is to survive in Growth stage, an important activity to do that can strengthen brand recall and build emotional bond between brand and consumer.

[View Full Paper] **[Download]** **[References]** **143-148**

Institutional Economic Analysis Of Bugis Merchants In The Inter-Island Trade

Ansar, Umi Farida, Muhammad Yahya, Yusriadi Yusriadi, Saidna Zulfiqar Bin-Tahir

Trade is the activity of exchanging goods or services or both which based on an agreement, not coercion. One of the famous tribes in Indonesia in trading is the Bugis tribe. Bugis merchants are known as inter-island traders who use the sailboats of Pinisi, Lambo, and Benggo. The goods traded by them are earth productions, including rice, tobacco, nuts, etc., but the most popular product to trade was rice. This research uses descriptive qualitative design research, which is the process of getting information for research purposes by way of questioning during face to face with the respondent. The sample is taking by using the purposive sampling technique to gain descriptive data, personal documents, field notes, the speech of the respondents and an existing document. The results of the study show that Bugis merchants in the inter-island trade have developed "a sense of trust, honesty, and justice" as well as "a sense of achievement" in order to uphold justice among them, so "the Amanna Gappa Cruise Law" is upheld, setting the rules in cruise and trade.

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Implementation Of Network Station

Systems In Inews Network Main Station

Annisa Adysti Ayunanditia, Mungky Diana Sari

This research aims to explain the broadcasting network system management of iNews through local content program broadcast. This research also reveals the type of program broadcast by every iNews fellow broadcasting network. The purpose of this study is to describe the application of Network Station System in iNews. This is a descriptive research with qualitative approach in order to explain in detail about application of Broadcasting Network System that occur in iNews. Data obtained from iNews is in accordance with the obligations set out in the Law of the Republic of Indonesia No. 32 of 2002 concerning Broadcasting, Regulation of the Minister of Communication and Information No.43 of 2009 concerning the Implementation of Broadcasting Through Network Station Systems by Private Broadcasting Services for Television Broadcasting Services, Government Regulation No.50 of 2005 concerning the Implementation of Broadcasting of Private Broadcasting Institutions, and the Indonesian Broadcasting Commission Regulation which discusses the Network Station System. In this study want to know in depth the process of implementing the Network Station System which is done by iNews television station as it is, and problems encountered in the implementation. In this study, iNews was the object of this research. After getting the information needed, the information is analyzed to get the results of the study. The results showed that iNews simply used the Network Station System to meet the local needs of at least 10% of the broadcast time per day. Despite many obstacles to implement the Broadcasting Network System, the conditions that have been granted by the Government to every Public Service Broadcasting in Indonesia is must be done. If the Broadcasting Network System can run in eligibly, then the local potential can be increased.

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Interpersonal Communication Implementation In Forming Brand Loyalty (Case Study Of The FLCC Church Community GBI WTC Serpong)

Yohana Wardana Sentosa, Oryza Devi Salam

This study aimed to find out how to

implement interpersonal communication in forming brand loyalty in the Frontliner Campus Community community, GBI World Transformation Church Serpong Church. This research was descriptive research with qualitative approach, and the research method used case study. Data collection was conducted through interview with data analysis technique. According to Miles and Huberman, data analysis technique is data reduction, data display, and drawing conclusion and verification. The main theory of interpersonal communication that used to see the implementation of interpersonal communication in this study is Devito's interpersonal communication. Then, the main theory of brand loyalty used as an indicator is Griffin's brand loyalty theory which discusses the characteristics of loyal customers and supported by the loyalty pyramid proposed by Rangkuti. The main theory of perception that used as an indicator is the theory of interpersonal perception by DeVito. The results showed that the formation of brand loyalty in the Frontliner Campus Community was influenced by the positive perception of its members on the implementation of interpersonal communication in the mentoring program.

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Peduli Sobat Ekor: A Social Campaign About Responsibility Towards Abandoned Pets

Vera Jenny Basiroen, Nugroho Hartady

In Jakarta, there are many cases of pets that are abandoned and thrown away by their owner to the streets because the owner already bored or unable to take care of the pet anymore. Because of many cases of abandoned pets, a new problem arose, which is over population. Over population is still under discussion so many people have not familiar with the problem yet. Beside over population, there are also many cases of dogs or cats that were hit by vehicles on the streets. Therefore, the campaign is something that must be made to prevent this case from increasing in Jakarta. However, Jakarta is the area that has the most dog population compared to the surrounding area (Bekasi, Tanggerang, Depok, and Bogor).

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Personal Branding Analysis Of Food Blogger Cindy Lulaby Through

Instagram Social Media

Andre Hendrawan, Siti Nahdiah

This study is proposed to determine the strategy of @cnlulaby as a food blogger in building personal branding through social media Instagram. The type of research used in this study is a qualitative method with a descriptive approach. This research shows that personal branding performed by @cnlulaby through social media Instagram using special strategies applied from some personal branding concept that is personality, leadership, specialization, persistence and goodwill. Therefore, through social media Instagram, personal branding created by @cnlulaby has formed a positive perspective on her.

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Application Of P3SPS In Insert Infotainment Program On Trans TV

Shavira Annisa Putri, Muslikhin

The Broadcasting Code of Conduct (P3) is the provisions for broadcasters set by the Indonesian Broadcasting Commission (KPI). Broadcast Program Standards (SPS) is a broadcast content standard that contains the restriction, violation, and obligation set by the KPI. Insert is an infotainment program that aired on Trans TV. This study aimed to describe how the application of Broadcasting Behavior Guidelines and Broadcast Program Standards (P3SPS) on Infotainment Insert program in Trans TV. This study used descriptive qualitative method and used three stages of coding test, starting with open coding then axial coding and in proceed with selective coding, and do interviews and also observation. Based on research conducted, still found violations against P3SPS made by Insert program. That is in Article P3 Clause 9 and SPS Clause 9 concerning the right of privacy, then Article P3 Clause 14 and SPS Clause 15 on the value and norms of decency.

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Role Of Public Relations Of The Regional Secretariats In Building The Image Of Bekasi District Government In The Public Eyes

Lukmanul Hakim, Astrid Haryanti

This study aims to analyze and be able to find

out the Role of Regional Secretariat Public Relations in Building the Image of Bekasi District Government in the Public Eye. Efforts made by the Public Relations Secretariat of the Bekasi District Government through various types of publications, genres of community approaches, managing documentation, and obstacles that exist in carrying out public relations tasks. The research method used is descriptive qualitative to obtain valid data according to the results Data collection techniques in the form of semi-structured interviews, observations made since the internship, and documentation. The results of this study show that the Role of the Regional Secretariat Public Relations in Building the Image of the Bekasi District Government in the Public Eye through the operational standards of government public relations.

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The Activities Of Media Relations By PT IDC Indonesia In Maintaining The Company Image

Fitria Kholwatiandhani, Sari Ramadanty

The purpose of the study is to determine the strategy of media relations conducted by PT IDC Indonesia to maintain corporate image. Challenges and solutions encountered in media relations activies. This research method with semi-stucture interviews, observation, literature study, and documentation. Data analysis using reduction technique, display, and verification. The results of this research indicate that PT IDC Indonesia conducting media relations to maintain a positive image by publicitize and promote the latest reasearch from PT IDC Indonesia. Basically a media relations activites that have been done by PT IDC Indonesia need to be improved with doing other media relations activities.

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Social Engineering Model To Improve The Ability Of Tourism-Based Society In Managing The Local Potential Around Lake Toba In North Sumatera

Ria Manurung, Rizabuana Ismail, Iskandar Muda

The purpose of this study is to identify social potential of the communities around Lake Toba and the values supporting and hindering the development activities of the area of

tourism. The study was conducted using a quantitative-qualitative approach using questionnaires method to 100 respondents, in-depth interviews, non-participant observation, and focus group discussions. The study was conducted in three regencies, namely Simalunggun Regency, Samosir Regency, and the Tobasa Regency. The result of this study indicates that there is a value hindering the behavior of the ethnic communities in supporting tourism activities that position them as fishermen or service providers for the tourists.

[View Full Paper] [Download] [References] **186-191**

The Reorientation Of Criminal Justice System To Give Protection To Crime Victims

Achmad Irwan Hamzani, Nur Rohim Yunus, Mukhidin, Havis Aravik, Siswanto

The tendency of current criminal justice is that it favours more criminals. Meanwhile, crime victims receive less attention. As a result, the objective of sentencing is rendered ineffective. This study aims at 1) Describing the development of thoughts on the criminal justice system, 2) Formulating the idea of a criminal justice system which would give more attention and protection to the crime victims, and 3) Making an argumentation that a change in the orientation of a criminal justice system to the crime victims is a necessity. This research uses a normative approach. The research data used here are the secondary ones in the form of literature. The analysis uses induction-interpretation-conceptualization flow of thought. The results show that the tendency of the current criminal justice system is focused only on criminals. As the aggrieved party, the crime victims are forgotten instead. Such a sentencing system can never satisfy the victims, especially when the crime renders the victims at a personal disadvantage. The crime victims or their heirs deserve the rights to decide what sentence should be given to the criminals which can give benefits for the victims or their family such as indemnities. The idea of changing the orientation of criminal justice for crime victims, in essence, is to give law attention and protection to the victims. This is both realistic and rational. The objective is to actualize justice and expediency in law.

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The Influence Of Indian Drama In TV On Behaviour Of Fashion Imitation Of Housewives

Lestari Deviana, Muslikhin

Research Objectives, to find out whether or not the influence of Indian Drama Impressions in the Antv on Fashion Imitation Behaviour of Housewives in Cipadu Tangerang Village and to find out how big the influence is. The research method used in this research is quantitative method by giving questionnaires to respondents to get research results. The results of the research are presented with tables and numbers that represent the answers of each respondent. The Results Achieved, which Indian Drama Impressions have an influence on the Imitation Fashion Behaviour of 43.2%. The conclusions of Indian Drama show 43.2% of Imitation Fashion Behaviour, the remaining 56.8% are influenced by other factors which are not discussed further in this research.

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The Role Of Digital Public Relations In Maintaining May May Salon Image

Siti Murniasih, Sari Ramadanty

The purpose of the study, are to know how the role of digital public relations in maintaining the image and barriers of digital public relations in maintaining the image of May May salon. Research Method, which used in this research is qualitative research with qualitative descriptive approach. The data analysis used was semi structured interview, non-participant observation, literature study and documentation. The results, indicating that the role of digital public relations through social media is successful enough to better introduce May May salon to the public as well as to maintain the image. In addition, the obstacles that of digital public relations are largely contained in the content that is on the social media. The conclusion of this research is, the role of digital public relations through social media Facebook and Instagram is very important role for May May salon in maintaining the image. (SM).

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The Role Of Instagram As The Way To Establish Brand Awareness Of Elhaus

Mohammad Naufal, Gayes Mahestu

The purpose of this research was to determine the role of Instagram as the way to establish brand awareness of Elhaus. The research method applied in this research was qualitative with descriptive study approach. The data obtained from this research through in-depth interviews and secondary data in form documentation of Elhaus's Instagram account @elhaus. The result of this research shows that Elhaus applies the six characteristics of social media by Sulianta (2015), as following term: transparency, dialogue and communication, networking relations, multi opinion, multi form and online promotion power. The conclusion of this research is that Elhaus has successfully reached the top level of brand awareness that is top of mind through Instagram as their social media platform.

[View Full Paper] [Download] [References] **207-209**

Effective Synergetic Catalytic System For The Efficient Synthesis Of Multicomponent Biginelli-Type Pyrimidinone Derivatives

Hari R. Pawar, Narendra R. Kamble, Vinod T. Kamble

A simple, clean and efficient Biginelli-type reaction was reported towards single-pot synthesis of pyrimidinone derivatives using cyclopentanone, aryl aldehyde and urea/thiourea. In this transformation niobium pentachloride acts as excellent catalyst in presence of silver salt. Under identical experimental conditions, thiourea exhibited similar behavior as compared to urea.

[View Full Paper] [Download] [References] **210-213**

The Effect Of Brand Image, Service Quality And Price Towards The Decision Of The Use Of Remittance (The Remittance From The Indonesian Migrant Workers In Hongkong To Indonesia Through The State-Owned Banks)

Surachman Surjaatmadja, Ahmad Hubaib, Iskandar Muda

Remittance is the flow of goods and money from migrants to rural households. Remittances have a positive impact on inclusive finance, several studies reveal remittances as part of the transfer form is the entry point of inclusive finance. With the

ease of transferring funds, will help direct the unbanked using formal financial products and services. The aim of this study was to analyze whether brand image, service quality, and pricing is an activator of the public to use remittance, as well as view the relationship through customer satisfaction levels. The focus of this research object is Indonesian labor as call as TKI (Tenaga Kerja Indonesia). The data used in this study were collected by distributing questionnaires to members of TKI in Hong Kong. This study used purposive random sampling as sampling techniques and obtained 220 respondents. This study uses SEM analysis to test data with AMOS application. Results from this study is the brand image and price influence buying decisions, while the service quality and price affect the level of customer satisfaction. The level of customer satisfaction influence on buying decisions, while the brand image does not affect the level of satisfaction, as well as the service quality to the buying decision. Service quality and price influence buying decisions when through customer satisfaction levels.

[View Full Paper] [Download] [References] **214-221**

Ant Colony Optimization Based Energy Efficient Routing Algorithms For Routing In Mobile Ad Hoc Networks

Deepika Dhawan, Rajeshwar Singh

Routing protocols in Mobile Ad-hoc Networks (MANETs) has yielded optimistic results for a long time, but the conflicts begin when we start to focus on particular parameters of the algorithms, like packet delivery ratio, end-to-end delay, throughput, energy consumptions, etc. These factors are very crucial in an algorithm as these are the building blocks of the optimal solution. For example, if an algorithm has a satisfactory packet delivery ratio but the energy used/consumed by the nodes of MANETs is such high that is it not feasible to implement or beneficial to implement in a real-time issue, then the algorithm would not be a practical solution to the efficient routing problem. Ant colony optimization is a heuristic which has so far yielded results that are satisfactory compared to other nature-inspired heuristics. In this paper, we propose Ant Colony Optimization – Energy Efficient Routing Algorithm (ACO-EERA), an algorithm which has produced significantly good results in comparison with other algorithms. The algorithm implements a function which chooses less the nodes with low energy remaining and it reduces the loss

of energy of packets being dropped. At the end of the research paper, we also compare our proposed algorithm with Ad-Hoc On-demand Distance Vector (AODV), for the factors such as Packet delivery ratio, End to End delay and total Energy consumption.

[View Full Paper] **[Download]** **[References]** **222-226**

Investigating Students' Mathematical Creative Thinking Skill Based On Academic Level And Gender

Suripah, Heri Retnawati

This study aimed to describe students' mathematical creative thinking skills based on academic level and gender in complex analysis course. This study was naturally qualitative and therefore the data collection techniques were in the forms of data test and interview. The participants were 112 undergraduate students in Mathematics Education Department in Pekanbaru, Indonesia who were taking Complex Analysis course. Based on gender, the result revealed that there was a difference in mathematical creative thinking between male and female students in solving problems of square root complex equation. Furthermore, based on academic level, the result showed that the students' mathematical thinking skills were in high, moderate, and low level. This result indicated that the students were able to solve problems in mathematics by their own way. However, they had not yet been able to demonstrate detail procedures to overcome those mathematical problems.

[View Full Paper] **[Download]** **[References]** **227-231**

Literature Review On Geopolymer Mortar Using Agricultural Waste As Precursor

Faiz Sulthan

Alternative replacement material cement as a binder in concrete that is currently developed is the geopolymer material. Geopolymer is the result of the polymerization process material that contains silica (Si) and aluminum (Al) derived from natural materials, agricultural waste or industrial waste. Material results of agricultural wastes that can be used as precursors include rice husk ash, bagasse ash and palm oil fuel ash. Agricultural waste materials eligible to be processed into the material forming

geopolymer. Chemical compounds criteria based on testing X-Ray Fluorescence (XRF) and refer to ASTM C 618 is known that industrial waste materials are feasible to be developed as a precursor. Criteria for the mechanical properties of materials such as mortar compressive strength testing also showed good results, geopolymer using 100% bagasse ash can also achieve the compressive strength of mortar at 18.34 MPa. For materials rice husk ash and palm oil fuel ash is only used by 50% and mixed with 50% fly ash, compressive strength results showed with rice husk ash of 21.50 MPa and palm oil fuel ash of 20.70 MPa.

[View Full Paper] [Download] [References] **232-236**

Influence Of Fraud Pentagon Toward Fraudulent Financial Reporting In Indonesia An Empirical Study On Financial Sector Listed In Indonesian Stock Exchange.

Yulianti, Suci R Pratami, Yuni S Widowati, Lulus Prapti

This research aims to analyze financial target, financial stability, external pressure, institutional ownership, ineffective monitoring, external auditor quality, changes in auditor, replacement of company directors, and frequent number of CEO's picture influences to Fraudulent Financial Reporting. The population is financial sector listed in Indonesian Stock Exchange 2013-2016 selected by using purposive sampling. The data source uses annual report of each go public enterprise in IDX. The findings showed financial target produced by ROA, financial stability did not influence fraudulent financial reporting; external pressure did not influence fraudulent financial reporting; institutional ownership did not influence fraudulent financial reporting; ineffective monitoring did not influence fraudulent financial reporting; quality of external auditor did not influence fraudulent financial reporting; changes in auditor did not influence fraudulent financial reporting, replacement of company directors did not influence fraudulent financial reporting, and frequent number of CEO's picture did not influence fraudulent financial reporting.

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Antipyretic Effects Of Dried Earthworm (Pheretima Javanica K.) In Male White Rat (Rattus

Norvegicus) With Typhoid Fever

Joko Waluyo, Dwi Wahyuni, Nuri

Typhoid fever is a disease caused by Salmonella typhi bacterial infection, The symptoms commonly caused by this disease are usually fever, dizziness, nauseaand even diarrhea. Using Chloramphenicol as a medicine has been experienced resistancefor the last few years and has side effects. The aim of this research is to produce an alternative medicine of typhoid fever without side effects from dried earthworm (Pheretima javanica K.) in male white rats (Rattus norvegicus L.). This research is an experimental study, with 2 control group and 4 treatments group of each 10 white rats. The 4 tests are consist of Widal Test, body weight measurement, body temperature measurement and feces test. Widal test, feces test and body weight measurement were analyzed descriptively, while body temperature measurement was analyzed by using ANOVA test and continued with Duncan test with confidence rate at 95%. The analyzed result got probably result p = 0,000 (p < 0,05) means that dried earthworm has a significant effect on the reduction of typhoid fever on male white rats. The most optimal dose was gained from treatment 2 (dried earthworm induction with dose 0,8 gs/0,2 Kg of weight) which had similar value with the positive control with chloramphenicol induction.

[View Full Paper] [Download] [References] 243-246

Proposed Adult Immunization Training Program For Filipino Pharmacists

Romeo C. Ongpoy, Jr, Nora B. Capistrano, Ariel Geno R. Santos

The objective of this study is to present an adult immunization training program for the Filipino Pharmacist. To do this, literature reviews of Pharmacy immunization training and other related program proposal publications were synthesized and combined with the known immunization guidelines in the Philippines so far as well as discussions from the authors which are pharmacy practitioners. About this study, a seven-part training cycle is proposed to train Filipino Pharmacists in immunizing adult patients and an outline for training is also provided consisting of an active learning and a self-study part. It can be concluded that there is feasibility of conducting a good training program for pharmacist immunization in the Philippines as long as it is well prepared for

through good planning such as this proposal.

[View Full Paper] [Download] [References] 247-250

The Role Of Organization Citizenship Behavior As A Mediation Influence Of Organizational Commitments And Professionalism On Performance Of Environmental Employee Secretariats In The Regional Government Of Jember Regency

Winda Arifin Damayanti, Purnamie Titisari, Ika Barokah Suryaningsih

The purpose of this research is to find out the influence of organizational commitment to the organization citizenship behavior; knowing the effect of professionalism on the organization citizenship behavior; knowing the influence of organizational commitment on employee performance; knowing the effect of professionalism on employee performance and knowing the influence of organization citizenship behavior on employee performance. This population is all of the Secretariat Government Employees of Jember Regency Environmental, the employees 189 people. The sample in this study was 100 employees. The Data Analysis method uses path analysis. The results of this study indicate that 1) organizational commitment has a direct effect on OCB of the Secretariat Government Employees of Jember Regency; 2) organizational commitment has a direct effect on the performance of the Secretariat Government Employees of Jember Regency; Jember 3) Professionalism has a direct influence on OCB employees of the Secretariat Government Employees of Jember Regency; 4) Professionalism has a direct influence on the performance of the Secretariat Government Employees of Jember Regency. The results of this study indicate that professionalism has a significant effect on employee performance and 5) OCB of the employee influences the performance of the Secretariat Government Employees of Jember Regency.

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Heat Transfer Enhancement Of Staggered Dimples With Different Shape On Plate

Dhruv N. Desai, Sanjay N Havaldar

Nowadays the most common approach for heat transfer enhancement involves the use

of rough surface. A surface can be created rough in number of paths like by using pins, inserting ribs or creating dimples on the surface. With air as working fluid the experiment will be carried out for laminar forced convection conditions. The motive behind the experiment is to find out the rate of heat transfer and air flow distribution on triangle and circular dimples plate with straggled and inline arrangements, and found outcomes are evaluated with flat surface. Dimples 0.64 cm in diameter and 0.30 cm deep on the flat surfaces to enhance the heat transfer rate. Outcomes shows that the rate of heat transfer for triangle dimple shape surface with staggered arrangement seems to have maximum value than the smooth and inline plate.

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Improving Behavioural Design Patterns Detection Through The Incorporation Of User Knowledge

Mohammad H. Alshira'h, Saleh Alqatan

Design pattern detection is useful for a range of software comprehension and maintenance tasks. Current tools are limited to a combination of static and dynamic analysis, which can lead to inaccurate results for behavioral design patterns, which are intrinsically dynamic. This work proposes a technique to address these limitations by enabling the user to augment the automated analysis with their expert knowledge. This can be used to iteratively refine the results, removing any inaccurate patterns. The evaluation on JHotDraw indicates that the approach can yield significant improvement in accuracy from a relatively small amount of input from the user.

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Extension Services And Behavioral Strategies Of Farmers To Deal With Risk

Zahra Ranjbar, Mohammad Chizari, Hasan Sadighi, Homayoun Farhadian

Agriculture is considered a critical sector in the world economy while the nature of the agricultural activities is mainly based on the risk, implying the need for more attention to risk management. In this regard, it is important to consider the role of educational programs and how farmers react to risk. The

purpose of this survey research was to explore the role of extension services on strategies for coping with wheat production risks among farmers in Kermanshah province, Iran. The target research population consisted of all wheat producers in Kermanshah province who cultivated wheat in 2016-2017 (N=102000). A stratified random sampling method was used to select and interview 383 farmers in six districts of Kermanshah (n= 383). The reliability of different parts was estimated in a pilot study to be in the range of 0.73-0.94. The results highlighted 35 strategies that significantly influenced risk. Out of 35 adaptation strategies, the use of disinfected seeds was ranked the first among farm adaptive measures, while cooperative cultivation was ranked as the least frequently utilized. Despite the rather low use of the extension services by farmers, there was a positive significant relationship between the coping strategies and extension services. The results provide useful insights for researchers, extension agents, and farmers.

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A Novel Fast Hybrid Frequency Domain Approach For Evaluating Harmonic Power Flow In Electricity Networks

Pavan Khetrapal

Ideally, an AC power supply should constantly provide a perfectly sinusoidal voltage signal at every customer location. Nowadays, many power electronic equipment are used in industry in seeking higher system reliability and efficiency, and more electronic or microprocessor controllers are used in power system to control AC/DC transmission lines or loads. Moreover, the importance of green energy such as wind and solar is continually growing in our societies not only due to environmental concerns but also to resolve the problem of access to electricity in rural areas. As a result of these issues, power quality problems especially generation of harmonics are on the rise in the distribution network. In electrical power system, harmonics have a number of undesirable effects on power system devices as well as on their operation. It therefore becomes imperative for power system engineers to analyze the penetration of harmonics from the various sources into the network which commonly is known as harmonic power flow evaluation. This paper proposed a novel fast hybrid frequency domain approach (FHA) to evaluate the steady state harmonic power

flow with discrete harmonic frequency. The proposed method is applied to IEEE – 14 bus, IEEE New England 39 - bus, IEEE – 57 bus and IEEE 118 - bus power system respectively and compared with Newton – Raphson (NR) load flow method and Fast decoupled load flow method (FDLF) and the results validate the accuracy, robustness and authenticity of the proposed method..

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Assessment Of The Usability Of Mobile Commerce Prototype From The Users Perspective

Saleh Alqatan, Mohammad H. Alshira'h

Despite the M-commerce advantages for Small, Medium, and Micro-Sized Enterprises (SMMEs), especially in the tourism industry, these enterprises have limited access to information on technology adoption. This prevents them from understanding the implications of technology adoption, effective ways of managing competition, determining business and customer needs, and the ability to make strategic and sustainable decisions. This study aimed to develop a tentative design of Tourism M-commerce prototype (TMCP) based on the task-technology fit, perceived usefulness, perceived ease of use, task characteristics and technology characteristics, and to employ SUS and expert review in evaluating the TMCP for determining the factors influencing Mobile commerce. the questionnaire was distributed to the target sample and the obtained data from questionnaires was analyzed through the SPSS statistical software. On the basis of the prototype evaluation results, the proposed model is validated. In this case, the results of the evaluation provided insight into the effect that user acceptance factors have on the level of acceptance of M-commerce among Jordanian SMTEs. The validation also confirmed the relationship between acceptance factors and the acceptance of the M-commerce application among SMTEs. This study opens up opportunities for further studies to use user acceptance theories for system designs in other application domains.

[View Full Paper] [Download] [References] **287-305**

A Novel Optimization Approach For Solving Optimal Load Shedding Problem Considering Different Voltage Stability Indices

Raghu C N, A Manjunatha, G Raghavendra

Due to the increase in the complexity of the power system and the increase in electricity consumption. The power system no longer remains in equilibrium. In this paper, to restore the equilibrium in power system network, a proposal is made with the novel optimization technique to solve optimal load shedding problem by curtailing less amount of load at the optimal location and improving voltage profile. In this methodology, the risk of voltage instability and the critical buses are ranked based on NVSI. In this method, the NVSI constraint is used in the problem formulation in two ways: (a) New voltage stability index constraints added along with OPF formulation (b) Index is used in objective function formulation. The Modified Adaptive Harmony Search (MAHS) algorithm based on the improvisation of a musical tune approach is used to solve OLS strategies. The effectiveness of the proposed techniques is considered in terms of the location of load shedding and the amount of shedding. The effectiveness of the proposed method is tested on the standard IEEE-30 bus system. Simulation results show the minimum amount of load shedding using MAHS, while the NVSI provides an optimal load shedding location. By using this method, various power system blackouts can be prevented.

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Mathematical Modeling On Successive Awareness Policies For Swine Flu

Hema Purushwani, Poonam Sinha

Awareness about hygiene conditions and vaccination are the highly beneficial techniques of preventing infection. Good hygiene conditions and only one dose of vaccine are not sufficient for permanent consequence hence booster programme are introduced. Diseases induced immunity has permanent effect whereas vaccine induced immunity has a temporary effect. A mathematical model has been proposed to study the influence of successive awareness policies for spread of swine flu infection. Basic reproduction number RBooster has been derived. It has been shown that the disease free equilibrium point is locally asymptotically stable, when RBooster<<1. Further, we have also observed that a unique endemic equilibrium point exists and is stable, when RBooster<>1. During numerical simulation, it has been pointed out that RBooster< ROnedose< RWithoutvaccine Rwithoutawareness i.e. booster vaccination

programme are better than one-time vaccination programme. Sensitivity indices for basic reproduction number are measured to hint how the parameters should be managed to restrain severity and the level of the infection.

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Study On Solar Absorber Integrated With Thermal Energy Storage For Process Heating

R. Senthil

The main aim of this work is to construct thermal storage for the process heating application using combined sensible and latent heat concepts. Solid Aluminum storage with cylindrical phase change material (PCM) containers with paraffin wax fabricated. The heat storage was experimentally tested for process heating application using a concentrated solar collector. The incident solar energy is used to heat the transport medium and the transport medium passes through the solid storage. Aluminum stores energy as sensible heat and PCM stores energy as latent heat. The charging test conducted for two hours. The receiver with PCM storage serves for a longer duration of 30 minutes for the selected 15 kg Aluminum and 2 kg PCM. The thermal performance of heat storage is beneficial for process heating applications. The latent heat storage material showed improvement of productivity of hot water after the sunset.

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Required Bandwidth Capacity Estimation Scheme For Improved Internet Service Delivery: A Machine Learning Approach

Mba. O. Odim, Victor C. Osamor

This paper proposed a data driven, machine learning traffic modelling approach for estimating required bandwidth during telecommunication planning for good quality service delivery. The multilayer perceptron was employed to estimate the offered traffic, a safety factor was incorporated to ensure smooth flow of traffic and a neutralisation factor for moderating under or over provisioning of the bandwidth resource. The offered traffic input lags were varied from 1 to 24. The training epoch values of 200, 500, and 1000 on one and two hidden layered

networks were used. The learning algorithm was backpropagation with 0.1 learning rate and 0.9 momentum on logistic sigmoid activation function. The scheme was implemented in Visual Basic and compared with four existing statistically based bandwidth estimation formulae, using four categories of classified traffic of a residential network of a firm in Nigeria. The findings revealed that the proposed scheme gave the minimum cost function, loss rate, and the highest average utilisation on two of the traffic categories (the HOURLY_IN and of HOURLY_OUT), outperformed two of the existing models on the DAILY_IN traffic category and one of the existing models on the DAILY_OUT traffic set. The study recommended that the proposed scheme would serve more effectively toward enhancing internet management related tasks such as general resource capacity planning.

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Properties Of Hybrid Composites And Its Applications: A Brief Review

Yegireddi. Shireesha, Govind Nandipati, KiranKumar Chandaka

from the past few decades the world depends upon the glass fiber reinforced composites. These composite materials used in so many areas like aerospace, automotive, construction and household purposes also due to their high mechanical properties. But for these composites there are some drawbacks like high cost, high density, high weight. In addition to this it have large impact on environment while preparing these fibers and their related composites. These drawbacks have been overcome by the natural fibers. The advantages of Natural fibers over synthetic fibers are low density, less weight, biodegradable in nature, less cost, recyclable, easily available and nontoxic in nature. Many researchers show interest towards natural fibres due to its advantages. Due to less cost and ecofriendly nature the natural fibers have capability to replace the synthetic fibres. This paper discusses about the mechanical properties of composites reinforced by natural fibers and factors which influences the mechanical properties of natural fibre reinforced composites.

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Creative Team Strategy In Marketing TVC BBM Advertising Content For

Middle East

Alvin Atmadja, Ebnu Yufriadi

This study is proposed to know the steps pf creative process, concept determination, and segmentatiojn research of BBM for middle east ads produced by PT VIP. This is a qualitative research type case study that uses the technique of collecting interview data in depth to the key informant who is a creative team at PT. VIP and using triangulation of sources, methods and theories of Wallas creative process as a technique of data validity. The result of this research is the creative process of this commercial video through the stages proposed by Wallas: preparation, incubation, illumination and verification

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The Effect Of Brand Image On Customer Satisfaction In Pizza Hut Alam Sutera (Quantitative Study On Bina Nusantara University Student Batch 2018-2021)

Andini Anindya Prameswari, Gayes Mahestu

The purpose of this study is to examine is there influence of brand image to customer satisfaction on Pizza Hut Alam Sutera. The approach used in this research is quantitative approach with explanative type and the method for data collection used in this research is survey by distributing questionnaires to students of Bina Nusantara Alam Sutera University with 100 respondents. The result of this research shows that there is influence of brand image to customer satisfaction with result of equal to 67,3% with unidirectional relationship. So, it can be concluded that the brand image has a strong influence on customer satisfaction.

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The Effectiveness Of The Implementation Of Independent Community Empowerment Programs In Bone District

M. Awaluddin A, Muhammad Luthfi Siraj, Yusriadi Yusriadi

The implementation in Bone Regency from the aspect of community development, direct community assistance, capacity building for the government, local actors, management

assistance, and program development showed effective results. Implementation has been carried out by the organizers well in carrying out development programs starting with the construction of road infrastructure, irrigation, lending business funds to the community. The program provides changes to the economy and social life of the city. The implementation of this program has several obstacles, such as the community lacking understanding of the aims and objectives of the program, the lack of responsibility of some communities in returning the revolving funds that have given.

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Application Of Lev And Schwartz Compensation Model On The Accounting Practices Of MCF Limited

Vishal Samartha, Rajesha T M, Iqbal Thonse Hawaldar, Lolita Jane D Souza.

In this competitive world, the efficiency of the labour force determines the competency of the organisations, which indicates that human beings are the greatest asset for any firm. This paper attempts to examine the applicability of human resource accounting and to measure the HRV of one of the largest chemical manufacturing company of India. The study conducted for a period of three years, beginning from 2013 to 2015. Lev and Schwartz compensation model was used to calculate the worth of the workforce at a specified discount rate corresponding to the company. Employee's age, remuneration, education, experience, job performance, cost of living, financial condition and the promotion policy of the firm, are the factors which affect the calculation of employee's worth. The result of the study indicates that employee demographics and human resource values are significantly correlated. The research also advocates the need for an efficient model which could facilitate measuring the intellectual capital at its true potential.

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Three-Phase To Two-Phase Transformation Of Asynchronous Machine By Reference Frame Theory

Avinash R. Waghmare, Dr. Vandana A. Kulkarni

An investigative three-phase asynchronous machine mathematical model is proposed,

validated and derived in this paper. This paper investigates the dynamic mathematical model of pseudo reference frame theory of three-phase to two-phase conversion for the asynchronous electric machine (three-phase induction machine) by using Clark's transformation. In this paper, also studies mathematical derivation of the hypothetical machine, primitive machine and behavior of asynchronous machine with the two-phase operation. A system of different reference frames and related transformations (three-phase to two-phase) is investigated for the presentation of asynchronous machine equations, which enchanting knowledge of all winding MMF equations. This contains transformations of three-phase to two-phase rotating reference frames and a novel transformation to two axis components. These transformations decrease to the already well-known transformations of generalized electrical machine modeling and analysis theory. This article also provides the mathematical equations of a three-phase to two-phase transformations using natural reference frame theory for an asynchronous electric machine. Reference frame theory, a mathematical model for approximating the equivalent circuit parameters of the asynchronous machine from the readily available performance characteristics is presented.

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Predicting Lipid, Caffeine And Chlorogenic Acid Contents Of Arabica Coffee Using NIRS

Safrizal, Sutrisno, Lilik Pujantoro EN, Usman Ahmad, Samsudin

Coffee is one the most increasingly propular baverage in the world community because it's very distinctive taste for each region of origin of coffee, which is closely related with the special chemical composition of coffee such as caffeine, lipid and chlorogenic acid components. A Component analysis of coffee in the bean form needs to be done in order to easily classifying the quality of coffee based on its chemical composition. Some studies resulted that NIR able to predict the chemical components in some agricultural materials, such as coffee that can also be predicted its composition using NIRS that should be combined by applying several data treatments on the spectrum including Multiplicative Scatter Correction (MSC), Standard Normal Variate (SNV), Mean Normalization (MN) and the transformation group represented by Orthogonal Signal Correlation (OSC), as well as De-Trending

(DT). The purpose of this study was to analyze the correlation between the NIR spectrum and the chemical composition of grinded coffee. Coffee samples were taken from the Indonesian Gayo highland, which 50 samples with 100 grams for each sample were harvested from various height of the planting and species. The samples were then prepared according to the method of Specialty Coffee Association of America (SCAA) protocol. NIRS measurements were done by using a Buchi NIRFlex N-500 spectrophotometer, while chemical components analysis were conducted using a UV-VIS spectrophotometer. The reseach analysis showed that the calibration using Partial Least Square (PLS) that combined with MN and OSC data pretreatment were found to be the best results for predict caffeine content with r value of above 0.7 and the Relative Percent Difference (RPD) value of above 2. The similar results were also found in prediticing of lipid and chlorogenic acid content with RPD values of above 2. The research concluded that NIRS can be used to predict the lipid, caffeine and chlorogenic acid content in the coffee.

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An Exploration Of Industrial Utility Monitoring Technologies For Energy Usage

Shubham Toshniwal, Sangita Bharkad

Utility consumption is the most important part for each unit of all industries. It helps to improve the production efficiency of industry. Controlled electricity use is one of the biggest challenges in this sector. This paper presents the exploration of the monitoring and control systems for all electricity consuming appliances. We have chosen the best monitoring system of energy management in industrial, commercial and domestic areas by comparing different technologies. Efficient use of system Application helps in reducing electricity consumption and carbon emission at work station. Industries do their annual audit on a regular basis for energy use. Energy consumption of the company in the industrial area gets measured. The energy audit is having a key role in finding large electricity consumption areas. This still does not have the proper solution for energy monitoring. This audit does provide information about potential areas, where industrialist needs to concentrate and reduce its energy consumption. Internet of Things (IoT) is introducing new age to monitoring and controlling many sensors remotely. All system control activities, products, and

utilities of the industry can be remotely monitored using an IoT.

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Bioinformatics As An Emerging Field Of Data Science

Reena Hooda

Bioinformatics is an interdisciplinary approach that originated from the interactions of different streams under one umbrella incorporating mathematics, computer science, statistics, geography, physics, biology and machine learning etc. Observing body structure & building blocks of the different species say human, plants, animals, body cells development & reactions as well as communications of different parts of body offered gargantuan approach to this emerging research area. Besides this, the study of environmental change affects, the resistance power, DNA Sequencing, proteomics, genomes, reproduction, every living thing of ecosystem & their growth stages, bacterial infection etc. under bioinformatics opens up a new domain of data science in biological research. An analysis to gain more information about living organisms, their survival in certain circumstances or devastations using advanced computational tools further accelerate the research. With range of sub-topics and huge variety of biological data, it is quite difficult to handle things manually. Thanks to development & progress of computer science & information technology that aid in fast and accurate analysis of data moreover employ this data to learn, modify, act and project more accurate outcomes. Present paper highlights the innovation of bioinformatics, its applications and advantages and tries to answer the questions that why bioinformatics is going to be most interesting area of research.

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The Role Of Strategic Entrepreneurship, Dynamic Capabilities, And Government Policy To Improve Pdam's Performance In Indonesia

Tamin M. Zakaria Amin, Dyah Budiastuti, Idris Gautama So, Muhtosim Arief

This research was conducted in order to minimize the developmental gap in

Indonesia's pipe drinking water supply system development. As of today, 383 of Regional Government Water Supply Companies in Indonesia, known as Perusahaan Daerah Air Minum (PDAM), are underperforming with only 36% of urban service coverage or 22,40% of national service coverage in average. This paper aims at examining the effect of the latent variables of strategic entrepreneurship, dynamic capabilities, and government policies to PDAM performance. The novelty of this research is the role of government policy as a moderating variable in the relationship between strategic entrepreneurship and dynamic capabilities as they relate to PDAM performance. The methodology used in this research is the quantitative method conducted through a descriptive and explanatory survey. The number of the sample is 120 respondents. Further data were analyzed using the SEM-PLS method with SmartPLS software. This research proved that dynamic capabilities influence PDAM performance, and indicate the need for a stronger government policy, one that would influence strategic entrepreneurship and dynamic capabilities relate to PDAM performance. These findings are intended to contribute to development of strategic management theory and a managerial implication, specifically that PDAM should apply strategic management for the improvement of their performance in order to actively participate in government programs for drinking water services.

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Production, Characterization Of Proteases By Solid State Fermentation Using Sugarcane Bagasse By Warcupiella Spinulosa.

Kuzhalvaymani K, Elizabeth Jacquline L , Subha T.S.

Solid state fermentation is well appropriate for the production of various enzymatic complexes. Microbial proteases are the most important industrial enzymes with significant applications in food, leather and pharmacy industries. In the present study the endophytic fungal strain was isolated from mangrove forest situated in Pichavaram, TamilNadu, India. The aim of this study was to confirm the ability of endophytic fungi in production of industrially important extracellular enzymes. The production of protease by Warcupiella spinulosa was studied under Solid State Fermentation, with substrates like cotton seed, sugarcane bagasse, rice straw, rice bran, wheat bran,

and mixing of all the above-mentioned substrate with feathers. The results displayed that the optimum conditions for maximum protease production were found to be Sugarcane bagasse (10,616 U/ml) as the substrate, 7th day of Incubation(10,833 U/ml) , Inoculum size 3%(13,216 U/ml) and Beef extract(1%) (13,216 U/ml) as Nitrogen source, the Metal Ions Fe_2SO_4(0.1%) (14,083 U/ml) supported the high enzyme activity, at pH 7 and Temperature RT. The production of protease was carried out at various selected substrates like Sugarcanebagasse,3%, Beefextract (1%), Fe_2SO_4(0.1%) ,pH(7),Temperature(RT) ,Day-7 and the results show that best for maximum neutral protease production (20,366 U/ml). The study was proved that Warcupiella spinulosa was able to produce a very high level of protease under Solid State Fermentation using inexpensive Sugarcane bagasse.

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Effect Of Cashless Payment Methods: A Case Study Perspective Analysis

M. Thirupathi, Dr.G. Vinayagamoorthi, Dr. Sp. Mathiraj

The Digital India scheme is a showcase scheme of the Government of India with a keen to convert India into a digitally empowered companionship and cognizance thriftiness. ﷿Faceless, Paperless, Cashless﷿ is one of professed party of Digital India. The digital payment system day by day rising with interlink between banks and financial institution movement from cash to cashless system. Present government (Narendra Modi) is pushing the people to go forward towards cashless transaction, it will helps to government to achieve the economical growth in India. In this case study research tries to find the impact of digital payment apps and its impact after demonetization.

[View Full Paper] [Download] [References] **394-397**

Use Of The Saving Matrix Method As An Alternative For Distribution Cost Efficiency: An Empirical Study On Log Timber Companies In Central Java

Suparjo

The purpose of this study is to obtain the most appropriate and optimal product delivery route that can minimize distribution costs, and to determine the magnitude of

distribution cost savings. The population in this study is data log companies in Central Java, and the sample of this study is data from 10 log transport companies in 10 major cities in Central Java. Analysis of determining the distribution route using the Saving Matrix method Forecasting results of the smallest MAPE, MAD, and MSE values of 0.317, 0.125, and 0.028. The results of analysis using the Saving Matrix method show the number of distribution routes can be reduced by 50%, from 20 routes to 10 routes. The original distance of 3890 kilometers can be reduced to 2238 kilometers, which means that the distance can be shortened / saved by 42.47% or around 1652 kilometers. A decrease in route resulted in lower product distribution costs and a distribution channel cost savings of 44.07%.

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Advanced Virtual Physics Laboratory (VPL) Of Dynamic Electricity

Firmanul Catur Wibowo, Agus Setiawan, Ni Ketut Rahayu, Dina Rahmi Darman, Agus Setyo Budi

The ICT for education has become the guiding principle of physics education in many countries and is the focus of research efforts. The development of physics education focuses on the use of technology as a means to integrate many subjects. The focus on new technologies and practical applications is to develop a website-based Virtual Physics Laboratory (VPL) of electricity concept for integration knowledge to effectively solve problems. The method used in this study is Research and Development (R & D). The instrument of this research is the team feasibility questionnaire expert and student response questionnaire. The Research was conducted on 60 students, whose age ranging from 18 to 20. Research result shows that based on the assessment of content experts an average 84.44 % and media experts VPL has very decent criteria with an average of 87.50 % and has very criteria both in response to students with an average of 86 % with category very good. The level of student acceptance of the main learning in the VPL model also shows that students tend to accept the use of Relevance, Confidence, and Satisfaction from virtual experiments.

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Changing Professionalism Tutor With TPACK Model Based On Interactive

Learning Simulation (ILS) Of Greenhouse Concept

Suherman Suherman

Experiment research aimed to find out how changing professionalism tutor with TPACK (Technological, Pedagogical, Content Knowledge) model based on Interactive Learning Simulation (ILS) of concept Greenhouse of the 21st century is the research subject tutor activity of the Teaching and Learning Centre (CLC), tutors were selected randomly as much as 7 out of every CLC. The Tutor after the implementation of this model shows that the model TPACK has a positive impact on the quality of the learning process. In detail the impact of the implementation of the model TPACK it is (1) increased knowledge of the subject matter better; (2) Tutor-Tutor is able to plan the learning process to encourage participants to be more active Tutor; (3) Tutor skill in conducting the learning process CLC changed for the better; (4) Tutor efficacy in performing the learning process increases CLC better.

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The Role Of Nafsul Muthmainah Achievement (Nma)-Based Leadership Training Orientation Model In Improving Employee Performance In Small And Medium Enterprises (Smes) In Central Java

Darwito, Sugeng Wahyudi, Indi Djastuti, Lala Irviana, I Ketut Santra

This research aims to report the differing findings of previous studies on empowerment in correlation with employee performance, then to explore and analyze the effects of the NMA-based leadership training orientation on affective commitment, job satisfaction, and employee performance in small-medium enterprises in Central Java. Structural Equation Modeling (SEM AMOS 21) is used to analyze the data in the hypothesis testing model. The population is the line managers who are given credence by the owners of Small-Medium Enterprises to attend the NMA-Based Leadership Training Orientation, which focuses on self-development for leaders and is held by the Department of Cooperatives and Small-Medium Enterprises in the Central Java Province. In total, there are approximately 1,270 Small-Medium Enterprises. Out of 200 samples, only 178 samples could be used. The SEM test results show that out of 8 hypotheses, only 6 are

accepted while the other two are rejected. The hypothesis testing is done by analizing the values of CR (critical ratio) and P (probability) on the data processing result of Regression Weights, using the requirement of statistical limit points, i.e. the CR (critical ratio) is over 1.96 and the P (probability) is below 0.05. The effect analysis conducted on the existing five influence lines has indicated that the greatest influence in shaping employee performance is the NMA-based leadership orientation training.

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Analysis Of Mediation Effect Of Consumer Satisfaction On The Effect Of Service Quality, Price And Consumer Trust On Consumer Loyalty

Darwin Lie, Acai Sudirman, Efendi, Marisi Butarbutar

This research aims to test the influence of services quality, price, and consumer trust in the consumer loyalty of user-based transport applications (Go-Jek), case studies on students of STIE Sultan Agung Pematangsiantar with consumers satisfaction as mediation variables. The number of samples in this study was as many as 322 students acquired through non-probability sampling techniques by the purposive sampling method. The instrument used is an online questionnaire that is shared through social media and chat apps in the form of links. The test tool uses SEM analysis with the help of AMOS software. The results of the research and the hypothesis test show that variable price and consumer trust have a positive and significant impact on consumer loyalty. Furthermore, service quality variables are negatively influential and insignificant towards consumer loyalty. Consumer satisfaction variables are a variable of mediation between service quality relationships and consumer trust in consumer loyalty. Furthermore, consumer satisfaction is not able to do the price relationship to customer loyalty. The empirical findings indicate that to increase customer satisfaction and loyalty. The Go-Jek company should pay attention to the supporting factors in the selection of transportation services for consumers, such as service quality, price, and consumer trust. In the aspect of service quality, Go-Jek company need to design a sophisticated system as an effort to integrate the identity of Go-Jek service users with attention to consumer convenience procedures. Furthermore, the company should still maintain an existing pricing

system and to maintain the trust of consumers should review the driver's hiring mechanism as a partner.

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Environmental Law Enforcement In Hazardous-Waste Management In West Java Indonesia: A Critical Trajectory Of Green And Anthropogenic-Based Environmental Policy Orientations

Endang Sutrisno, Taty Sugiarti, Novani Ambarsari Pratiwi

The main problems faced in efforts to enforce environmental law in developing countries are limited by legal awareness and legal compliance. Law enforcement must be carried out by considering the three integrated-comprehensive-holistic concept unions. Practically and hierarchically, enforcement of environmental regulations also needs to involve local governments in their implementation. Local government policies also need to support green and progressive policies in controlling the impacts caused by hazardous waste which results in anthropogenic aspects and environmental sustainability at the same time. This study highlights the input aspects of environmental policy in the context of hazardous waste, regulation and law enforcement by taking a case study in West Java, Indonesia. The findings reveal that licensing for the management of hazardous and toxic wastes is sought to build quality conditions that are environmentally friendly and human health so that legal arrangements regarding hazardous waste can lead to legal objectives to realize a sense of justice and balance for the company, society and the environment. This research practically suggests that the understanding of companies and the public about the norms of hazardous and toxic materials must be fully realized and policy support from the regional government must be carried out optimally as part of realizing sustainable development.

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The Effect Of Coupon Sales Promotion, Online Customer Review And Perceived Enjoyment On Repurchase Intention In E-Commerce Shopee

Ika Barokah Suryaningsih, Lilik Farida, Ovilia Revanica, A.Ahsin Kusuma M

This study is aim to find out whether coupon sales promotion, online customer review and perceived enjoyment can influence the interest of repurchasing in e-commerce Shopee. In this research, the population is e-commerce shopee consumers. The study used a purposive sampling technique with the criteria of respondents who spend at least Rp. 90,000 twice. Distribution of questionnaires using the google docs link and getting as many as 160 respondents. The analysis used in this study is multiple linear regression by using SPSS 24. The results of this study showed that coupon sales promotion, online customer review and perceived enjoyment significantly influenced the interest of repurchase in e-commerce Shopee. In this study, the most influential variable is perceived enjoyment.

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Recent Studies In The Application Of Internal Cooling System In Conventional Machining Process

B Sowgandhi, Dr P N L Pavani

In general, most of the manufacturing industries use lathe machine, because of its applications in various fields of automotive, defense, missile technology and aerospace. The workpiece material used in these fields are owing high hardness and good physical properties. In this machining process extreme heat is generated, which interrupts the chip flow. In turn it effects the surface finish of the machined surfaces and also decreases the tool life. Tool temperature cause damages like wear resistance and reduction of mechanical resistance therefore efficient cooling strategies are used to minimize the cutting zone temperatures. Now-a-days demands increasing on machining new cooling techniques, among them closed internal cooling system can be an alternative to green environment. Application of Nano particle blended in cutting fluids reduces the cutting zone temperatures, increases tool life, material removal rate and surface finish. However, the existing literature shows that under same application thermophysical properties are improved from other fluids. In this paper, a concise study of operating and machining conditions of lathe machine under internal cooling system is made and observations from the literature survey are discussed.

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Identifying The Factors Impacting Online Consumer Buying Behaviour

Dr. Vandana Sonwaney, Snehal Chincholkar

Internet has changed the traditional retailing process drastically which is not only beneficial for sellers but also for buyers. During online buying process several factors motivated and demotivates the consumers which direct their buying intention. This study is an effort to identify the factors which impact online consumer buying behavior. This study also focused on non-metro cities consumers which are the future potential for e-retailers. Total 78 samples have been taken from defined tier-III cities. The data were collected through research questionnaires and further analyzed by employing the various statistical tests. Psychological factors and some demographic factors have been found significantly impacting consumer buying decisions.

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Study Of Indo - Portuguese Architecture On The East And West Coast Of India

Ar.Tony Marcel Nisha, Dr.P.Jayasudha

The Portuguese were the lead explorers in maritime trading and colonization during the fifteenth and sixteenth centuries. They colonized many areas along the coasts of Brazil, Africa, India, Sri Lanka, China and the Far East. The colonial architecture of Portuguese reflects the cross-cultural aspects of both Portuguese culture and the local culture of the colonies. The Portuguese gained knowledge and experience as they travelled from one place to another but preserved their traditional building typology. The resultant architecture is an amalgamation of both traditional building prototype and the addition of local cultural influences to it. In India, the Portuguese left their mark in many cities through their religion, language, lifestyle, art and architecture. Indo-Portuguese architecture is a perfect example of the cross-cultural miscegenation of Portuguese culture and Indian culture. This paper aims at understanding the degree of cross-cultural composition in Indo Portuguese Architecture through case examples

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Antibacterial Coating Of Herbal Biopolymer Nanocomposite On Bamboo Cotton Fabric For Textile Applications

DR. Banupriya.J, DR. V. Maheshwari

The healthcare and sanitation textiles are gaining additional importance for the eco-friendly and valuable antibacterial activity that have become vital to safegaurd human beings from harmful microorganisms. Most of the antibacterial agents available in the market for the application of textiles are synthetic-based and may not be environmentally friendly. Among the improvement of textile with Antibacterial finish it is greatly essential and appropriate since garments are in direct contact with human body. The present investigation is to develop a fabric with antibacterial property using Terminalia chebula herb and Chitosan biopolymer extracts. Antibacterial property has been imparted to bamboo cotton blended fabric using nanoencapsules by exhaust method. The antibacterial activity was assesed using Agar Diffusion Method against Gram Positive organism (Staphylococcus aureus) and Gram Negative organism (Escherichia coli). The samples were imparted with herb and biopolymer nanocapsules which showed best results for antibacterial activity against microbes even after 30 washes. The finished sample was analyzed for its morphology using FESEM and FT-IR.

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Journey Of CFBA Variants With Advancement In Text-Mining And Subspace-Clustering

Preeti Mulay, Rahul Raghvendra Joshi

Many professional data-clustering algorithms in history and in use today have dependency on varied inputs from the user. Any wrong input by user may hamper the quality of clusters. With the advent of Internet-of-Things (IoT) in particular and Information-Technology in general, huge amount of data is getting produced in real time consistently. To handle such huge data, and to produce quality clusters iteratively, parameter-free incremental-clustering algorithm was a need of an hour. With this background the first Closeness-Factor-Based-Algorithm (CFBA) was in 2013 and evolved thereafter consistently. This paper is the amalgamation of all variants of CFBA, its progress, its relevance in the real world and the attempt

to further propose few more new variants of CFBA in the fields of text-mining and sub-space clustering. The distributed versions of CFBA are successfully implemented using platforms like Azure, AWS and Map-Reduce, to name a few.

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The Effect Of Forensic Accounting, Training, Experience, Work Load And Professional Skeptic On Auditors Ability To Detect Of Fraud

Evenri Sihombing, Erlina, Rujiman, Iskandar Muda

This study aims to examine and analyze the Effect of Forensic Accounting, Training, Experience, Workload, and Professional Skeptics on the Auditor's Ability to Detect of Fraud (Empirical Study on Representative BPK, BPKP Representatives and Provincial Inspectorates in North Sumatra). This study uses a type of causality research using the survey method. Data collection is done by questionnaires distributed to respondents. The method of determining the sample using a simple random method. The method of data analysis uses multiple linear regression analysis. Data processing uses the SPSS version 25 application. The results show that forensic accounting variables, training, experience, workload, and professional skepticism have a simultaneous effect on the auditor's ability to detect fraud. Partially, forensic accounting, training, experience, and professional skeptic variables have a direct (positive) and significant relationship, while workload has a relationship that is not in the same direction (negative) and has no significant effect on the auditor's ability to detect of fraud.

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Multihop Vector Based Routing For Void Avoidance In UWSN﷯A Linear Programming Approach

Gulista Khan, Kamal Kumar Gola, Manish Dhingra

Wireless sensor networks used in each and every area of human life. Underwater sensor networks (UWSN) provide applications in various fields. Underwater environment experience various limitations like low bandwidth, extraction, high bit rate, high deployment cost, high propagation etc. Nodes drift due to water current; this node mobility causes void holes in area. Void hole are

serious issue in routing of underwater sensor networks. It will cause high energy consumption and high end to end delay. So, void holes avoidance can help in network performance improvement. Void holes can be avoided by picking the best forwarder node to forward the data. This paper focuses on selecting the best forwarder node based on various parameters like holding time, distance from sensor node, distance from virtual vector and residual energy. Two hop neighbour information is used to select the best forwarder node. Proposed algorithm aims to provide the better network performance by composite function and optimal best forwarder node by using two hop neighbour information. Mathematical linear programming helps in calculating the composite function which significantly helps in reduction of energy tax and end to end delay and also improves the better throughput and PDR.

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Choosing An Best Economic Corridor Level Between Chennai To Salem Using Analytical Hierarchical Process (AHP) And Technique For Order Preference By Similarity To Ideal Solution (TOPSIS)

Dr. K. Yogeswari, R. Bala Keerthana

Economic corridors are meant to increase the connectivity between major cities such that the industrial growth will happen. These kinds of economic corridors will play a vital part in the economic growth of a country. The Indian government has announced an economic corridor between Chennai to Salem. It is necessary to consider sustainability in the project for its long run. The following work is an analysis of choosing the best corridor level i.e. elevated or on ground. The indicators for sustainability are identified and evaluated. Since there are many variables it is necessary to chose the best alternative design by using multi criteria decision making. The multi criteria decision making has various options the best method has been opted. The importance of indicators is made with the help of Analytical Hierarchical Process Process (AHP) and the best alternative is arrived with the help of technique for order preference by similarity to ideal Solution (TOPSIS).

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Screening Of Novel Antibiotic From Streptomyces Griseus To Control Pyogenic Infection Causing Multidrug Resistant Staphylococcus Aureus

Saravana kumari. P, Balachandar. S, Dhanabalan. R

Recent studies by epidemiology surveys on acquiring the potential of drug resistance among Staphylococcus aureus delineated that drug resistance is tremendously increasing due to the high rate of mutation in virulence genes of pathogens. Apart from the emergence of Methicillin resistant Staphylococcus aureus (MRSA), Vancomycin resistant cases also increased 170% within last one decade, indicating a need for continued surveillance and to search and develop prospective agent to treat drug resistant pathogens. Present study aimed to screen for novel antibiotic from Streptomyces sp., isolated from undisturbed areas. Alkaline to acidic range of soil samples from different part of Western Ghats regions in and around Coimbatore district of Tamil Nadu were collected and upon processing thirty different Streptomyces species with unique morphological features were identified. Antibiotic production against pathogenic, multidrug resistant Staphylococcus aureus (AR, CR, ChR, CdS, ER, GR, MR, OR, VR) isolated from suppurative wound swab used in the study along with a reference strain S. aureus MTCC740 (AR, CS, ChR, CdR, ER, GS, MR, OR, VS). By the primary screening for antibiotic production from thirty Streptomyces sp., maximum zone of inhibition of 27mm showing organism belonging to Streptomyces griseus, was identified and confirmed by 16S rDNA sequencing. Antibiotic was partially purified from the S. griseus and minimal bacteriocidal concentration (MBC) of antibiotic against test pathogens S. aureus MTCC740 and clinical pathogen recorded as 128&#65533;g/ml and 256&#65533;g/ml respectively. Minimal inhibitory concentration (MIC) for S. aureus MTCC740 was confirmed as 8&#65533;g/ml and against the clinical isolate as 32&#65533;g/ml. Recorded MIC and MBC concentrations of novel antibiotics required to control the pathogens were comparatively lower than the antibiotics used in treatment at present. Thereby the study recommends the potential use of novel antibiotic purified from new strain of Streptomyces griseus as drug, after complete purification, characterization and toxicity assay as drug to treat emerging pan drug resistant clinical pathogens of S. aureus.

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The Development Of Student Activity Sheets Integrated With Scientific Approach To Increase Students' Skills In Completing Natural Environment Problems

Gio Mohamad Johan, Lili Kasmini, Waspodo Tjipto Subroto

The purpose of this research is to develop a product in the form of student activity sheets integrated scientific approach to fourth grade students of elementary school. The student activity sheets integrated with scientific approach is an activity sheets that presents material, instructions and various kinds of tasks for students that are integrated with scientific approach activities in the form of (1) observing, (2) asking questions, (3) gathering information, (4) processing information, and (5) communicating. The purpose of developing the product of student activity sheets integrated with scientific approach is to train students' sensitivity in observing the state of the natural environment and facilitate the teacher in the process of teaching material in the natural environment. This type of research is a research and development or R & D (research and development) type. The student activity sheets are developed based on the standard of content eligibility, language feasibility, graphic feasibility, and feasibility of presentation. In this research process, the result is that the development of student activity sheets integrated with scientific approach has a high value of validity, practical and effective to be used in the learning process especially to improve the skills of the fourth grade students in solving surrounding natural environment problems.

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Validating Constructs Of Procedural Justice Based On Confirmatory Factor Analysis For Behavioral Accounting Scientific Research

Petrus Ridaryanto

This study seeks to present some constructs of procedural justice, and validate them, so that they can be used as valid constructs in subsequent behavioral accounting research. This research was conducted at 262 auditors in Jakarta, Indonesia. The data of this study are cross section data from all auditors working at the Public Accountant Office in Jakarta. This research was conducted by survey method. The research instrument used was a questionnaire. The findings as

supported by descriptive empirical data presented in table 2 show that the average index value of 49.5 is interpreted medium. This means that the respondents have perceptions of procedural fairness fairly. Even though it is in the middle group, if it is turned on, the index value is relatively low so that it can be interpreted that the procedures for evaluating auditor performance have not been carried out very satisfying the auditors. Based on the validation test, the constructs that can be proposed in scientific research in the field of behavioral accounting in the context of procedural justice are the feeling of respondents to work performance appraisal truly reflects the work done, fairness of work period assessment, evaluation of job performance according to respondents, fairness perceived by respondents from supervisors in conducting your performance appraisal, respondent's feelings regarding performance appraisal during the past period are free from errors, similarity of respondents' assessment to performance appraisal made by the employer if the they evaluate their own performance.

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Radio Frequency Sensor-Based Traffic Light Control For Emergency Vehicles

Goshwe, Y. Nentawe, Okewu A. Victor and Kureve D. Teryima

Most cities in Nigeria experience traffic congestions during peak periods because road transport remains the dominant mode of transportation in Nigeria. These congestions have the consequence of affecting the efficiency, reliability and safety of emergency vehicles in performing their duties which are vital for saving lives and reducing property losses. This paper presents a prototype of an intelligent RF based traffic control system for emergency vehicles that transmits using amplitude shift key modulation technique at a frequency of 433 MHz and maximum sensing distance of 65 meters. The system operates in two modes: normal and emergency sequences. Under normal sequence, the designed pass period per lane was 15 seconds and complete cycle is 45 seconds. Under an emergency sequence, the transmitted signal overrides the normal sequence of traffic because the microcontroller will run the interrupt service routine (ISR) or interrupt handler which will trigger the red light on all the lanes. The prototype constructed gave a sensing distance of 42.2 meters, pass period per lane of 12 seconds and a complete cycle period of

36 seconds.

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Preparation Development Of Learning Device Problem Based Learning Model With Scientific Approach To Improve Mathematical Problem Solving Ability

Neilur Rahmi, I Made Arnawa, Yerizon

The problem in this study is the students' mathematical problem solving ability is still low, the cause is that the learning device designed by the teacher has not supported the formation of these abilities. Through learning device development will improve students mathematical problem solving. This is a development research with Plomp model. The Statistic Group Comparison Design is the experimental design being used in this research. Research result reveals that: (1) Learning device developed by the researcher is 3. 55 in average resulted from validation result by experts and it is a very valid category. (2) On average both teacher and students respond toward learning device based on Problem Based Learning as a whole is valid with 80.675% average percentage and in including in a good or practical respond criteria. (3) Students learning result reveals sig. score (2-tailed) 0.014 smaller than (0.05) score, hence is rejected and is accepted. Conclusions obtained that learning device based on Problem Based Learning with a scientific approach has a significant impact toward class VIII students of Islamic Junior High School (MTs) ability in solving mathematics problem.

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Relationship Between Smoking And Stress Behavior Related To Hypertension In Men Aged 35-45 Years In Cihampelas Health Center

Ando Fikri Hakim, Hardini Tri Indarti, Oktoruddin Harun, Hilman Surya Permadi, STIKes Budi Luhur Cimahi

Hypertension cases in West Bandung District, especially in the work area of Cihampelas Public Health Center in 2018 in the period of January to March reach 575 cases. Based on hypertension data, there are 82 hypertension cases that are engaged in male patients in aged 35-45 years,. The purpose of this study is to determine the relationship between

smoking and stress behavior in hypertension cases in men aged 35-45 years at the Cihampelas Health Center.The research design in this study was an analytical survey research with cross sectional method, meaning that each research subject was only observed once and measurements were taken on the character status or subject variables at the time of examination. The method used in this study is a standardized questionnaire. The independent variables of this study are smoking and stress behavior and the dependent variable of this study is hypertension. The population in this study is 82 male respondents aged 35-45 years and the sample used is 45 male respondents aged 35-45 years who fulfilled the requirements. The sampling method used is non probability sampling using the Slovin formula. Based on the results of this study, it is known that: the p value of smoking behavior = 0.042 ≤ α (0.05) and the p value of stress behavior = 0.014 ≤ α (0.05). So, it can be concluded that there is a relationship between smoking and stress behavior in hypertension cases in men aged 35-45 years at Cihampelas Health Center.

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Tree Regeneration Pattern And Size Class Distribution In Anthropogenically Disturbed Sub-Alpine Treeline Areas Of Indian Western Himalaya

Nandan Singh, Ashish Tewari, Shruti Shah

The position and structure of the treeline species vary from one site to another and in Himalayan region it depends on the snow line or snow cover. The transformation from seedling to adults is important and therefore the regeneration dynamics is a major thrust area of the study. The present study was conducted in the three anthropogenically disturbed treeline areas varying in altitude between 3145 and 3467 m asl in the sub-alpine region of western Indian Himalaya. The cattle pressure was estimated by using questionnaire and direct observation method. 3-5 herds of 800-1000 animals grazing in each studied site during snowless period. Across the treeline sites the total tree density varied between 590 and 760 ind. /ha and seedling density between 200 and 710 ind. /ha. The un-palatable R. arboreum and R. campanulatum showed the maximum seedling density (90-230 ind. /ha and 190-330 ind. /ha) whereas, remaining other species had poor regeneration. R. campanulatum seedling were present 6-20m outside from

the actual position of krumholtz and showed an upward movement from actual treeline limit encroaching into alpine meadows.

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The Legal Status Plans For Construction Of Roads In The Heritage Of Sumatra's Tropical Rain Forests (Tropical Rainforest Of Sumatera)

Sutiarnoto, Jelly Leviza, Iskandar Muda

The purpose of this study is to determine the Legal Status of the Plan for the Construction of Roads in the Heritage of Sumatra's Tropical Rainforest (TRHS). The type of research used is qualitative descriptive doctrinal normative law or library research. The object of this research study is the internal aspect of positive law. The technique of data collection is done by Neutral, objective and descriptive. The results show that the factors that become obstacles to the implementation of the application of legislation in TRHS include the still inconsistency between legislation both vertically and horizontally in accordance with the hierarchy of laws and regulations as stipulated in Law No. 12 of 2011 concerning the establishment of legislation. This study contributes to the legislation and synchronization of these regulations will lead to overlapping, legal loopholes and legal vacancies. Other factors include the existence of a issuer and the lack of coordination between institutions related to protection and management in the TRHS area.

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Development Of Mathematical Learning Devices Based On Inquiry To Improve Mathematical Problem-Solving Skills Of Tenth Grade Students In Vocational School

Veggi Yokri, Dony Permana, Yerizon

This development research aims to provide an inquiry-based mathematics learning tool for tenth-grade students of Vocational School that are valid, effective and practical in order to develop their mathematical problem-solving abilities. This research is motivated by the learning of mathematics in schools, especially in vocational high schools (SMK) that have not supported the development of problem-solving skills. The priliminary results

of interviews and observations were taken in SMAKPA, West Sumatra. The resealed that teachers merely depended on questions in textbooks although a few of them gave questions in an effort to train mathematical problem-solving skills. The existing student worksheets (LKPD) were not prepared by the teacher itself but were purchased from the publisher and even did not use LKPD. The form of RPP and LKPD are used as tools developed in this study. Three stages of the development model of Plomp are applied. The research data was collected by interviews, questionnaires, observation sheets, and analysis sheets as well as tests of mathematical problem-solving abilities. Therefore, The results of the study showed that the mathematics learning tools produced meet valid, practical and effective categories both in terms of feasibility and validity. In other words, the developed device can be used as reference material in mathematics learning that is oriented to problem-solving skills in tenth-grade students in SMKPA.

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BIM Based Building Performance Analysis Of A Green Office Building

Anju Ebrahim, Dr Abhaykumar S. Wayal

Over the past few years, Green and Sustainable Buildings have gained a lot of prominence owing to the growing environmental concerns. Buildings have acquired a significant share in the overall energy usage and have also become a major source of CO2 emissions throughout its lifecycle. Construction of Green Buildings by incorporating various sustainable design parameters may be a tedious process, but integrating Building Information Modeling (BIM) in the design can make the procedure much simpler. In this study, the building performance of a Green Office Building is assessed in terms of sustainability using BIM. Similarly, performance analysis is carried out for a conventional building to explore the ecological advantages of erecting a Green Building. The analysis gave about 15% energy savings, 22.3% water usage savings and 21% carbon reductions in the Green Building compared to the Conventional Building. Also, an alternative for the Green Building Design is evaluated which showed 4.7% Energy Cost Savings and about 38.6% Reduction in CO2 emissions compared to the original design. So,with this method, different alternatives for the design are easily generated in the conceptual phase itself and therefore, decisions regarding the design are made easily. But this technique generates

results which mainly focuses on the operation phase of a building with least attention given to material production and transportation stage. Also, there are chances of errors due to file transfer in different formats while carrying out the analysis in BIM.

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Automated AI Based Road Traffic Accident Alert System: YOLO Algorithm

Deeksha Gour; Amit Kanskar

Road Accidents, a very common reason of tragic deaths and many times the victim dies due to non-reporting of such accidents to the proper authority. Since the accident was not reported the lack of emergency medical care results in death. We live in an era of technology where we are moving towards making the city, A Smart City. A smart city with smart AI based traffic monitoring and reporting mechanism can help providing medical emergencies in real time and this would result in saving lots of life. Traditional Traffic systems are equipped with IP cameras and sensors, and are already installed in most part of the city to monitor and control traffic. These systems are able to generate traffic tickets automatically. In this paper we are proposing a more advanced traffic monitoring system which can identify and detect moving objects such are cars, bikes etc in live camera feeds and detect collision of these moving objects and immediately send emergency alerts to the nearby authority for them to take necessary actions.

[View Full Paper] **[Download]** **[References]** **574-578**

Improving Novice Lecturers' Teaching Ability On The English For Specific Purposes (ESP) Through The Implementation Of Lesson Study

Puji Sumarsono, Masyhud

It is mandatory for higher education institution (HEI) to improve the quality of their teaching staff simultaneously as a basis to contribute more to society. This research aims to improve novice lecturers' teaching ability. The target of this program is 2 (two) novice lecturers in the English Department who teach ESP Reading. The skill aims to improve in the LS is reading skill as the lecturers wanted to gain more knowledge about how to teach Reading well. Also,

reading skill is taught in six different levels such as; Reading I, Reading II, Reading III, and Reading IV, as well as ESP Reading I and ESP Reading II. To overcome that issue, it applied Lesson Study (LS) as a form of Classroom Action Research (CAR) which covers three stages; Plan, Do, and See. In the Plan stage, LS team collaborated to plan teaching and learning. In Do stage, the lecturers applied the teaching and learning based on the teaching and learning scenario that had been approved previously. In See stage, the LS team applied reflection on the teaching and learning that was just presented. The results indicated that LS could improve novice lecturers' teaching ability.

[View Full Paper] [Download] [References] **579-584**

Prime Coloring Of Some Graphs

P.Murugarajan, R. Aruldoss

In the recent era, the coloring of the graphs is arousing the attention of researchers. Among the mathematical models, coloring technique plays a vital role in a broad range of applications in real life problems and it solves several complexities of computer networks. Considering the above facts, in this paper, prime coloring and its chromatic number of some graphs are depicted and its results are validated with few theorems. Subject Classification Code: 05C78, 05C15

[View Full Paper] [Download] [References] **585-588**

A Multivariate Binary Logistic Regression Modeling For Assessing Various Risk Factors That Affect Diabetes

Pallavi Rastogi, B.K. Singh

This study is based on the development of multivariate logistic regression model to assess the effect of various risk factors like age, BMI, meal-regularity and fast-food consumption on the prevalence of diabetes spatially in urban and rural areas of India. The existence of non-multicollinearity, non-normality and non-linearity between the variables was studied. The test-of-association showed that age, BMI and fast-food were significantly associated with diabetes in rural($p<0.05$). While, age and BMI were found to be associated with diabetes in urban area. The Wald test and Odds ratio ($OR>1$)showed that age and BMI were significant predictors of diabetes. The intake

of fast-food has 4.08 times more effect on diabetes than those who do not take. Similarly, the persons with regular nutritional diet were at low risk of getting diabetic. The area under the ROC curve showed the better performance of the model. Hence, the developed logistic regression model can be a powerful statistical technique for identifying the association of most prominent risk factor to diabetes and thus timely notify to take needful actions to reduce the risk of getting diabetes.

[View Full Paper] [Download] [References] **589-599**

The Development Of Learning Instruction Based On Problem Based Learning To Improve Problem Solving Ability Of Students In Grade VII (Preliminary Research)

Citra Putri Permatasari, Yerizon, I Made Arnawa, Edwin Musdi

The problem encountered in school is that students' mathematical problem solving abilities are not optimal. It can be improved by using learning instruction based on Problem Based Learning. The purpose of this study is to develop learning instruction based on Problem Based Learning (PBL) to improve students' mathematical problem solving abilities. The type of research is development research using Plomp&#65533;s model which consists of three phases namely preliminary research, development or prototyping phase, and assessment phase. This article discusses the preliminary section. Questionnaires, teacher interview guidelines, field notes, educational test questions were used as a instruments. The results of data analysis show that 1) Students mathematical abilities was low, 2) the learning process focused on the teacher, 3) Students&#65533; involvement in the learning process was lack, 4) The learning instruction used by teachers are not facilitating students to improve mathematical problem solving skills , 5) Students feel difficult to understand the language used in learning resources.

[View Full Paper] [Download] [References] **600-604**

Multimodal Biometric Recognition System For Efficient Authentication Using MATLAB

A.Jagadeesan, R.Dhanasekar, M.Kalaiyarasi

Unimodal biometric framework has pulled in different analysts and made incredible

progress. Unimodal framework alone will be unable to meet the expanding prerequisite of high precision in the present biometric framework. Single biometric frameworks experience the ill effects of numerous difficulties, for example, loud information, non-all inclusiveness and satire assaults. Multimodal biometric frameworks can illuminate these confinements successfully by utilizing at least two individual modalities. In this strategy combination of iris, fingerprint and face qualities are utilized with the end goal to enhance the exact security of the framework and to recognize the human. The principle intention is to investigate whether the combination of iris, fingerprint and face biometric can accomplish execution that may not be conceivable utilizing a solitary biometric technology. The framework is connected at the coordinating score level, with different standardization and combination run the show. The individual coordinating scores produced in the wake of coordinating of question pictures with database pictures are passed to the combination module. Combination module performs score standardization and combination of standardized scores by weighted whole runs the show. Algorithms used for iris, fingerprint and face traits are Image Pre-Processing Step 1 Image Denoising (Restoration) 2d Hybrid Bilateral Filter, Image Enhancement Using Wavelet Transform And Short Time Fourier Transform (Hybrid Transformation) and Face Recognition Using Pca Eigen Matrix Principle. Coordinating various biometric characteristics enhances acknowledgment execution and lessens fake access. The proposed multimodal biometric framework conquers the impediments of individual biometric frameworks and furthermore meets the reaction time and in addition the precision pre-requisites.

[View Full Paper] [Download] [References] **605-610**

Some Algorithms Of Various Projective Coordinate Systems For ECC Using Ancient Indian Vedic Mathematics Sutras

Manoj Kumar, Ankur Kumar

In this present approach, Some Algorithms of Various Projective Coordinate Systems for ECC (Elliptic Curve Cryptography) using AIVM (Ancient Indian Vedic Mathematics) sutras, has been studied. This work explained some useful Vedic sutra for multiplication calculation in cryptographic operations. In this paper, we have used some Vedic Mathematics Sutra to get minimum steps in

the calculation of the addition algorithm, doubling algorithm and for improving the speed of processing time in the cryptographic operations, such as point addition, point doubling which occurs in the Elliptic curve cryptography over projective coordinate systems (Standard Projective, Jacobian Projective, Lopez-Dahab Projective). The coding and synthesis are done in MATLAB. The results proved that the Vedic Mathematics based schemes show better performance compared to the conventional method. The total delay in computation is reduced by Vedic mathematics Sutras (Urdhva-Tiryagbhyam, Dvandva-Yoga) with the help of MATLAB software.

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Camera & Sensors-Based Assistive Devices For Visually Impaired Persons: A Systematic Review

Preetjot Kaur, Roopali Garg

Assistive Technology has led to the removal of numerous navigation barriers for visually impaired individuals. It promotes more freedom by empowering such people to perform tasks that were formerly challenging, such as Obstacle Detection, indoor/outdoor Navigation, finding lost objects etc., with more ease. This paper provides a wider scope for researchers in the field of Obstacle detection for blind/partially sighted persons. This paper discusses several techniques contributed by numerous researchers to serve this purpose. These techniques are reviewed and categorized according to the criteria of taking visual information and then the research gaps in those techniques have been detailed. The critical challenges faced by visually impaired users in using Assistive systems based on smartphones, IoT devices, sensors, etc have been discussed along with future directions. In this paper the advancements and research done in this field is surveyed. Further, the various research gaps are included.

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Role Of PH On Structural, Optical And Visible Light Photocatalytic Activity Of CdS Nanoparticles By A Simple Wet Chemical Route

Jeevanantham N, Balasundaram O.N

The potential CdS nanoparticles (pH 9, 10 and

11) are synthesized by wet chemical route. The crystallographic nature and grain size of the synthesized CdS nanoparticles were analyzed using their corresponding XRD pattern. Elemental composition and purity of the CdS nanoparticles was predicted by EDX analysis. The optical band gap and characteristic absorption peak of the CdS nanoparticles is examined by UV-Visible and photoluminescence spectra analysis. The functional groups of CdS nanoparticles were founded using FTIR. Surface morphology and paticle size of CdS nanoparticles were examined using TEM and HRTEM. The photocatalytic degradation efficiency of CdS nanoparticles (pH 9, 10 and 11) on MB and RhB were analyzed using visible light irradiation.

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Study Of Material Requirement Planning Processes & Its Analysis And Implementation (A Case Study Of Automobile Industry)

Rahul Hencha, Dr. Devendra S. Verma

The Material is the prime requirement of any final product, so that the Material Requirements Planning (MRP) systems are frequently used in any industry. In Material Requirements Planning (MRP) determining lot sizes, Lead time, scheduling in production areas is an essential task of production planning and control. Calculating economic lot size is becoming important in industries Due to the large number of parts and its varieties are available. Higher Lot Size increases the inventory level as well as increases the inventory carrying cost. This paper presents impact of Lot sizes on Material requirement planning (MRP), calculation of lot sizes of items, percentage of decreasing lot sizes & Collection plan, Receipts analysis & without collection plan material inward analysis & reduction in inventory level as well as inventory cost, transportation cost, storage cost by lower lot sizes, Collection plan, Receipts plan, coverage plan & reduces the without collection plan material inward, in order to increase Overall Profit of the organization, greater effectiveness in the production process and better information accuracy.

[View Full Paper] [Download] [References] **648-653**

Decision Support System Using Data Warehouse For Top Marketer

Marketing is an important thing that greatly influences the growth of the company. If marketing performance is good, then the company will also develop well. But in today's conditions, we often find that marketing motivation is often overlooked or not too cared for. So that performance decreases and will be very detrimental to the company. However, marketing motivation needs to be improved by determining the top marketers through a bonus system. Where the use of data warehouse will be carried out as the best Decision Support System (DSS) for manager in determining the top marketers. With the use of data warehouses, large amounts of data can be prayed in such a way as to produce information that is useful for managers in decision making.

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Designing A Web-Based Quality Of Accounting Information System

Meiryani; Jajat Sudrajat

Recording of transactions and financial reports that are still manual on small and medium micro businesses creates the risk of errors in financial records that are not rigorous, irrelevant, incorrect and not reliable, and creates difficulties with the increasing transactions that will occur in the future. This study aims to design a quality accounting information system model needed by small and medium micro businesses in order to assist business operations. This research is a research and development research with the method of developing rapid application development (RAD) which consists of three phases that require planning, RAD workshop design and implementation. Data collection techniques used were interviews, observation, documentation, literature study. The results of this study indicate that small and medium micro businesses in Indonesia still use manual cash receipt accounting information systems. Documents used in the form of cash notes and invoices, while the notes made are records of cash sales, accounts receivable, and inventory. However, recording is not done routinely so that financial information / reports are inaccurate. Designing a quality accounting information system can simplify and speed up the making of financial statements.

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A Novel Approach Of Microstrip Fed Planar Monopole Antenna For WSN Applications At 2.4ghz ISM Band

P. Saleem Akram, Dr. T. Venkata Ramana

In this research article a condensed planar monopole antenna is proposed for wireless sensor networks which operates at 2.4GHz ISM bands. The suggested antenna model is printed on a 16�23�0.8mm3 FR4 substrate with a dielectric constant Ɛr=4.4. We have modeled different U shape slots in various directions on the rectangular patch. At every stage by inserting the slot, we observed the antenna tunes from 4.25 GHz to our required operating frequency 2.4GHz. Simulation results are observed in HFSS V15 and prototype antenna results are matched with the simulated one. In general, the smaller size patch antennas works at high frequencies but the proposed Inverted U shaped slots and the side slots helped to tune the antenna to lower resonance around 2.4GHz with better gain and return loss. Its smaller size makes it very useful for wireless sensor networks applications around 2.4 GHz frequencies.

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Examination Of Electrical Behaviour Of Unidirectional Epoxy-Carbon Fiber Composite Under Tensile Load By Experimental Method.

Prathmesh Chopade, Mahesh Pradhan

Composites are modern materials which are currently used in almost all areas of technology. Because of the versatile behaviour of composites, analysis of composites is required to be done. In this work a unidirectional epoxy-carbon fiber reinforced composite was subjected to tensile load. While loading, the electrical resistance measurement is done using Kelvin�s four-wire method. Electrical contacts were made by epoxy-silver adhesive on the specimen. Connecting wires were attached with the epoxy-silver adhesive. The results obtained during tensile test were analysed to study the mechanical and electrical behaviour of the composite and their correlation which could be helpful in predicting the performance of composite materials.

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The Social-Psychological Components Of Farmers' Adaptive Behavior In Dealing With Drought (The Case Of Kermanshah County)

Sara Ghobadi Aliabadi, Hossein Agahi, Homayoun Farhadian

When a natural disaster hits, the affected households try to cope with its impacts. A variety of coping strategies, from reducing current consumption to disposing of productive assets, may be employed. Given the negative impacts of climate change the development of the rural community in Iran, it is of crucial importance to understand the solutions adopted by local communities, as the primary target group, to deal with these effects. Considering the importance of the issue, the present study aims to analyze the social-psychological determinants of farmers' adaptive behavior in dealing with drought among 335 farmers in Kermanshah County selected according to Krejcie and Morgan's table by two-stage cluster sampling method. The present work is a descriptive-correlational study in which data were gathered with a questionnaire whose validity was confirmed by experienced experts and whose reliability was estimated by Cronbach's alpha test (72≥ α ≥85). The results showed that five variables, i.e. environmental attitudes, strategy, subjective norm, perceived behavioral control, and agricultural work experience, could account for 51.9 percent of the total variance of farmer behavior. Also, the results of path analysis revealed that three variables, i.e. environmental attitudes, subjective norm, and strategy had total impacts of 0.400, 0.344, and 0.292, respectively and they were the most important factors in determining farmer behavior. Also, three variables of perceived behavioral control, age, and agricultural work experience had total impacts of 0.169, 0.051 and -0.172, respectively and had a minimal effect on farmers' behavior.

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Preferences Of Indonesian Workers 'Rights In Post-Bankruptcy Company

Aries Harianto

Worker rights preferences are normatively coupled with the rights preceding the state. Countries with their authorities have the right to take precedence over other creditors after the company is declared bankrupt by a court decision. This fact in the perspective of justice for workers does not reflect the commitment as a welfare state that is

functionally obliged to create the welfare of workers and their families as mandated by the constitution of the 1945 Constitution of the Republic of Indonesia. workers are loaded with legal problems that lead to injustice. Certainty is the beginning of the birth of injustice. Therefore, it is necessary to do 'legal reform', especially the Civil Code in the hope that the regulation on the rights of workers/laborers after the bankruptcy decision has a clear and certainty orientation, not a false preference.

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Organizational Transformation: A Reviews Of The Literature

Abd. Rasyid Syamsuri, Abd. Halim, Sumitro Sarkum

Organizational transformation is a directed effort in creating a new vision for the organization. The purpose of organizational transformation is to respond the environmental changes or initiate change. Changes in the role and transformation of human resources are expected to be able to increase comprehensive credibility in human resources in response to changes in the business environment. The challenge of organizational transformation is to find and develop better processes by leaving the past leading to better processes for the future of the organization.

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Improving Thematic Learning Outcomes Using The Picture And Picture Method To The Fourth Grade Students Of SD Negeri 31 Kota Ternate

Taufik Abdullah, Sudarto M. Abukasim, Amrin Hi. Saban

This research aimed at improving students' learning outcome of the thematic subject using picture and picture method to fourth-grade students at SD Negeri 31 Kota Ternate. The technique used in this research was qualitative in this case, Classroom Action Research (CAR). The researcher (lecturer) stayed in class during the learning process and collaborated with a teacher in teaching in the classroom. The learning actions were planned into three cycles, and each cycle had observation, planning, action, and reflection. The improvement of students' learning outcome of the thematic subject in cycle 1,

shown that; by the 24 students of grade 4, it was only 20 students or 26% which achieve completeness, overall, the average score is only 53.93; it is categorized adequately. In the cycle 2, the students' learning outcome of thematic subject by using 'picture and picture' method shown that; from the 24 students of class 4, in reality, focused on teacher's and lecturer's explanation for two meetings, they were 100% got improvement or in descriptive scale was categorized very good.

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Cultivating Spiritual And Social Attitudes In Elementary School Students: Evaluative Study With Cipp Approach On The Learning Of Religious And Character Education

Nur Asiyah, Abdul Ghofur

This study evaluates the cultivation of spiritual attitudes and social attitudes in the learning of Islamic Education and Character education through a scientific approach at State Elementary School of 05 Krajan Kulon Kaliwungu, Central Java. This type of research is an evaluation research, by taking one of the evaluation models, the CIPP model developed by Stufflebeam. The conclusions of this study can be detailed as follows. The cultivation of spiritual attitudes and social attitudes on learning Religious Education Lessons and Character education in SD Negeri 05 Krajan Kulon Kaliwungu begins with planning, implementation and evaluation. In planning, there are some things done by the teachers of religious education and character education. Implementation of spiritual attitudes and social attitudes in learning religious education lessons and Character education at SD Negeri 05 Krajan Kulon Kaliwungu are: Teachers implement learning in accordance with the RPP, but sometimes adjust to classroom situation and condition. The approach used is a scientific approach that uses 5 M (observing, asking, trying, associating and communicating). The methods used in learning vary, tailored to the material. Among the methods used in learning of religious education lessons are lecture method, question and answer, discussion, drill, demonstration by using scientific approach. In the development of teachers using learning model discovery learning and problem-based learning. Evaluation of spiritual attitudes and social attitudes on learning religious education lessons and Character education in SD Negeri 05 Krajan Kulon Kaliwungu implemented in

accordance with the existing plans in the RPP. Assessment techniques used include observation, task, observation and portfolio.

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Equitable Coloring Of Prism Graph And It's Central,Middle, Total And Line Graph

K.Praveena, M.Venkatachalam, A.Rohini, Dafik

A proper vertex coloring of a graph is equitable if the sizes of color classes differ by atmost one. The notion of equitable coloring was introduced by Meyer in 1973. In this paper we find the equitable chromatic number for Prism graph(Yn), the central graph of prism graph C(Yn), the middle graph of the prism graph M(Yn), the total graph of the prism graph T(Yn) and the line graph of the prism graph L(Yn).

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On -Multifunctions In Topological Spaces

K.Damodharan, M.Vigneshwaran

In this paper, the authors introduced upper and lower -continuous multifunction and -irresolute multifunction in Topological spaces. Some of their properties and characterizations are investigated.

[View Full Paper] [Download] [References] **715-721**

People Motivation In Doing Sport

Widya Handayani

The research problem in this study was "what is the motivation of the community to exercise in Kambang Iwak Palembang?" The number of sports facilities and infrastructure in Palembang is an advancement for the city of Palembang in the field of sports, one of the places is area of Kambang Iwak Palembang. People who exercise in Palembang's Kambang Iwak area are a community consisting of children, adolescents, adults and the elderly. The method in this study uses descriptive quantitative method, while the instrument in the study uses a questionnaire with a Likert scale. The sample in this study is the people who exercise in Kambang Iwak Palembang as many as 150 people. The sampling technique

uses non-probability sample technique with quota sampling. Quota sampling is a technique for determining a sample of a population that has certain characteristics to the desired amount (quota). The results showed the percentage of people exercising in Palembang's Kambang Iwak area. It is known that the percentage of people exercising in Palembang's Kambang Iwak is divided into two, namely the intrinsic sub variable of 80% (high category), extrinsic sub variable of 71% (high category). From the results above it can be concluded that the motivation of the community to exercise in Kambang Iwak Palembang is in a high category.

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The Effect Of Pocket Book Promotion Media On Student Knowledge About Risk Of Non-Infectious Disease (NID)

Ahmad Ahmad, Suhartini Suhartini

Non-Infectious Disease (NID) have become a major public health problem because they add to the economic and social burdens of families and communities. The use of appropriate promotional media is one of the factors in the success of achieving health promotion goals. The purpose of this study is to know the effect of Pocket Book promotion media on students' knowledge about the risks of NID and their prevention efforts. The research design used was quasi experiment. The population in this study were high school students in Banten Province, Indonesia. Samples were taken from different classes. One class was given health promotion by lecturing methods and giving leaflets (Control class) and one class was given health promotion by lecturing methods and giving pocket books (experiment class). Data were analyzed using computer devices with dependent T test in each group and independent T test in the treatment and control groups. The results showed that the average value of students' knowledge about NID in the Treatment group, the first measurement was 51.53, the second measurement 74.17 The results of statistical tests showed that there were significant differences between the mean values of student knowledge in the first measurement and second. In the first measurement control group 58.03 6. Second measurement 67.58. The results of the statistical test showed that there was a significant difference between the average value of student knowledge in the first and second measurements. The average value of students' knowledge about NID in the Treatment group 74.17 Whereas

for the control group 67.58 The results of statistical tests showed that there were significant differences in the average value of knowledge of students in the treatment group with pocket books with control groups with giving leaflets.

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The Effect Of Dopant And Glass Composition On Judd-Ofelt Parameters And Radiative Decay Rate Of Erbium Doped Zinc Borate Glasses For Broad Band 1.53 μm Emission

D. Vijaya Sri, S. Hima Bindu, Ch. Linga Raju

Erbium doped zinc borate glass system containing constant concentrations of M2+ oxides with the molar percentage of 10MO-(30-x)ZnO-60B2O3-(x)Er2O3 (where M = Ca, Sr & Ba and x=1, 2 & 3 mol %) were synthesized and characterized using various techniques like XRD, FTIR, optical absorption, photo-luminescence and decay curve analysis. The absorption spectra specified the ionic nature of the organized Er3+: MZB glass. The high spectral intensity values (ε) for the transitions 4I15/2→2H11/2 and 4I15/2→4G11/2 reveal the high site asymmetry around Er3+ ions. Broad & intense 1.53 μm infrared fluorescence for the transition 4I13/2→4I15/2 is observed at 379 nm. The green emissions in photo-luminescence spectra for 4I13/2→4I15/2 transition indicate strong quenching. The values of bandwidth (292 nm), stimulated cross section (5.3 cm2) and lifetime (1.65 ms) along with broad emission of 4I13/2 level in Er3+: MZB glasses suggest the present prepared glass system be potential beneficial candidate for high gain broad band amplifiers in WDM systems.

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Analysis Of Comparative Of Regional Poverty: A Case Of Indonesia

Ahmad Soleh

The main focus in this study is to analyzing the development of regional poverty in Sumatra and to analyzing the factors that influence poverty levels, poverty depth index and poverty severity index in the Sumatra region. This research was conducted in the period 2010-2012 in Indonesia. This study uses qualitative and quantitative methods

using panel data regression analysis. The results of the study show that the level of poverty is influenced by the level of education and the unemployment rate. Furthermore, the poverty depth index and poverty severity index are influenced by productivity, while the education level, unemployment rate and per capita income have no effect on the poverty depth index and poverty severity index.

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Competitiveness In Higher Education: An Empirical Study In Indonesia

Hendry Hartono, Satryo Soemantri Brodjonegoro, Engkos Achmad Kuncoro, Dyah Budiastuti

The influence of globalization affects all business organizations as well as non-businesses. Moreover, Higher Education Institution (HEI) is required to consistently produce new knowledge, products, or technology, so utilization of the resources as a key factor of higher education success is a necessity. The purpose of this study is to examine the key factors of HEI competitiveness. This study argues that organizational learning with the right transformational leadership and application of knowledge management along with the ability of the organization to act entrepreneurially and to behave innovatively to achieving high performance and competitiveness. This research is descriptive and verificative with explanatory survey method at accredited private HEI in DKI Jakarta. Data collection was done through documentation study, interview and questionnaire distribution. The analysis tool used is Structural Equation Modeling - Partial Least Square (SEM-PLS) with WarpPLS version 5.0 software. The results showed that HEIs could be diagnosed, understood and changed to enhance competitiveness. This study provides evidence to guide strategy development, priority, setting and planning, especially how to develop entrepreneurship culture and enhance innovative behavior with transformational and knowledge management roles. Creating appropriate transformational leadership culture and knowledge management support organization as a learning organization to change, improve and growth.

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A Trust Computational System For Service Oriented IOT

Shweta, Dr. Sunil Kumar

Internet of Things has made noteworthy benefits over old style communication technologies. IoT has done a lot in modern day and have totally changed the scenario of technologies. This paper helps in providing an overview of Internet of Things. Counting on an ample literature review, the main objectives of this research paper is to provide a trust computational model for service oriented IoT environment. Most of the existing trust model doesn't consider service Provider claim which affect the efficiency of trust management system. The proposed Trust model ORC is unique which consider three major parts Observation, Recommendation and Certification for computing subjective trust along with several parameters of Trust. The proposed model is able to remove the Biasness towards the new nodes in the system. Also certain weightage is given to the all ORC model parameters which help in reducing risk factor by giving preference to the Direct Observation as here node has most reliable analysis but the service provider. Fuzzy logic along with the weighted sum is used as trust aggregation. Also Trust Computing Algorithm has been proposed to evaluate trust In IoT environment.

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Career Model In Information And Communication Technology Informatics Based On Expert Systems

B. Herawan Hayadi, Nizwardi Jalinus, Kasman Rukun, Jalius Jama, Wakhinuddin, Dedy Irfan

Expert Systems were built in building an application program in helping Informatics students in determining their work and future careers that were suitable for Informatics to fit their expertise by leading to Information and Communication Technologies (ICT). Where in determining the field of work and future career, it was seen from his expertise at the time of lecture, especially in mastering the material in each course arranged in the form of Semester Learning Plans in each course which was cared for by a Lecturer who was an expert in their field. With the Semester Learning Plan, students must complete their learning and have a graduated standard that is determined or agreed upon such as values 80-100, where the value will affect the cumulative achievement index.

After the rules were established, a rule was established to determine the rules in determining the database of expert systems by using the forward chaining method so that it could be executed with a program in this case Desktop-based Visual Basic (VB).

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Effect Of Pinealectomy And Recovery Treatment Of Melatonin Dose On Vertebral Column Of Catfish (Heteropneustes Fossilis)

Reeti Panchal, Sudesh Rani

In order to study the effects of pineal removal on catfish (Heteropneustes fossilis) vertebral column, three groups of catfishes were formed.) Group-A was taken as control where normal fishes were placed. In Group-B, the surgery of pineal gland was performed i.e. pineal gland was removed and considered as pinealectomized group. Group-C fishes were pinealectominzed, administered with injections of 200mg melatonin dose/Fish. At the end of experimental period, growth abnormality in vertebral column and minerals contents in bones were measured. Results indicate that in pinealectomized group and melatonin received group fishes, the growth was reduced and hence lives weight gain values were obtained with negative sign. Results on vertebral column suggested that more curvature in spine was recorded in pinealectominzed fish. Whereas the fish which received melatonin dose the change in vertebral column was only slightly. Which indicates that melatonin is helpful to overcome the deficiency of mineral contents in bone.

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Forecasting Housing Choices Selection In Penang, Malaysia

Mohd Ali, N.H.S., Zainun, N.Y

National Property Information Centre (NAPIC), Malaysia recorded that for the first half year 2018 there was a decline about 37.8% on the residential stock especially for new planned supply and an increment of 18.2% on the overhang units. However, in Penang, it was estimated the demand to reach a total of 46,740 units due to the growing number of populations, formation of new households and the replacement of existing houses. Crucial housing challenge in

Malaysia, especially in Penang is majorly related to a mismatch in demand and supply for affordable housing. The goal of this research is to predict a housing demand in Penang based on 4 categories of housing which is consist of low-cost, low-medium cost, medium cost, and high-cost houses based on household formation. The research used Census Data 2010 from the Department of Statistic Malaysia to determine the headship rate and will use the Headship Rate Method to obtain household formation. A questionnaire was designed and approved by the expert before distributed to 400 households. The households were choose based on five districts in Penang and the respondents or household were divided according to 14 levels of age group which are; (1) 15-19 years old; (2) 20-24 years old; (3) 25-29 years old; (4) 30-34 years old; (5) 35-39 years old; (6) 40-44 years old; (7) 45-49 years old; (8) 50-54 years old; (9) 55-59 years old; (10) 60-64 years old; (11) 65-69 years old; (12) 70-74 years old; (13) 75-79 years old and (14) 80 and above. Multinomial Logit analysis was carried out to determine the choice of probability on house type selection and to produce a Choice Probabilities (CP), Model. The result analysis showed that Medium Cost housing was the most preferable type of house with the highest CP value of 0.4875. This prediction can assist local authorities, developers, consultants, contractors to plan which type of housing to construct based on demand in the future.

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Farmers' Income During Palm Oil Replanting In Siak Regency: Finding An Alternative Sources

Latifa Siswati, Rini Nizar, Enny Insusanty

The study aimed to find a model of farmers' income sources during palm oil replanting by breeding livestock and horticulture plants, so that farmer households still obtained a source of income during palm oil replanting. Farmers must be able to use land appropriately to earn income. This study uses a survey method, sampling by purposive sampling, which sampled farmers who do integrated farming when palm oil replanting. The data obtained calculates combined farming income. Primary data is obtained directly from farmers, and secondary information is collected from agencies and services related to this research. The analysis is done by finding an integrated farming model and farmers' income. The results of this study show an integrated agricultural income model

when palm oil is replanting Z = 6.837.600 X1 + 10.444.000 X2 + 1.250.000 X3 resulting to the results that can still be added for optimal livestock income and optimal income horticultural crops to be Rp.14.257.780. Integrated farming can become an excellent source of income: a. Palm oil and livestock breeding, b. Palm oil and cattle breeding, c. Palm oil and goats, d. Palm oil and fish, e. palm oil and horticulture plants.

[View Full Paper] [Download] [References] **778-780**

Detection And Prevention Of Distributed Denial Of Service Attack Using Choke Packet

Mariyam Fatima, Jameel Ahmad, Shish Ahmad

Security is the most important theme which needs to be given uttermost importance. The MANET is more prone to security threats because of its dynamic nature. One of the attacks in MANET is the DDoS attack. DDoS attack is a type of attack in which certain nodes floods the target system by sending the packets with high speed resulting in the denial of services of the authorized users. In this paper, a novel scheme is proposed to deal with DDoS attack in the MANET. The proposed approach implements a choke packet technique to detect the malicious node i.e. the node which does not decrease its data transmission speed even after receiving the choke packet from the receiver end, is marked as a malicious node and also digital signature technique is used for verifying the malicious nodes. The simulation is performed on NS-2.

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Analysis Of Behavior Extraction On Social Life Issues Using Tweets By Deep Learning Technique

Obaidullah, Faiyaz Ahmad

Sentiment analysis is also recognized as opinion mining. It exploits natural language processing (NLP), text analysis and computational linguistics to discover and dig up prejudiced information from the source materials. Sentiment analysis intends to establish the approach of a critic or an orator with respect to an exact topic or the overall contextual polarity of a manuscript. In this paper we aim to propose a deep learning approach to perform sentiment analysis of social media user reviews We exploit the

conception of natural language processing(NLP) to find out meaningful tweets and then use Nave Bayes method to classify all tweets.

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Prediction Of Coronary Artery Disease Using Core Principal Component Analysis Based Support Vector Machine

Omprakash Subramaniam, Dr. Ravichandran Mylswamy

Data mining plays vital role in many fields. In medical field, the usage of data mining is getting increased day by day to predict the disease and classify its severity. Coronary Artery Disease (CAD) is becoming major reason for sudden death, which is getting increased in the South Asian countries. Hence, there exist a need to predict CAD by utilizing the patients history by using data mining algorithms. In order to solve this issue, this paper proposes a core framework for finding the indicators and fixing the thresholds to classify the patterns in the dataset; it utilizes the feature based mechanism which integrate principal-component-analysis (PCA) and support-vector-machine (SVM) for productive detection of patterns in the dataset. In dataset multiple features may be available, where few or more features might not be used in classification, even if used it may reduce the classification accuracy. The proposed classification algorithm wisely eliminates the features that are not required for performing the classification by introducing the new features. The results shows that the proposed algorithm outperforms the existing algorithms with 97.34%.

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Evaluation Of Seepage Discharge On Jatibarang Dam Based On Instrumentation Data Monitoring

Siswanto, Suprapto

More than 90% of dams in Indonesia are fill type dams (rocks and soil). Rockfill dam has better stability than the homogeneous soil dam. So that it is possible to be made leaner in volume. The disadvantage of rockfill dam lies in the core zone which functions as an impermeable zone. Fill type dam failures are

usually caused by: seepage, piping, overtopping, hidraulic failure and structural failure. At the fill type dam seepage occupy the first ranks towards the risk of failure. Dam failure is statistically potentially large happened in the first 5 years since impounding. Geotechnical design and engineering is a major challenge due to the many influential factors. Rock fill dam with zonal core is a combination of various material properties. Geometry and drainage design will affect the seepage and phreatic line properties that occur. So it is not easy to make an analysis of seepage with these limitations. Based on the evaluation of the instrument since the impounding period of May 2014 to November 2018, data was obtained that seepage discharge was 648,864 liters/day. The discharge is still below the maximum allowable limit. So it can be assumed that the body of the Jatibarang dam is safe towards seepage that occurs.

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Early Contractor Involvement (ECI): Indian Scenario Of Construction Project Delivery

Siddhesh Sagvekar, Dr. A. S. Wayal

In recent years, for various complicated projects, early contractor involvement (ECI) is rising as a new project delivery methodology. Different project delivery strategies are like Design-Build (DB), Construction Management in danger (CMR), Alliance and Swiss challenge method and the selection of most appropriate project delivery method is dependent on number factors and project requirements for a particular project. Cases of Bandra-Worli Sea link project and Dharavi Redevelopment proposed project are reviewed to understand various risks and need of ECI. Questionnaire surveys with industry experts are conducted to obtain opinions regarding the various circumstances for early contractor involvement. Various problems identified from questionnaire responses are grouped into risk distribution issues, cost issues, time issues and quality issues. The study is focussed mainly on different government and semi-government authorities in Mumbai and Thane region from Maharashtra, India. The study identified some circumstances wherein Early Contractor Involvement can be beneficial and if well planned for ensure innovation and strong professional relationships, early contractor involvement could be a procurement approach which will and lead to economical designing and construction processes.

[View Full Paper] [Download] [References] 807-811

Implementing The Good Faith In The Buying Selling Agreement Between The Developer And Buyer

Austin Al Hariz, Yudho Taruno Muryanto

This study aims to find out and analyse the application of good faith principles in the sale and purchase agreement between the developer and the buyer so that the legal efforts can be analysed by the buyer if there are disadvantaged parties. This study is empirical legal research that is descriptive analysis. The type of data used is primary and secondary data. Methods of collecting data using field studies, literature, and documentation. Qualitative data analysis was concluded based on the results of interviews with residents in "Dramaga Cantik Residence". The results showed that the application of the principle of good faith in the Sale and Purchase Agreement between the Developer and the Buyer was not achieved because there were many injustices carried out by the developer to the buyer, such as without socialization with the developer, eliminating green open spaces and housing icons to build the condominium that is managed like hotel management and restaurants. Furthermore, the legal efforts made by the buyer, if the loss is done is resolved by consensus. If it cannot be resolved by deliberation and consensus, then this problem is resolved by a lawsuit in court.

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A Comprehensive Review On Design And Analysis Of Passive Enhancement Techniques In Double Pipe Heat Exchanger

Thejaraju R, Dr Girish KB

With the growing need for more energy, it is always important to design energy-efficient heat exchangers which intern leads to simpler in design, cheaper in cost and higher heat transfer rate. The Double pipe heat exchanger (DPHE) has the benefit of reduced construction and maintenance cost so that its application has been widely supported in industries like food processing, textile, energy, power, oil refineries, and refrigeration. From the earlier year's studies, it has foreseen that a great amount of passive augmented techniques has been

introduced to enhance and optimize double pipe heat exchanger. In this review paper, both experimental and numerical works are considered on the aspects of the augmented approach, working conditions, the percentage of heat transfer enhancement, working fluids and observations for a double pipe heat exchanger which is widely discussed. The current study represents the best of a comprehensive review on passive augmented technique as it's been cited regularly. The paper also signifies the amount or percentage of enhancement in Nusselt number and friction factor from previous studies, believing that the review may offer further insights for the researchers on passive augmented techniques. This paper reviews numerical and experimental works of various investigators on these techniques since 1998 such as fins, inserts, swirl generators, turbulators etc. Lastly, the present review article excludes the previous works on twisted tapes as there are a lot of review papers done on it.

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Parental Encouragement And Achievement Motivation Among Adolescents

Dr. Suvidha, Divya Gera

The study aimed to assess the level of Parental Encouragement and Achievement Motivation. The study was conducted on 200 secondary and higher secondary students (100 girls and 100 boys) from 2 schools one private and one government schools of Delhi. The major objectives were to find out gender differences in Parental Encouragement and Achievement Motivation, to find out the differences in Parental Encouragement and Achievement Motivation in students of government and private schools and to find out correlation between Parental Encouragement and Achievement Motivation. The standardized tools used for data collection were Parental Encouragement Scale by Dr. R.R.Sharma (2014) and Deo-Mohan achievement motivation scale developed by Prof. Pratibha Deo and Dr. Asha Mohan (2011). The results showed that majority of adolescents possess average level of parental encouragement and achievement motivation followed by high and low. Findings of the present study also revealed that non-significant gender differences existed in parental encouragement and achievement motivation levels of girls and boys respondents indicating that boys and girls adolescents perceived their parents to be non-biased as far as parental encouragement

is concerned. On the other hand, there is significant differences in Parental encouragement and achievement motivation in students of private and government schools students, Result revealed that parental encouragement and achievement motivation are significantly correlated with each other. It can be concluded that more the adolescents are encouraged by parents, greater is their achievement motivation.

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Reversible Jump MCMC To Estimate A Piecewise Constant Model With Exponential Additive Noise

Suparman

Piecewise constant is a mathematical model that is often used to model data in various fields. Exponential multiplicative noise or exponential additive noise can be added in a constant piecewise model. This study aims to estimate a constant piecewise model that has exponential additive noise. The estimation of the constant piecewise model is carried out in the Bayesian framework. The prior distribution for the number of constant models, the location of the change in the constant model, the height of the constant model, and the noise variance selected. This prior distribution is combined with the probability function of the data to get the posterior distribution. The Bayes estimator for the number of constant models, the location of the change in the constant model, the height of the constant model, and the noise variance are estimated based on the posterior distribution. The Bayes estimator cannot be formulated explicitly because the number of constant models is a parameter. The reversible jump method of the Monte Carlo Markov Chain (MCMC) is proposed to determine the Bayes estimator. This study resulted in estimating the parameters of a constant piecewise model with exponential additive noise. This method can be used to estimate a constant piecewise model that has exponential noise even though the number of constant models is unknown.

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Effect Of Online Mastery Learning Strategy On Achievement In English In Relation To Cognitive Ability

Ram Mehar, Shrutee Kanwar

The present study investigates the effect of online mastery learning strategy on achievement in English in relation to cognitive ability. The sample consisted of 120 students of 9th class from two private schools of Aligarh District in Uttar Pradesh affiliated to Central Board of Secondary Education, New Delhi. The study covered two independent variables viz. instructional strategies, cognitive ability. The variable of instructional strategies was studied at two levels, namely online mastery learning strategy and conventional method of teaching. The variable of cognitive ability was studied at three levels, namely high, average and low cognitive ability. The dependent variable was the performance gain which was calculated as the difference in post-test and pre-test scores. A pre-test was conducted on achievement in English. The experimental group was taught through10 lesson plan based on online mastery learning strategy and the control group was taught through conventional method by the investigators. The post-test was conducted. The descriptive statistics techniques such as Mean, and Standard Deviation were used in the analysis of data. The F-ratio and t-test were employed to find significance of difference between means related to different groups and variables. The data was analyzed using 2�3 Analysis of Variance and following conclusions were drawn: (i) The achievement of group taught through online mastery learning strategy is much higher than that of conventional method of teaching. (ii) The performance of high cognitive ability groups was higher than that of average and low cognitive ability groups. (iii) There was significant interaction effect between online mastery learning strategies and cognitive ability on achievement in English.

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Ups And Downs In The Indian Economy: The Impact Of Crude Oil Prices

Habeeb Ur Rahiman; Dr. Rashmi Kodikal

The economists have long been intrigued with the evidence of empirical data�s macro-economic performance of the country are closely related with oil price shocks. India is one of the countries that is highly dependent on oil imports. The domestic consumption for oil products is rising year to year and since there is a decrease in oil prices over the years due to financial crises and oil shocks in the market. The nationals that are highly dependent on oil imports are hugely benefited

as the economies of nations are growing at a faster phase. The study was undertaken in an Indian oil refinery, Mangalore Refinery Petrochemical Limited (MRPL). The paper considered crude oil prices as independent variable X and Stock market (BSE Sensex, Nifty 50), exchange Rate, inflation and GDP are taken as dependent variable. For this purpose, 10 years data is taken into consideration from January 2008 to January 2018. Hypothesis testing is done with the help of ANOVA using Regression, testing of hypotheses is done through F-test. The finding showed that crude oil prices has an impact on BSC Sensex Nifty 50 and inflation and no significant relationship with exchange rate and GDP of the country. The paper also suggest that India must move from using petroleum products to renewable resources as processing of crudes that has been imported has caused a lot of pollution worldwide. India and other countries must keep in mind that the resources of crude are depleting. Thus, these are fluctuations in crude oil prices are having an impact on Indian Economy.

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A Mathematical Programming Approach To Aggregating Raw Scores Into A Course Grade

Badreddine Jerbi

Teachers use tests, quizzes, assignments, labs, exams to evaluate the students' learning. This assessment leads to grades which are vital to students, their parents and teachers. The ways the scores are combined are diverse and differ from one course to another and different ways of combination may result in different grade. What is precarious is to see that a method of aggregation can result in a failure of a student and another method produces a success for the same student. In this paper and based on the results in a semester course, I try to find the best weights that have to be allocated to the tests, the quizzes, assignments, labs and exams with a a mixed linear program that if were used, they would have maximized the number of successes. An immediate benefit is to implement those weights for the following semester the course is offered.

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Effect Of Heat Transfer Fluid Flow

Through A Cylindrical Containers With Phase Change Material In The Annular Region

R. Senthil

The main objective of the study is to propose thermal energy storage for medium temperature solar systems. The selection of TES is also concerned about the feasibility and effectiveness of the phase change material followed by the design considerations of the storage tank. The storage process focus is to determine the charging and discharging of heat by the latent heat or sensible heat storage for the entire day. By providing the design configuration in a satisfying aspect can provide the information on the charging and discharging process according to the melting and solidification criteria of specific phase change material used in the system. The precise examination of the parameters of solar receiver and the design characteristic features of the storage compartment provides the exact details on the charging and discharging of the phase change materials used for TES system. Heat transfer fluid flow rate of 120, 150 and 180 kg/h used to charge the TES. The fluid flow rate during the discharge process is 25 kg/h. Energy analysis of the receiver is performed to have an effective thermal performance and reduction in heat losses from the system. The peak collector efficiency is 57% and the overall system efficiency including TES is 75% for the HTF flow rate of 180 kg/h.

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Comparative Study On Soil Parameters & Their Effect On Shear Strength In Gadag City

Vikas k, Devreddy R, Mutturaj H, Shrigandh K, Gavisiddesh Majjagi, Sameer Chitnis

in the present study, Gadag city district of Karnataka State has been selected for comparative study of soil parameters cohesion and angle of internal friction and their variation and effect on shear parameters of soil. This parametric study directly relates to Safe Bearing Capacity of the soil which in turn is related to the stability of structure. A relative depth of 1.5m is selected and all the studies are related to this depth

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Enhancing The Competence Of Ict Educators In Developing Media And Learning Material Based On Local Wisdom Through Learning Cycle (3e) For Teacher In Sd Kkg Gugus 05 Kemuninglor Jember

Titin Kartini, Arika Indah Kristiana, Ridho Alfarisi

An educator, is expected to have five (5) competence to be prepared in the era 4.0, namely (1) the competence of internet-based learning as a basic skill, (2) the competence to bring the students have an entrepreneurial attitude with the technology on the work of innovation of students, (3) hybrid competence, (4) the competence memprekdiksi future strategy, and (5) competence in psychological problems.The purpose of this activity to provide training on developing the media and interesting learning device using Macromedia Flash and Microsoft Publisher to educators KKG SD 05 village groups Kemuninglor Jember. This mentoring is done by modifying the model Learning Cycle (3E), which consists of three stages, namely Exploration, Explaination and Elaboration. This activity is expected educators with KKG SD 05 Kemuninglor Jember group was able to develop local knowledge-based learning media using Macromedia Flash and develop local knowledge-based learning tools using Microsoft Publisher.

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Performance Characteristics & Emission Analysis Of Mustard Oil Based Biodiesel In CI Engine Using Exhaust Gas Recirculation

Elavarasan.G, Kannan.M, Thiagarajan.L, Karthikeyan.D

Increase in the price of crude oil and the release of harmful emissions from the automobiles force researchers to search for an alternative source of energy for fueling. Biodiesel production from plant seed have become a promising alternative fuels for diesel powered engines. The biodiesel was extracted from the mustard oil and it was blended with the diesel in the ratio of MB10 (10% Mustard Biodiesel, 90% diesel), MB20 (20% Mustard Biodiesel, 80% Diesel), and MB30 (30% Mustard oil, 70% Diesel), MB40 (40% Mustard Biodiesel, 60% Diesel), MB50 (50% Mustard Biodiesel, 50% Diesel). The blends were tested in a single cylinder, constant speed (1500 rpm) diesel engine with 15% of exhaust gas recirculation (EGR). The

performance and emission characteristics were measured for various diesel blends. The results shows that the Brake thermal efficiency (BTE) was decreased about 3% to 4% as the specific fuel consumption is increased for all the blends. The smoke and CO emissions were found to be decreasing with increase in the blend, the maximum decrease of 35% and 53% was observed for MB50 blend of smoke and CO emissions respectively. The NOX emission was reduced about 40% because of the increase in the combustion temperature and pressure for M50 blend.

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Use Of Plastic As A Partial Replacement Of Coarse Aggregate In Concrete For Brick Classifications

H. M. A. Mahzuz, Anika Tahsin

In this study, plastic waste is used as the partial replacement of coarse aggregate in concrete. For that four volume based mix proportions (1:1:1, 1:1.25:2.5, 1:1.5:3 and 1:2:4) were taken. For each ratio 0%, 25% and 50% stone was replaced by plastic. Waste of high density polyethylene (HDPE) type plastic was used. Compressive strength and unit weight of concrete was measured after 28 days curing. The test result revealed that, addition of 25% and 50% plastic as coarse aggregate reduces unit weight of concrete up to 9.8% and 12.4% respectively. But such in case, reduction of compressive strength was up to 29.17% and 48.5% respectively. Linear regression model was also developed using SPSS modeler and its accuracy was judged by statistical parameters.

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Approximate Analytic Solution For Self-Gravitating Isothermal Gas Sphere

Aswathy Mary Prince, Sanish Thomas

In modeling a self gravitating Isothermal Gas Sphere, isothermal Lane Emden Equation is used which cannot be solved analytically. In our present study we have solved the problem using iterative method. The obtained result almost matches with the earlier results. So the method provides an efficient and accurate way to solve this type of problems.

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The Pain Of Disconnection: A Vignette Of Indonesian Religiosity-Based Education Toward Character Strengths

Sukidin, Erfan Yudianto, Wiwin Hartanto, Senny Weyara Dienda Saputri, Fuad Hasan, David Imamyartha

The duality of education aiming at knowledge and character is not anew in socialization (Shoshani, 2018) and manifests fundamental initiative to prepare students for increasingly complex challenges in Industrial Revolution 4.0. In the character-end of the continuum, Indonesian primary schools have integrated religiosity-based activities in curricular, co-curricular, and extracurricular areas, which is presumably apt to cope with the continuity and discontinuity of character development (Rutter, 1984). Regardless of robust roles of schools and teachers in character development (Arthur and See, 2011), the implementation of religiosity-based education has yet to be clear, thus calling for extensive investigation as to its current praxis as well as the rate of success. This study delved into the formulation and implementation of religiosity-based education in Indonesian primary schools through survey. The subjects were primary school teachers from numerous regions in Indonesia, involving teachers of different education backgrounds and teaching experiences. The data were put under descriptive analysis to portray how religiosity-based education is implemented across schools. The study has revealed that Indonesian schools have attempted to infuse religious character strengths through numerous measures. However, these are only evident at macro level, yet remains of peripheral emphasis within micro level, manifesting the pain of disconnection.

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Study On Use Of Lignin As An Antioxidant In SBR Based Tire Tread Compound

A.H.L.R. Nilmini, Nuwan Surej

Next to cellulose, Lignin is the second most abundant plant based organic polymer in the world. Currently over 70 million of lignin is produced mainly through chemical pulping process. At present high amount of lignin use

as inexpensive fuel or raw material to produce low added value products. The main aim of this study was investigation of potential of lignin to use as low cost, environmental friendly, high effective antioxidant for SBR based tire tread compound. Tread of a solid tire is degraded in static and dynamic conditions as it is exposed with the external environment. Oxygen is the principal environment factor, however, property deterioration are also supported by heat, light, humidity and radiation. Antioxidants hinder the oxidation of rubber and prevent property deterioration. Petroleum-based antioxidants are commonly used in tread compounds, though they have disadvantages like risk on health and adverse influence to environment. Therefore, this study aimed to investigate the possibility of replacing conventional antioxidants with a bio-based substitute. Kraft lignin (KL) is a naturally abundant and cost competitive wood-derivative and possesses antioxidant properties with Phenolic functionality. Lignin was compared with two conventional antioxidants, namely, N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine (6PPD) and sterically hindered styrenated phenol (SP). KL was varied from 2 to 3 phr at 0.5 phr intervals when it was used alone. When Lignin was combined with 6PPD and SP, each antioxidant was varied from 0 to 2 phr at 0.5 phr intervals, maintaining total loading at 2 phr. Mechanical Properties, Cure characteristics and other industrially important testing on rubber tread compound was investigated before and after thermo-oxidative aging. KL has reinforced the Vulcanizate, showing highest physical properties in tensile strength, tear strength, elongation at break, rebound resilience, hardness and abrasion resistance compared to Vulcanizate prepared incorporating commercially available antioxidants before the aging. After the aging cross linking density, abrasion resistance, rebound resilience and hardness have increased and other properties and their retentions have decreased in lignin alone than other Vulcanizate. Higher properties retention in tensile strength, tear strength, elongation at break and improvement in abrasion resistance except 6PPD and styrinated phenol alone show by Vulcanizate with lignin: 6PPD (1: 1) and lignin: Styrenated phenol (0.5: 1.5) ratios. Blend of KL and other antioxidants demonstrate better antioxidant effect than KL alone. The results obtained are shown that the KL exerts a stabilizing effect. Moreover KL blends with other selected antioxidants increased the stabilization effect.

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Participant Types In Translation In Subtitle Film "The Conjuring 2: The Enfield Poltergeist

Megan Asri Humaira, Rasmitadila, Achmad Samsudin

Translation of participants realized in nouns greatly influences the integrity of the meaning that the source language wants to convey. In fact, with differences in language rules, the meaning of translation in the target language can be very different from the meaning in the source language. This can lead to a misunderstanding of a series of events. The purpose of this study was to find out in depth about the types of participants in translating participants from English to Indonesian on the subtitle of the film "The Conjuring 2: The Enfield Poltergeist". This study uses a systemic functional linguistics approach with content analysis method. The results of this study were dominated by the participant range with a total of 41 elements of nouns (23.4%), and actor participants with a total of 29 elements of nouns (16.6%). Both types of participants were included in the material process which shows that the clauses contained in this movie subtitle show that the texts are a description of every process that is being carried out or is happening. Translation of participants in subtitles takes into account the use of language contained in each clause so that the delivery of messages from the source language (SL) is delivered based on the grammar or content of the message into the target language (TL) with due regard to the suitability of the grammar applicable in TL.

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Application Of Primavera Software In Management Of Construction Project: A Review

Gaurav S. Narlawar, N. B. Chaphalkar, Sayali Sandbhor

The construction industry which provide large-scale employment is the foundation of development for emerging countries like India. The productivity of the construction industry depends largely on resource management methods. Also, it is very difficult to prepare accurate and achievable plans in large construction projects. As the complexity of the project increases and the cost of the project surges, companies must effectively manage their budgets and schedules. For construction project monitoring and control Primavera P6 turns out to be an

effective tool because the time to upgrade is significantly reduced. This paper aims to provide a review on application of Primavera software in time and resource management of construction project. The study finds how Primavera P6 software solves various complexities associated with planning, scheduling, controlling, monitoring and tracking of construction projects based on detailed literature survey..

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Advantages And Challenges Of The Flipped Classroom Application • Based Learning In Enhancing 10th Grade Senior High School Students• Reasoning Ability

RidiaFedistia, Edwin Musdi, Yerizon

Mathematical reasoning ability need to be trained during mathematics learning process at school. Based on the field observations at school, it was found that students' mathematical reasoning abilities were still low. This was due to the hours limitation during teaching and learning process in the classroom, so learning process only focused on explaining the materials without much discussing the exercises that required reasoning abilitiy in its accomplishment. The Flipped Classroom • Based Learning Model could be an alternative to overcome this problem, because the students could learn at home by using online and offline videos. Thus, the students could prepare themselves first before discussing the reasoning exercises in the classroom. The purpose of this study is to review the advantages and challenges in applying a learning model based on Flipped Classroom. This research is a development research. The method used is a quantitative method to observe improvement in student learning outcomes and qualitative method to review the advantages and challenges of the Flipped Classroom model. The instruments in this study were final tests of mathematical reasoning abilities, questionnaires, interview guidelines, and observation sheets. Research revealed that the advantages obtained: 1) Increased learning outcomes of students; 2) Time efficiency; 3) Student involvement and satisfaction; 4) Increasing student interaction; 5) Overcoming the problem of students 'self-confidence, while the challenges in this model are 1) Lack of students' preparation; 2) Familiarize the model; 3) Limitations of self-help learning; 4) Need a lot of time and work; 5) Access to technology.

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Assessment Of Key Kharif Season Maize Production Constraints In East Champaran District, India

Hillary M. O. Otieno

This research aimed at assessing the current situation and challenges affecting the production of Kharif maize in East Champaran District. The research utilized focus group discussions and thorough literature review in assessing the production conditions and drawing recommendations. From the research, Kharif maize production is challenged by poor weed management that leaves the crop vulnerable to competitions for growth factors. Increasing drought frequencies and intensities were also noted to affect production. Waterlogging, due to relatively flat topography, was found to cause 60-80% maize yield loss when it occurs during critical growth periods. Pre-planting application, 1-2 weeks before planting, of readily soluble fertilizers such as DAP, urea, and MOP exposed the nutrients to early leaching before plants could establish proper roots. The losses were found to be aggravated by the broadcasting method of fertilizer application commonly practiced by the farmers in the region. Incidences of stalk borers were reported and could cause up to 95% of field yield loss if not controlled. Grain borer infestations at the stores could cause 10-25% of grain loss. High incidences of aflatoxin infection were also recorded. These challenges could be managed through prioritized research on key areas like drought, fertilizer use, pests and aflatoxin management) and improved agricultural extension services that offer training and dissemination of already available technologies and agronomic practices.

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Behavior Factors In Turnover Intentions (Study Of Accounting Personnel In Thre Riau Provincial Government)

Amries Rusli Tanjung, Muhammad Rasuli, Desmiyawati, Nur Azlina, Sri Indrastuty S.

The purpose of this research was to examine the effect of 1) job stress to job satisfaction, 2) job stress to organizational commitment, 3) job stress to turnover intentions, 4) job

satisfaction to turnover intentions, 5) organizational commitment to turnover intentions. Population is accountants who work in SKPD and PPKD Local Government in Riau Province. The sample were accounting staff who assisted the government in preparing financial statements in Bengkalis Regency, Kepulauan Meranti Regency and the Riau Provincial Government, totaling 138 accountants.Data analysis methods used SmartPLS. This study found that: (1) job stress does not affect on job satisfaction (2) job stress has a positive influence on organizational commitment. (3) job stress has a positive influence on turnover intentions. (4) job satisfaction has a negative influence on turnover intentions. (5) organizational commitment does not affect on turnover intentions.

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Development Model Strategy Of MSMEs Local Food Product To Increase Regional Advantages: Triple Helix Approach (Case Study In Kepulauan Meranti And Bengkalis, Riau Province)

Efrita Soviyanti, Nofrizal, Zulia Khairani, Wakhid Slamet Ciptono, Mamduh Mahmadah Hanafi

People's economy contributes to project development including local small and medium enterprises in Kepulauan Meranti and Bengkalis districts, but several improvements are needed, therefore formulating strategies for local and district development. Methods in this study using qualitative research with data analysis method using EFE matrix, EFE matrix, and SWOT 8K matrix. The Model development strategy uses the Triple Helix approach. The result of analysis using data analysis method shows the condition of MSMEs local food in position / condition of stabilization, but stability which almost show to retrectment position. Using Triple Helix some strategies that can be done by the government, MSMEs local food, and University are maximaze existing Programs, make training on strategies, programs made by the government, and focus research and community service at MSMEs Local food.

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A New Droop Compensated CIC Decimation Filter With Improved Response

Gaganjot kaur, Sanjay sharma

This paper extends the class of sharpened modified comb filter(SMCF) introduced by Missimilano Laddomada for ΣΔ A/D converters in order to obtain more improved response i.e., lesser pass band droop than SMCF and alias rejection better than basic CIC with the use of compensation techniques along with SMCFs. Sine based compensation and the maximally flat compensation are applied to SMCF by Laddomada for achieving improved results. The overall response improvement is targeted in this paper. Zero droop in pass band and better alias rejection is achieved for SMCFs which is shown with the help of computer simulations.

[View Full Paper] **[Download]** **[References]** **933-937**

Speech And Speaker Recognition: A Review

Karthika Kuppusamy, Chandra Eswaran

Essentialthrust research domain of digital signal processing is speech processing. The framework of speech recognition allows thenormal people to converse to the computer to fetch information whereas the framework of speaker recognition aims to determine the speaker alone. Automatic speech recognition is considered as the concept of science invention and now it is said to be the significant branch of information and communication technology. This paper gives the overview of speech and speaker recognition, role techniques namely feature extraction and classification which were discussed with its recent study. Finally, the paper concludes with the security issues and applications of speech and speaker recognition.

[View Full Paper] **[Download]** **[References]** **938-944**

Analysis Of Recurrent Parent Genome Recovery In Marker-Assisted Backcross Breeding Program In Watermelon

Kazeem K. Olalekan, Mohd Y. Rafii, Azrul M. Salleh, Mahmud TM. Mohamed, Khairulmazmi Ahmad, Azizah Misran, Tanweer F. Abro, Yusuff Oladosu, Ibrahim W. Arolu, Chukwu Samuel, Magaji Usman

Marker-assisted backcross (MABC) is a breeding technique used to develop improved varieties by transferring a gene or QTL into the genome background of an elite variety after 2-3 generations. It is an advanced way

of overcoming challenges facing conventional backcross methods as it speeds up the recurrent parent genome recovery (RPG). In order to develop a Fusarium wilt resistant watermelon variety, MABC was used to incorporate wilt resistant gene from the resistant inbred line CS-19 into the genome of the high yielding but wilt susceptible inbred line BL-14. There was estimation of RPG recovery in earlier generations with the use of polymorphic simple sequence repeat (SSR) markers. A total of 380 SSR markers were tested to identify polymorphism between the parents and 78 of them were found to be polymorphic. Background analysis revealed 74.7 – 94.4 and 86.6 – 96.8 % recovery in BC1F1 and BC2F1 generations, respectively. In the BC2F2 generation, RPG recovery ranged from 95.1 and 96.9 and the average in the selected lines was 96.14 %. This study led to the selection of plants that are similar to the recurrent parent and it showed the usefulness of MABC for the quick recovery of a parental genome in a backcrossing population.

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A Review On Speaker Verification: Challenges And Issues

Sujiya Sreedharan, Chandra Eswaran

Personal Voice based verification is an essential requirement for protecting and controlling various confidential resources in the present technological world. Security key codes like passwords and Personal identification number and other traditional passwords can be stolen and used without the permission of the legitimate user, which resulting in loss of integrity leading to great threat to security. Hence to overcome such security issues high-tech and consistent biometric authentication technique is required in verifying identity claim of an individual from his/her voice with enhanced security measures. Recent technologies focused towards biometric features which is the emerging development of mobile technology. This article gives an overview on speaker verification biometric technology with the issues and present scenario and various applications on voice processing technology.

[View Full Paper] [Download] [References] **956-960**

Comparison Of Various Adsorption Isotherm Models For Allium Cepa As Corrosion Inhibitor On Austenitic

Stainless Steel In Sea Water.

William-Ebi Duduna, Osaribie Nelson Akeme, Tombiri Mark Zinipere

The corrosion inhibition study was carried out using weight loss method at room temperature. The values of inhibition efficiency increased with increasing concentration of the allium cepa extract. The values of the Gibbs free energy of adsorption obtained were negative indicating a spontaneous adsorption process. The mechanism of adsorption for the study was physisorption. The El-Awady isotherm model showed that Allium cepa extract occupies more than one active site having 1/y value of 1.4051 greater than one. The adsorption process was an easy one obtained from the Freundlich isotherm parameter 1/n which equals 0.2866 satisfying the condition for easy adsorption. The sorption data of the extract obeyed Langmuir, Freundlich, Temkin, El-Awady and Adejo Ekwenchi isotherm of which Langmuir Isotherm gave the best model fit.

[View Full Paper] [Download] [References] 961-964

Properties Of Prime And Composite Pseudo Intrinsic Edge-Magic Graphs

M. Kaliraja, M. Sasikala

In this paper we introduced prime pseudo intrinsic edge-magic graphs using the concept of prime strength. Also we focussed prime double pseudo intrinsic edge-magic graphs. We examined these concepts in fuzzy complete graphs, banner graphs, cycle graphs, gem graphs and butterfly graphs.

[View Full Paper] [Download] [References] 965-968

The Effect Of Academic Qualification, Work Experience And Work Motivation Towards Primary School Principal Performance

Salwa, Muhammad Kristiawan, Bukman Lian

This paper aimed at determining the influence of academic qualifications, work experience and work motivation of teachers towards the principals' performance. This research was carried out in Primary Schools in Kalidoni, Palembang. The paper used the partial correlation method. The sample in this study were 28 primary school principals in Kalidoni. The instrument in this study was questionnaire. The results of this study

indicate there was significant effect of the principal's academic qualifications on the principal's performance, where tcount 4,584 ≥ ttable 2,055; there was significant influence of work experience on the principal's performance where tcount 11,360 ≥ ttable 2.055; there was significant effect of work motivation on the principal's performance where tcount 6,564 ≥ ttable 2,055; and there was significant effect jointly between academic qualifications, work experience and work motivation on the principal's performance, where the ANOVA test obtained Fcount 155,189 ≥ F table 3.24. It can be concluded that there was significant influence of academic qualifications, work experience and work motivation towards the principal's performance of primary school in Kalidoni.

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Comparative Analysis On Sign Language Recognition System

Swati Sharma, Varun Prakash Saxena, Kandukuru Satish

A process of exchanging information, expressions and views between two and more than two people is communication. It can be either Verbal or Non-Verbal communication. Non-Verbal communications makes use of hand gestures for interaction. Hand Gestures can also be termed as sign language which works in a systematic way. With the help of this sign language it is becoming easier for people with disability to interact with the normal people. The people who suffers from hearing disabilities makes them different from others as they lack behind due to their impaired hearing as there is a system which is used by them to interact with normal people is SLR. Sign Language Recognition (SLR) system basically used as an intermediate between normal people and hearing impaired. In this survey, various techniques that were implemented for sign language recognition along with the key points like the Classification Algorithms are discussed including the challenges and future scope too.

[View Full Paper] [Download] [References] **981-990**

Overview Of Liquid Desiccant Based Indirect Evaporative Cooling System

A.A.Kole, A.A.Nene, Dr.S.Ramchadran, Dr.S.Suybazhahan

Liquid desiccant indirect evaporative cooling system consists of dehumidifier, regenerator, evaporative cooling unit and liquid desiccant. This system become alternative for convectional mechanical vapor compression system, because it reduces the consumption of electrical energy and avoids emission of harmful gases i.e. it is cost effective as well as environment friendly. Liquid desiccant absorb moisture from air in dehumidifier unit. Often solar energy is used to produce thermal energy and this thermal energy is used for regeneration of liquid desiccant in a regenerator. Further indirect evaporator is used for sensible cooling of a dehumidified air. In this paper, a review of dehumidifiers, regenerators, indirect evaporative coolers and also integrated liquid desiccant system with indirect evaporative coolers are studied. Also system configurations, modes of operations are presented. This review designates that liquid desiccant indirect evaporative cooling technology can provide human comfort in hot and humid climatic conditions.

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IOT Sensors And Applications: A Survey

Dr. J. Jegathesh Amalraj, S. Banumathi, J. Jereena John

The Internet of Things (IoT) is unique of the current most promising and important technological issues. Sensors have recently been considering a highly prospective feature of scientific research. IoT based sensors now play major role since the usage and features are numerous. Sensors helps to monitor our state of health, air quality, home security, and our widely used to monitor production process in industrial internet. For these reasons, knowing how they work and how they can use them to gain information is important. Earlier the Industries and organizations have been using various kinds of sensors but the invention of the Internet of Things has promotes the growth of sensors to a completely different level. For water, transport, garbage, environment, etc., the IoT sensors can be used effectively. This paper presents different types of IoT sensors and its various applications.

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The Determinants Of Financial Innovation

Dewi Tamara, Adler H. Manurung, Dezie L. Warganegara, Toto Rusmanto

The importance of innovation in financial sector has attracted attention of scholars and practitioners. However, the scholar work of literature about determinants of financial innovation is incomplete and limited. This paper propose new angle from Resource-Based View to indicate the determinant of financial innovation which are innovation organization, skill, peer, information technology and firm size. Using sample from mutual funds companies in Indonesia and the method of partial least square to analyze data, this paper finds that innovation organization, skill and technology information are significant to financial innovation. This results indicate that premise of resource-based view also important to innovation in financial sectors. This paper contributes to the body of knowledge either in resource-based view literature and financial innovation in term of the discussion of determinants factors of innovation..

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Fault Tolerant Routing In Heterogeneous Environment

Madhumita Panda, Pinakini Pradhan, Hitesh Mohapatra, N.K.Barpanda

The information exchange is one of the important aspects of a modern and improved life. Nowadays every component such as home appliances, vehicle, and grocery everything is equipped with sensors or RFID, which are communicating with each other over Wi-Fi technology. The occupancy of the internet in day-to-day objects introduces the concept called the internet of things (IoT). The function of IoT is integral of wireless sensor network and sensors. The dense deployment of sensors in different objects and their intention to communicate over the internet creates a challenge of routing. Clustering is one of the proven methodologies for routing mechanism. The major constraints of existing protocols are consideration of less of sensor nodes, which is not true in real sense. Hence, the development of an algorithm by considering a dense amount of SN is a very critical challenge. In this paper, we have studied the existing routing schemes and proposed a new algorithm called Heterogeneous Fault- Tolerant Routing (HFTR) protocol, which ensures prolonglifetime of sensor network with better dead node ratio against the number of the electoral rounds.

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[References] 1013

Clustering Student Data Based On K-Means Algorithms

Khoiriyatus Sya﷽iyah, Herman Yuliansyah, Ika Arfiani

Educational data mining is interesting research always to discuss. Student data has the potential to be further processed and provide results for other uses. By grouping student data, the educational institution will get useful potential knowledge. The methodology in this research divided into five steps, i.e., data cleaning, data selection, data transformation, clustering using K-Means Algorithms, and knowledge presentation. We split the cluster of student data into three groups. It is because we want to get characteristic of the student with excellent performance, standard performance, and underperformance. We use 724 student data and four variables, i.e., Grade Point Average (GPA), length of study (LS), English proficiency score (EP), and length of thesis working (LT). The results of this research are the three characteristics of the student, i.e., the students in cluster 1 have 3.28 scale 4 for GPA, 4.52 years for LS, scores 404 for EP, and 7.46 month for LT. The students in cluster 2 have 3.29 scale 4 for GPA, 4.48 years for LS, scores 481 for EP, and 7.26 month for LT. The students in cluster 3 have 3.31 scale 4 for GPA, 4.50 years for LS, scores 437 for EP, and 7.14 month for LT.

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The Effect Of Cyclic Olefin Copolymer Loading On Linear Low Density Polyethylene Blends: Characterization By Fourier-Transform Infrared Spectroscopy And X-Ray Diffraction

H. C. Shah, S. K. Nema

In this work, linear low density polyethylene (LLDPE), a versatile commodity thermoplastic and cyclic olefin copolymer (COC), an amorphous engineering thermoplastic, were blended by melt-mixing technique using a co-rotating twin screw extruder in ratio of 5%, 10%, 15% and 20%. Effect of COC blending with LLDPE on X-ray Diffraction (XRD) patterns, and Fourier-transform infrared spectroscopy (FTIR) were analyzed. The characteristic absorption peaks of LLDPE, COC and LLDPE/COC blends were determined and compared. The intensity of fundamental

vibration peaks in the spectra of LLDPE/COC blends tends to vary with respect to the component contents in the blends. X-ray diffraction studies were carried out to study the effect of blend composition on crystallinity and particle size.

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Enhanced Feature Specific Collaborative Filtering Model For Aspect Opinion And Temporal Based Product Recommendation

J. Sangeetha, Dr.V. Sinthu Janita Prakash

nowadays, the online purchasing and advertising becomes massively increased due to the increase in utilization of internet services by the users. For the product sale and its quality description, the product&#65533;s customer review plays a significant role. Thus, the words and phrases with large size in a raw data is converted into numerical values based on the opinion prediction method. The fault prediction of the reviews and inappropriate recommendation of the best product to the users are the main challenging issues in recent days. To avoid these issues, an Enhanced Feature Specific Collaborative Filtering Model (EFCFM) is proposed for Aspect Opinion and Temporal Based Product Recommendation system. Initially, the raw data is preprocessed using stop word removal technique and the keywords from that preprocessed data is extracted using POS tagger which has both positive and negative polarity. The features of the keywords are extracted from the Senti-WordNet database, product property from the POS tagger and the reviews from the user ratings. Then the Enhanced Feature Specific Collaborative Filtering Model is used to calculate the product&#65533;s strength and weakness. Also it helps to predict the corresponding characteristics and its opinions. After that, the user query is also analyzed and finally, the opinion score based product recommendation is obtained. The proposed EFCFM technique is analyzed comparatively with other existing techniques with the metrics like precision, recall, f-measure, RMSE, and the MAE. The evaluation results show that the proposed EFCFM technique offers best product recommendations accurately to the users.

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Design And Analysis Of Zero Coupled

Compressor Crankcase

Prathamesh P. Joshi, Dr. Ratnakar R. Ghorpade, Abijeet B. Birari

The Piston compressor is a positive displacement compressor with crankshaft, connecting rod, crankcase, piston etc. as main components. Piston compressor are highly used in oil and gas industries as they demand high pressure air, also chemical, petrochemical and process gas plant use piston compressor for compressing final product gases. This compressor used at CNG stations to refill the automobile CNG tanks. The crankcase is the core structure of the reciprocating compressor, supports and encloses almost all internal components of piston compressor. The main function of the compressor crankcase is to provide sufficient rigidity to the compression mechanism to make it work properly. Another function of the crankcase is to act as a limiter that absorbs any shock that may occur during compressor transport. Crankcase is one of the bulky part in piston compressor and there persist the scope of weight reduction of crankcase. This paper focus on static and harmonic analysis of crankcase . For doing analysis of crankcase along with crankcase crankshaft, connecting rod, crosshead guide, cross head also weight of cylinder and piston are considered. For analysis purpose FEA solver (ANSYS) is used. static analysis is done to check stresses in crankcase, harmonic analysis is done to evaluates vibrations in terms of velocity. After transient dynamic analysis By analysing the results optimization of crankcase will be done for weight reduction.

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Energy Efficient Task Scheduling In Cloud Using Underutilized Resources

Sumeet Bharti, Navneet Kaur Mavi

Resource scheduling and provisioning in cloud environment are most challenging due to the execution variability and uncertainty of the cloud infrastructure and of the load being set up. In this framework, the task scheduling VM allocation using underused resources has been implemented with the concept of RAM and mips and compared it with the existed Energy-Performance Trade-Off Multi-Resource Cloud Task Scheduling Algorithm. The underutilized elements are found out in this policy. In this way, it uses more number of processing elements as compared to the existing algorithm. The experimental results demonstrate that the resources are being

utilized properly in order to reduce the overhead, energy consumption and execution time.

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The Urbanization And Diversification Of Farmland Namlea Village

M Chairul Basrun Umanailo, Nanik Handayani, Andi Masniati, Sitti Hajiyanti Makatita, Syafa Lisaholit,

The urbanization process in Namlea village is a consequence of the change in the administrative status of Buru regency into a district. The phenomenon of change affects the social economic life of the community, such as kinship patterns and interaction patterns that shift from homegenous to heterogeneous traits. The research location focuses on the village of Namlea in consideration of changes in community structure and the reduction of agricultural land. The number of informers interviewed were as many as farmers, village apparatus, religious figures, community leaders as well as traders. Analytical techniques used to follow the concept of Miles and Huberman where activities in the analysis of qualitative data are conducted interactively and continuously. The results showed that the urbanization process has brought about the impact of changes in the fulfillment of life needs in which life orientation shifts from agriculture to non-agriculture. Diversification is the basis for increasing the value of land selling and the limitation of agricultural products as a result of the increasing number of needs that are not followed by the improvement of land resources and agricultural products.

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Utilization Tofu Dregs As A Source Of Nitrogen In Fermentation Of Tuber Ganyong (Canna Edulis Kerr.) By Saccharomyces Cerevisiae

Rudi Kartika, I Putu Sukanadi, Arika Sukma Prasetya, Dedy Irawan

This study was combined of tofu dregs powder as a source of nutients with enzimatic to hyrolyzed tuber ganyong powder (Canna edulis Kerr.) in the ethanol fermetation process using Saccharomyces cerevisiae has been performed. This study also purpose to determine the concentration of tofu dregs powder and fermentation time was used to

produce the optimum ethanol content. The enzymatic hydrolysis method carried out through liquification phase with α-amylase and saccharification phase with gluco-amylase. Furthermore the process of fermentation stage with the variation of the time (130 hours, 154 hours and 178 hours) using the Saccharomyces cerevisiae with the addition of tofu dregs powder as a nutrient at concentration variation (1 % (w/v), 2 % (w/v) and 3 % (w/v)). The results of the research, the highest ethanol content was found in the addition tofu dregs powder of 2 % (w/v) with fermentation time of 178 hours. The results of ethanol content obtained from density methods was 85 % and from gas chromatography methods was 84,451 %.

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Village Head Partnership, Village Consultative Body And Customary Institution In Village Development

Lutfi Rumkel, Belinda Sam, M Chairul Basrun Umanailo

The Government of Kayeli village is an integral part of the District government Buru where the administrative elements make the Kayeli village government have to run the administrative tasks strictly in their activities, in fact A involvement in traditional institutions that eventually affect the orientation and implementation of development. The three elements of village institutions namely village Governments, village consultative bodies and indigenous institutions are able to collaborate from planning to monitoring the development of the Kayeli village community. This research is a qualitative study aimed at describing the partnerships that awakened between institutions in the village of Kayeli. The research site is focused on Kayeli village. The number of informant interviews of 30 people consisting of village apparatus, public figures, indigenous people and local communities is taken purposive. The analytical techniques used to follow the concepts given by Miles and Huberman include data reduction, data presentation and withdrawal of conclusions. The results showed that the relationship that awakened from these three institutions was able to create harmonization of village development that materialized through the planning, implementation and supervision conducted jointly with Communication and active role in village development.

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Aromatic Plants: Phytoremediation Of Cadmium Heavy Metal And The Relationship To Essential Oil Production

Yustina Sri Sulastri, Koko Tampubolon

This research was aimed to obtain the aromatic plants selected as phytoremediation of cadmium heavy metals (Cd-HM) and their relationship to essential oil production. This research was conducted in the Experiment Land, the Faculty of Agriculture, Universitas Sumatera Utara in March until May 2018. This research was used as a non-factorial Randomized Block Design (RBD) with three replications. Plants treatment: P1 (Vetiveria zizanioides), P2 (Cymbopogon nardus), P3 (Curcuma xanthorrhiza), P4 (Cymbopogon citratus), P5 (Pogostemon cablin), P6 (Alpinia galanga) were treated stress heavy metal of 100 ppm 3CdSO4.8H2O. The parameters include water content, Cd-HM uptake, Cd-HM uptake ratio, essential oil total content, translocation factor, correlation coefficient, and determination. The analysis using the ANOVA and were continued by DMRT at level 5%, and multiple linear regression using the IBM SPSS Statistics 20 software. The results showed that translocation factor value sequentially of P5> P6> P4> P2> P3> P1. The Cd-HM uptake ratio in the root was higher than in the shoot except for P4 plant. There was an increase in the essential oil total content in the P1, P2 and P5 plants of 101.56%; 12.70% and 2.27%, respectively. The increased water content in the plant can decrease the essential oil total content but the Cd-HM uptake can increase the essential oil total content. The water content, Cd-HM uptake in the root and shoot had positive linear correlation, were classified as weak (r = 0.30) and their relationship of 9.10% (slightly) to the essential oil total content.

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Palm Oil Prediction Production Using Extreme Learning Machine

Yudi Triyanto, Ronal Watrianthos, Pristiyono, Yusmaidar Sepriani, Khairul Rizal

The total production of Indonesian palm oil (CPO) in 2018 reached 43.9 million tons, with a land area of 12.3 million hectares. However, every month there are still many companies that have problems in predicting palm oil production. Problems in predicting this production can be solved by calculation methods in the field of artificial neural

networks, namely the Extreme Learning Machine (ELM) method. This method can solve linear and non-linear data problems and provide better average computation compared to other methods in predicting oil palm production. The data used is palm oil production data at PT Indo Palm Oil Labuhan Batu with a total of 297 in the period 2017-2018. While the parameters used are planting age, land area, number of trees, and yields. The results of the best-hidden neuron test are 13 with 2 technical data features and the training data pattern is pattern 1. The average MAPE value is 20.1% with the fastest computing time is the use of the number of hidden neurons 2. So based on the test results, the method ELM has a predictive model with quite good performance because the MAPE value is in the range of 20% -50%.

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The Integration Of Science And Culture On Indonesian Archipelago Kliwonan Around Masjid And Buyut Trusmi's Tombs In Cirebon

Mohamad Agung Rokhimawan

This research aims to (1) know the integration of science and culture on Indonesian Archipelago kliwonan around the Trusmi's tombs and its society in developing pluralism. (2) To know the meaning of kliwonan tradition at Masjid and of Trusmi's Tombs in developing the behaviour's quality of archipelago in the society. Besides, this research aims to find the local cultural wisdom from the masjid and Trusmi's tomb. (3) To find out the kliwonan tradition at the masjid and Trusmi's tomb, which is still preserved by the culture and this research aim to looking for the science of culture in making batik. This research used a qualitative method in analyzing and describing the data with the case of study in Trusmi's culture. The instrument that is used in this research are some data from observation, interview, literature review, focus group discussion and documentation. There is a relationship between science and culture to be a reciprocal relation as both of them has integration and interconnection. By its sustainable on the development of science and technology, some people in Trusmi still maintain and preserve the culture and traditions to some area. However, the thinking sensitivity in responding the social issues is still lacking.

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Wireless Patient Monitoring System

R. Karthikamani, P. S. Yuva Prasath, M. Vidhya Sree, J. Sangeetha

Wireless patient monitoring system plays a major role in the world wide based on Internet of Things (IoT). It is an easy task to monitor patients without direct contact using wireless. Hence they do not need to go to Hospitals for regular checkup and updates of the health. The high speed data combines with rapid decisions, treatment and send datum to the concerned physicians over mobile and server. The physicians consults and medical examinations. This project will continuously monitor the temperature of the patient using CC3200 microcontroller with inbuilt WIFI and the data is stored into the database. It is sent to the Doctor's mobile in the form of application called as an ANDROID through the web server. Then the feedback is instantly sent to the required station. Therefore the IOT enables effective and fast care of patient at any situation or environment. The Internet of Things (IoT) has been widely used to interconnect the available medical resources and offer smart, reliable, and effective healthcare service to the elderly people. In this paper, we present an IoT architecture customized for healthcare application. The proposed architecture collects the data and relays it to the cloud where it is processed and analyzed. A prototype of the proposed architecture has been built to demonstrate its performance advantages.

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Ground Water Analyzation Using Query Optimization And Spatio-Temporal Data Mining Technology

I. Shahina Begam, K.Tajudin

The perspective of this paper to determines the data mining technology in spatio-temporal concept. Data mining is one of the main research areas to analyse data from the known set of data. The concept of ground water and rain water is very important to make growth of agricultural sectors. The association rule integration algorithm to implement using these two datasets. The ground water data is covered by country of India in the state of Tamilnadu. The query is to describe ground water level in maximum and minimum level in the pre monsoon and post monsoon in each year. The dataset used from the year of 1991 to 2016. The rainwater level compare with ground water in the year

of 2011 to 2016.Using constraint checking to make different analyzation and comparisons report. The Predictions are used to give knowledge about the ground water level, rain fall details and maximum ground water level area.

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Optimization In The Design Of Fiber Reinforced Plastic Storage Tank

Akash Tiwari, Dr. Suwarna Torgal

In recent years, demand of composite materials has increased to a great extent because of their various advantageous properties when compared to other materials such as stainless steel. Fiber reinforced plastics (FRP) is a type of composite material that is used for storage tank construction. The main aim of this research is to optimize the design of a vertical cylindrical fiber reinforced plastic storage tank by varying the thickness of the cylindrical shell. Laminate construction having alternate layers of chopped strand mat (CSM) and woven roving (WR) is used for designing the cylindrical shell. Analysis is done using ANSYS 19 software and the results of the FRP storage tank is compared to a similar storage tank which is made of stainless steel. In this research, storage tank is designed for storing chemical liquids.

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The Effect Of Leadership Style, Motivation And Discipline Of Employee Performance With Understanding Of Islamic Work Ethics

Angrian Permana, M. Havidz Aima, Eny Ariyanto, Adi Nurmahdi

The purpose of this study was to examine the Effect of Leadership Style, Motivation and Work Discipline on Employee Performance with Understanding of Islamic Work Ethics as a Moderating Variable Case Study at Koperasi Simpan Pinjam Sejahtera Bersama. The respondents used were 97 employees who worked in the Banten Branch Office. Data is processed using variance based Partial Least Squares (PLS) analysis, with SmartPLS 2.0 software. The results showed that Leadership Style had a significant influence on Employee Understanding of Islamic Work Ethics, Motivation did not significantly influence

Employee Understanding of Islamic Work Ethics, Work Discipline did not significantly influence Employee Understanding of Islamic Work Ethics. While leadership style, motivation, and work discipline together have a significant influence on Employee Understanding of Islamic Work Ethics. The results of the moderating analysis (path analysis) show that the Leadership Style has an indirect positive effect on employee performance. Motivation has an indirect negative influence on employee performance. Work Discipline has an indirect positive influence on employee performance. Employee Understanding of Islamic Work Ethics has an indirect positive effect on employee performance. Overall Leadership Style, Motivation, Work Discipline, and Employee Understanding of Islamic Work Ethics together have a positive effect on employee performance.

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The Implementation Of Principals' Academic Supervision In Improving Teachers' Professionalism In The State Primary Schools

Uswatun Khasanah, Muhammad Kristiawan, Tobari

This study aimed at determining how the implementation of academic supervision and the factors that influence. This study used a qualitative with a descriptive approach. The technique of collecting data through observation, interviews, and documentation. The subjects of the study were principals. The results showed that 1) the implementation of school principals' academic supervision in improving the professionalism of teachers in Indralaya North Elementary School had been well implemented, there have been follow up activities in the form of guidance, training activities, training, and workshops; 2) there are two factors that influence the implementation of school principals' academic supervision such as readiness, motivation and positive response from the teacher, there is an awareness of his duty as headmaster. While the inhibiting factors are still a sense of fear from the teacher to be supervised, and the dense schedule of activities of the principal outside so that the supervision does not work according to the planned schedule.

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Quantify The Reviewer Genunity Based On Behavior Metrics And Past

Trust Analysis

Pankaj Chaudhary, Dr. Anurag Aeron, Dr. Sandeep Vijay

Internet has become easily accessible now days due to exponential growth of mobile and data networks. Smart phones have become easily accessible to a large number of people. This has made social networking an integral part of human life. People are sharing their comments and reviews on the forum or portal about their views and experiences. Even in taking the final decisions about the brand selections for best hotels, people are gradually depending on the previous online reviews. In such scenario, some companies may indulge themselves in generating the fake reviews with wrong intentions to create the positive or negative hype about the particular products. It may mislead the customers and decision makers. Several individual theories have been proposed by the researchers for fake review detection approaches, but effective integrated implementation is still underway. In this paper, some specific parameters are proposed to develop a robust model for identifying fake reviews and fake reviewers based on behavior matrix and past trust analysis. Although this work is specifically proposed for helping customers in selection of the best hotels by analyzing the previous online reviews, and help in concluding the right decision based on Location, Security, Price, Quality, Ambiance etc. Yet the something similar model may be designed after minor modifications for taking right decision in selecting the best colleges, best products etc.

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Analysis Of Variation In Planned Cost Due To Changed Cost At Brownfield Construction Site

Mrunali M. Ghumare, Ashok More, Ashwini Patil

Prudent management throughout the construction phases leads towards the success of project. On the basis of need and objectives of the project, construction can be brownfield (redevelopment of existing structure) construction or Greenfield [construction on land] construction. Changes in brownfield construction site are more as compared to green field construction site. Changes is addition, deletion and/or rework to the scope and goal of project. Changes may lead towards the effects like disputes, revision of drawings, schedule, cash flow etc. These changes can impact the project in

terms of cost, time and quality. This study mainly focuses on cost parameter and changes during planning and execution phases are considered. As per the methodology, List of the changes was made with the help of daily observation at the brownfield construction site and discussion with the site expertise. Cost of these changes were found out in change log with the help of MS Excel sheet. To find the variation in planned cost due to this change cost, planned cost was calculated by giving resource allocation to the various activities on MS Project. This study shows that the project cost overrun due to changes is 2.85%. Even if the percentage calculated seems very small in comparison with total cost of project, it gives significant value.

[View Full Paper] [Download] [References] **1122-1127**

Comparative Study Of Synthetic And Herbal Cosmetic Products For Their Toxicity Assessment By Microbial Bioassays

Maithili Agarwal, Anuradha Singh, Nupur Mathur, Sakshi Sharma

The main components in personal care and beauty products can be natural or artificial, but their effects on consumer's health is mainly determined by the chemical compounds present in them. The chemical components of these cosmetics build up toxins in our body over a long period of use which results in adverse effects and long term severe systemic illness. This reason has driven us to design a satisfactory toxicological study for evaluating potential toxicity caused by these products. The purpose of the present study is to screen cosmetic products formulated with synthetic chemicals and products formulated with herbal extracts for their toxic effects using short-term microbial bioassays and compare them with each other. The study has been done by using one prokaryotic (Pseudomonas fluorescens growth inhibition assay) and one eukaryotic (Saccharomyces cerevisiae respiration inhibition assay) bioassay. Synthetic cosmetics products have shown comparatively higher toxicity than the herbal ones in both the bioassays. Through this study, an effort has been made to enlighten consumers and scientific community about the grave consequences on health by excessive use of cosmetics and personal care products. The study also enlightens us towards the selection of the products. The samples found to be toxic based on the baseline data obtained by these assays can further be taken for specific and more

advanced assessment procedures.

[View Full Paper] [Download] [References] 1128-1133

Path Analysis Of Work Intervening Variables

Pristiyono, Ade Parlaungan Nasution, Siti Lam◆ah Nasution, Ronal Watrianthos, Yudi Triyanto

The relationship between employee performance and job satisfaction lies in the achievement of a goal. The existence of organizational support signifies the implementation of leadership has run according to the needs of the organization. Job satisfaction has a direct influence on the dependent variable Organization Citizenship Behavior. This makes the Organization Citizenship Behavior a new concept in performance systems because high employee performance creates a high quality of work. Tujuan penelitian ini adalah mengetahui hubungan langsung dan tidak langsung antara leadership dan Organization Citizenship Behavior terhadap kinerja karyawan melalui variabel kepuasan kerja. The purpose of this study was to determine the direct and indirect relationship between leadership and Organization Citizenship Behavior on employee performance through job satisfaction variables. The path analysis technique is used to test the relationship between variables with the help of SPSS software. The primary data in this study were the results of the questionnaire related to the variables studied as many as 113 respondents from employees of PT. FIF Rantauprapat. The test results show leadership has no significant direct relationship to employee performance, whereas Organization Citizenship Behavior has a significant direct relationship to job satisfaction through employee performance variables because it has a p-value (0,000) smaller than the sig level (0,1) and has t-value (5,714) is greater than t-hit (1,96).

[View Full Paper] [Download] [References] 1134-1136

Impacts Of Palm Oil Industry In Sri Lanka

Udara. S. P. R. Arachchige, Chiran D. M. O. Ranaraja, Nirmala W.K.J, Preethika D.D.P, Rangajith D.G.P.H, Sajath S.H.M

The evolution of renewable energy over the past and recent decade is the huge turning point of humans. This tendency has been occurring due to increasing of fossil fuel

pricing, rising demand for energy and scarcity of non-renewable sources. Biomass is the primary eco-friendly renewable resource in all over the world. One of the significant biomass resources is palm oil. Palm oil industry currently occupies the topmost position in the international vegetable oil market. This paper reviews the development of the palm oil industry within the analyses associated with environmental and social impacts and also evaluating existing palm oil sustainability initiations in Sri Lanka. We selected one plantation and agriculture study site in Sri Lanka to show evidence of the impacts. This research article findings and indicating that the development of palm oil cultivation has been caused significant environmental impact such as deforestation, resulting in significant impacts for water pollution, noise pollution, soil erosion, biodiversity loss, GHG emissions and also air pollution. In terms of social impact, there having some part of adverse effect to many groups like employees, suppliers, shareholders, investors, landholders, and ordinary people as well. However, we found that not only impacts but also has many benefits to those parties as well. In this article, we also try to introduce and suggest to prevent environmental pollution and reduce it.

[View Full Paper] [Download] [References] **1137-1145**

Performance Estimation Of PTS Based PAPR Reduction With CFO Optimization Of Multi Carrier CDMA System Over Frequency Selective Fading Channel

T. Dineshkumar, Dr. P. Venkatesan

Multicarrier Code Division Multiple Access is the most promising technique for high speed data transmission. However, the MC-CDMA signals are characterized by large peak to average power ratios (PAPR), which can reduce the system spectral efficiency. In this paper PAPR reduction of an MC-CDMA system using PTS technique is investigated by using whale optimization algorithm that uses pseudo random sequence for QPSK modulation techniques with different number of active users. Whale optimization algorithm optimizes the time delay and carrier frequency offset and thus minimizing the Inter Carrier Interference (ICI) from the carrier signal occurs. The results show that 64 bit QPSK shows better performance in case of Bit Error Rate, PAPR, spectral efficiency, and Carrier Frequency Offset for achieving high speed data transmission in

MC-CDMA with PTS system.These all the results are taken for different modulation and the different channels.

[View Full Paper] [Download] [References] 1146-1152

On The Applications Of Aleph - Function In A Slightly Different Type-1 Beta Density Model

Yashwant Singh

In the present paper, the author has studied about the structures which are the products and ratios of statistically independently distributed positive real scalar random variables.The author has derived the exact density of a slightly different Type-1 beta density by the Mellin Transform and Hankel Tranform of the unknown density and afterthat the unknown density has been derived in terms of Aleph functions by taking the inverse Mellin transform and Inverse Hankel Transform .A more general structure of Type-1 beta density has also been discussed. Some special cases in terms of - function are also given.

[View Full Paper] [Download] [References] 1153-1163

Impact Of Stone Crusher On Ambient Air Quality And Human Health Jhansi Region In Bundelkhand U.P

Shree Ganesh, M. M Singh

The aim of study,to evaluate the status of ambient air quality and human health in and around stone crusher industry. The main parameters considered for study of ambient air quality included suspended particulate matter (SPM), respirable suspended particulate matter (RSPM), respirable, nitrogen oxides (NOx) and sulfur dioxide (SO2) and for the assessment of human health used to standard questionnaire during the period of December 2016 to Novrmber 2017. The results indicate, that the particulate matter was found above the NAAQ standard in and around stone crusher industry i.e. RSPM 1803$\pm$71.5 to 140.66$\pm$40.68 µg/m3 and SPM 3758$\pm$29.8 to 300.33 µg/m3). But in case of gaseous pollution average annual mean was recorded below the permissible limit in both selected sites stone crusher unit and Lakshamanpura village, SOx (5.58 to 4.91 µg/m3) and NOx (10.66 to 9.5 µg/m3) respectively. In the survey, which was based on questionnaire the high prevalence of diseases particularly, respiratory problems

79%, eye irritations 41%, hearing loss 50%, cough 65%, headache 58%, vision defect 52%, wheezing 51%, skin irritation 31%, chest pain 29%, aliment problems 15% and hair loss 9% reported problems among population living in and around the neighborhood of stone crusher industry.

[View Full Paper] [Download] [References] **1164-1167**

Clustering Schemes In Mobile Ad-Hoc Network (MANET): A Review

Sandeep Monga, J.L Rana, Jitendra Agarwal

Mobile Ad-hoc Networks (MANETs) are inherently wireless networks organized without pre-existing topology. MANETs are effectively deployed in different environments such as: Armed Forces, Disaster Management, Medical and other similar Integrated Applications. However, it is observed that newer challenges and applications come up in MANETs every short period of time. In large deployments MANETs can have a huge number of mobile nodes creating new problems. In order to overcome such challenges, clustering algorithms are invariably used which allow the structuring of network into group of entities or cluster. In each cluster there is a particular node acting as Cluster Head (CH). In a cluster individual node has different values for parameters like node mobility, degree of the node, identity or energy of node, etc. Clustering is s process, identifying the number of nodes to be grouped together and an associated cluster head. This process plays an indispensable role in enhancing network performance and resource management. In this paper, analysis of many existing clustering algorithms of MANETs to classify such as: Identity based, Mobility based, Topology based, Energy based, Weight based and artificial intelligence based clustering is done. Further features of clustering like definition, cost, advantages and disadvantages, review of existing techniques and their evaluation are also done. Suggestion for the best clustering scheme has also been put forth.

[View Full Paper] [Download] [References] **1168-1176**

The Principal Leadership In Building The Students Character

Ribuwati, Edi Harapan, Tobari

The objective of this study was to find out the implementation of the vision and mission, strategy, and efforts of the principal to

supervise the religious character education and discipline of students at SMAN 1 Belitang OKU Timur. The method used in this study was a qualitative method. The data collection instruments were interviews, observation, and documentation. It is concluded that; First, the implementation of Principal's vision and mission in building the religious character and discipline of students, which is to make the virtuous character who became their temperaments in their daily life. Second, the Principal's strategy in building the character of students by example, reprimand, motivation, environmental conditioning, habituation, and integrating character through learning activities. Third, monitoring carried Principal in building the character of students, among others, to monitor the teachers in carrying out character learning in the classroom, oversees the activities of the character education program, check the integrity of the state and school facilities and evaluate through briefings and meetings on character education program. Principal should together with teachers to improve guidance and supervision in building the students discipline and religious character.

[View Full Paper] [Download] [References] **1177-1183**

Intelligent Headlight System

Keerthi V N, Hitesh Kumar S P, Nagaraja V H, Hanumanthegowda C, Aravinda D

our project is on vehicles headlight system, currently there are many researches are going on in this field. We reviewed all current trends, researches and came with a solution of intelligent headlight system. We came up with the idea to reduce the accident occur due to the headlight deflection while driving in night as well as in bad condition roads and also due to wrong turn indication. So we developed the prototype of intelligent head light is a solution for above problem. The microcontroller is used to prepare a prototype model. Accelerometer and potentiometer is used to turn the headlight using micro servomotor in vertical and horizontal direction. The ultrasonic sensor detects the coming vehicle and automatically reduces the intensity of head light and also it sense the ditch's present on road and inform to driver. The light dependent resister is used to vary the intensity of headlight based on external lighting conditions. Potentiometer is also used for automatic turning indication system .As a result the road accident will be reduced rapidly. It is possible to implement because the device is cheap in cost, easy to implement and it works automatically. Traditional headlamps cannot compensate the

light beam on a curved and unconditional road at night time and automatic turning indication helps to reduce many accidents due the negligence of driver while turning.

[View Full Paper] [Download] [References] **1184-1188**

Survey On Text Categorization Using Sentiment Analysis

Chaitanya Bhagat, Dr. Deepak Mane

Twitter is a blog website online on internet which offers the platform to humans to experience and talk their perspectives about troubles, occurrences, merchandise and exclusive mind. Sentiment Analysis is an open-ended subject of research in the text mining area. Using several systems gaining knowledge of algorithms for evaluation of sentiments from exceptional tweets having a most of one hundred forty phrases consistent with a tweet and proposes a studies technique for improvisation of class. This survey paper tries to provide an entire evaluation of the modern replace in this discipline. The most important goal of this survey is to give a complete picture of ways Machine studying strategies are used in Sentiment Analysis to get better effects in short details. Also, we will have a look at basic emotion&#65533;s classification into ternary lessons i.e. Fantastic, negative, neutral the usage of exclusive device learning algorithm and type into their subclasses i.e. Love, happiness, fun, neutral, hate, sadness, and anger the use of equal system getting to know algorithms.

[View Full Paper] [Download] [References] **1189-1195**

On Multidimensional fixed Point Theorems In Ordered V-Fuzzy Metric Spaces

Ayush Bartwal, R. C. Dimri, Gopi Prasad

In this article, we establish some coincidence point and common fixed point theorems in the recently introduced notion of partially ordered V-fuzzy metric spaces for ϕ-contraction. Using the results, suitable conditions are framed to make sure the existence of multidimensional coincidence point and common fixed point results, which generalize and improve fixed point results of Gupta and Kunwar [Fixed Point Theory and Application (2016), 2016:51]. We also give an example to support our main result.

[View Full Paper] [Download] **1196-**

[References] 1203

A Study On Awareness And Impact Of Tobacco Consumption With Special Reference To Salem Corporation

J.Renuga, Dr.P.Balamurugan, Dr.M.Sakthi

Tobacco and tobacco products are more regulated today. Companies have lost countless lawsuits and are now forced to clearly label their products as having a detrimental effect on the health of a person. Also, tobacco advertising is severely limited and regulated. Still, tobacco companies make billions of dollars in revenue every year, destroying the health of others. It's estimated that there are around 1 billion tobacco users.

[View Full Paper] [Download] 1204-1208 [References]

A Review Analysis On Emergency Data Dissemination Techniques In Vehicular Adhoc Networks

C. Balakumar, Dr. E. Karthikeyan

A Vehicular Ad-Hoc Network (VANET) is an amazing application of Mobile Ad-Hoc Network (MANET) that facilitate vehicles to vehicles and vehicles to road side units and its base stations communication with the main objective of providing secure and safe transportation in an efficient way. The emergency alert message information are transferred through V2V (vehicle to vehicle data communication), so the parameters like network strength, wait time, high mobility and repeated network disconnections plays vital role for the data communications. The different data dissemination advances in VANET can be followed to intimate the vehicles about the traffic congestion which leads a safe and efficient travel journey. In this paper, different data dissemination techniques are widely reviewed and identified the main challenges in it. There are many VANET data dissemination techniques were applied, but it really does not provide adequate transmission speed for emergency oriented data transmission services. In most of the situations it leads to unexpected traffic congestion and accidents. To minimize the same, VANET network need intelligent and effective routing protocols for intra vehicle communication. The various data dissemination techniques used to share the information in highway and urban environment with good quality of services,

rebroadcast and the assurance of message when it reaches the destination are studied and reviewed with different research authors papers. It covers application areas, challenges, different dissemination techniques and security issues in the VANET.

[View Full Paper] [Download] [References] **1209-1215**

E-Commerce, Competitive Advantage And Business Performance Of Banyuwangi Small And Medium-Sized Enterprises

M. S. Irwan Hariandi, T. A. Gumanti, E. Wahyudi

The aim of this research is to examine the mediating effect of competitive advantage on the relationship between e-commerce and performance of SMEs in Banyuwangi East Java Indonesia. It proposed a quantitative analysis in which uses proportionate sampling method to collect the data from 209 owner/managers SMEs. Four hypotheses were formulated to answer the research questions; (a) There is significant relationship between e-commerce and competitive advantage, (b) There is significant relationship between e-commerce and SMEs performance, (c) Competitive advantage mediates the correlation between e-commerce and SMEs performance, and (d) There is significant correlation between competitive advantage and SMEs performance. The findings revealed that no significant correlation exist between e-commerce and performance, but competitive advantage was found as mediator to totally correlate e-commerce and performance. These findings shows that owner/managers of SMEs can use e-commerce to gain competitive advantage and increase SMEs performance.

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Evaluation Of Pass By Noise Performance Of Passenger Car By Modified Muffler

Dr. Amit Kumar Gupta, Rakesh Mandloi

The sound quality of any product plays an important role for its marketing and popularity. Here in this research we are trying to improve the sound quality of passenger car. So for the sound quality of car, we are trying to modify the exhaust system.In the exhaust system, are using baffle plate with perforation. Firstly we use single baffle with perforation and increase the

baffle plate up to three baffle plates.This project deals with four different models of chambered exhaust muffler with perforation in baffles and concludes the best possible design for good sound quality. In this exhaust system along with baffles plate, we also use absorptive materials to improve the sound quality. Absorptive materials for this research we are using the glasswool and rockwool. For this research we have performed all the simulation in Ricardo wave build software. So after simulation in Ricardo wave build software, we conclude that the muffler with having three baffle plate along with rockwool as an apsorptive material give the best result as compare to other cases.

[View Full Paper] [Download] [References] **1221-1225**

Child Sex Ratio In The North Eastern Region Of India: A State-Wise Comparison

Nilutpal Chutia

This paper examines the trends and differentials of child sex ratio (CSR) in the eight North Eastern states of India by using secondary data. It is observed that all the North Eastern (NE) states hold a better position regarding CSR as compared to the national level. But, the major issue of concern is that CSR is declining during 1991-2011 in the NE states, except Arunachal Pradesh and Mizoram where a &#65533;U&#65533; shaped trend of CSR is observed. The paper also examines differentials of CSR among the NE states by residence, tribe and religion. Another observation is that CSR is positively correlated with Sex ratio at birth; and negatively with sex ratio among the infant deaths are negatively correlated, in the NE states.

[View Full Paper] [Download] [References] **1226-1233**

Mode Of Action Of Ammoniating In Increasing Nitrogen Content And In Vitro Apparent Organic Matter Digestibility Of Forages

Dede Kardaya, Deden Sudrajat

An experiment was conducted in order to repeal mode of action of ammoniating in increasing nitrogen content and in vitro apparent organic matter digestibility of forages. The experiment was accomplished under completely randomized design with two factors (2 x 4) and three replicates. The

collected data were analysed with a two-factor ANOVA and, if applicable, continued with Tukey's tests. Regression analyses were applied to repeal the incubation rate. Results showed that ammoniating treatment used 3% of urea increased crude protein content and in vitro apparent OM digestibility of rice straw significantly ($P<0.05$). Nitrogen originated from urea retained in rice straw materials during the consecutive incubation period could be best predicted with a cubical regression $Y = 0,447 + 0,114\ t - 0,52\ t2 + 0,004\ t3$ ($R = 0.849$; $p = 0.002$) and the highest rate of ammoniating process occurred in week 2 of the incubation period. It was an implication that disruption of lignocellulosic fractions occurred as a result of retaining N originated from urea in C1 site of reduced sugar.

[View Full Paper] [Download] [References] **1234-1238**

Influence Of Leadership To Employee Engagement And Its Impact To Actual Performance In Digital Era

Arif Budiarto

This research aims to analyze influence of leadership to actual performance by using employee engagement as mediating variable. The data analysis used path analysis. This research also describes leadership, employee engagement, and employee variables by using questionnaire. This research tried to prove employee engagement was influential variable to actual performance so employee engagement played role as mediating variable.

[View Full Paper] [Download] [References] **1239-1242**

Study And Analysis Of Finished Good Inventory & Logistic Management

Ashutosh Kumar, Dr. Nagendra Sohani

Inventory management is a difficult problem area in supply chain management. Companies need to have inventories in warehouses in order to satisfy customer's demand. These inventories have holding costs and frozen fund that can be lost. Therefore, the task of inventory management is to find the quantities of inventories that will satisfy customer demand and help in avoiding overstocks. This paper presents a study and analysis for the steel bar manufacturing industry (Small Scale Industry) on finished good inventory and logistics management.

The research found that company Y had a few inventory problems such as unorganized finish good inventory arrangement, high vehicle in-vehicle out time and no provision for safety stock. The study also proved that how we can reduce the finished good inventory level and reduce the vehicle in-vehicle out time along with the introduction of safety stock. This paper also provides a recommendation to the company and for further research.

[View Full Paper] [Download] [References] 1243-1246

The Effect Of Management Accounting Information System Application On Information Quality And Its Implication On Good Government Governance

Rindu Rika Gamayuni

The main purpose of this study is to find empirical evidence of the effect of Management Accounting Information System application toward resulted information quality, the effect of information quality on good government governance (accountability, transparency, participative), and the direct effect of Management Accounting Information System application on good government governance. Meanwhile, the special purpose of this study is to find the indicator of the success of Management Accounting Information System application, the indicator of qualified information, and the indicator of accountable, transparent, and participative government at local government in Lampung, Indonesia. This study uses survey method with descriptive and verification approach in the population of all regional Working Organization (Organisasi Perangkat Daerah / OPD) in districts/cities in Lampung, Indonesia, by using primary data through questionnaire distribution. Data analysis uses SEM Partial Least Square (PLS). The result of this study gives empirial evidence that the application of management accounting information system positively affects information quality of management accounting. Moreover, information quality of management accounting positively affects Good Government Governance. In this case, information quality of management accounting is proven playing role as mediating variable between variable of Management Accounting Information System (MAIS) application and Good Government Governance (GGG). However, there is no direct effect of MAIS application of GGG which is accountability, transparency, participation. The limitation of this research

is limited population in lampung province since this research uses questionnaire as primary data. The practical implication of this result is that government is expected to be able to improve and apply the right policy to overcome the weaknesses in regional MAIS application in order to increase resulted information quality and eventually would affect good government governance. MAIS can affect GGG directly or indirectly via information quality as mediating variable.

[View Full Paper] [Download] [References] **1247-1254**

Speech Recognition System Approaches, Techniques And Tools For Mathematical Expressions: A Review

Vaishali A. Kherdekar, Sachin A. Naik

Speech recognition is an interdisciplinary area which includes linguistics, electrical engineering, and computer science which focus on speech processing. Now a day's automatic speech recognition systems are used in various fields for various purposes such as corporate, government, education which consists of mathematical expressions. Major progress is being recorded in automatic speech recognition on technology but still no one has achieved 100% accuracy. Current research put emphasis on barriers in speech recognition systems for mathematical expression. In this paper we reviewed current status of speech recognition approaches in general as well as with respect to mathematical expressions by considering the feature extraction techniques, classifiers, dataset, recording tools, performance measures etc.

[View Full Paper] [Download] [References] **1255-1263**

Innovation In Energy Systems: Paradigms In Operation In Business And Development

Prof. Saad Darwish, Dr. Venus Bunagan

The research on Innovation in Energy System: Paradigms in Operation in Business and Development discusses a few of the historical backgrounds of renewal energy. It also tackled the trends both global and local, the levels of energy consumption. It also discusses the types of renewable energies which are common and their competitiveness. The last parts of the research emphasizes the breakthroughs and opinions of the authors on

renewable energies.

[View Full Paper] [Download] [References] 1264-1271

Factors Influencing Business Efficiency Of Watershed Society In Kuantan Singingi Regency Kuantan Singingi District

H. Edyanus Herman Halim, Ishadi, Arika Fitriani

Industry level correlates to productivity management. This research was conducted to find out the development of small and medium industries in Kuantan Singingi Regency. Special attention is given to small and medium industry because it is a small and medium-sized industry that is very helpful in generating employment and becoming a household income. The role of the government that has provided a lot of input in the effort to encourage the structure of small and medium industry in Kuantan Singingi Regency. From the results of the research, then obtained the variables to measure the productivity of Small and Medium Industry in Kuantan Singingi Regency include: (1) Business Growth (2) Overhead Cost (3) Labor Cost (4) Efficiency, which is moderated by roles (5) Government Assistance, the results of the study show that the average level of the small and medium-sized countries in Kuantan regency is still not efficient, so a strategy is needed to overcome them. To develop small and medium-sized industry are very necessary for stakeholders, including the role of universities, district or city government agencies related to it. It can determine what is the superior product of small and medium industry in Kuantan Singingi Regency.

[View Full Paper] [Download] [References] 1272-1279

Effect Of Spalling In Different Position Vertically On Mid Span Of Tooth In Mesh

Akhilesh Lodwal, Dr. Ashesh Tiwari

Time Varying gear mesh stiffness (TVMS) provides important information about health of a geared system. The spalling created/ developed on gear profile causes change in Time Varying gear mesh stiffness behaviour of the system. In this paper the spalling is assumed in mid of the gear tooth profile anywhere from top of the tooth to the bottom of the tooth and then the effect of change in TVMS by changing in width and height of spall

is calculated. The potential energy method is used for the above calculation. This study is done by keeping in mind the vibration behaviour change due to sudden change in gearmesh stiffness. The metrology of gear is used to do calculations. It is found that as the fault occurs near the tip it may give impulse due sharp change in mesh stiffness but as we go towards root side the variation of TVMS is found throughout the contact of teeth. So in all the position of spall may take some span in the dynamic behaviour. Firstly an analytical method is used to calculate stiffness & then the effect of change in stiffness is calculated by varying the geometry of spalling. This paper will help in fault finding of gear analytically and data may be useful for dynamic analysis.

[View Full Paper] [Download] [References] **1280-1284**

Zakat Determinant Variable Of Sharia Banks In Indonesia

Riska Uswatun Khasanah, Ahmad Roziq

This study aims to examine the effect of the buying and selling financing, profit and loss sharing financing , and lease financing to zakat through financing risk and financing performance as an intervening variable in sharia banks in Indonesia. This study uses secondary data from the financial statements of sharia banks 2016-2018 periods. The sample in this study was 13 sharia banks in Indonesia. The hypothesis was tested using the approach Partial Least Square (PLS). The results showed that selling and buying financing, profit and loss sharing financing, and lease financing affect the financing risk. Financing risk and financing performance became intervening variable that affect zakat on sharia banks in Indonesia period 2016-2018

[View Full Paper] [Download] [References] **1285-1292**

A Study Of Human Development Among Tea-Garden Community In Dibrugarh District Of Assam

Dharmaraj Hazarika, Dr. Shanta Arakeri V.

As a scientific method of measuring development of a nation, HDI index has various superiorities over the traditional income based measures of development. It reflects the real scenario of development of human well-being. Though the Human Development Index has primarily space

dimension, still it can be used to construct the Human Development Index by tribes, communities, ethnicity and religion. This paper is an attempt to analyze the status of human development of tea garden community of Assam. By adopting both old and new methodology of UNDP, HDI for the community is calculated. Both the values of HDI are very low as compared to the state and national average.

[View Full Paper] [Download] [References] **1293-1298**

Relative Retrieval Efficiency Analysis Of Local Binary Pattern Variants In Color Images

C.Callins Christiyana, J.Merlin Sheeba Rani, V.Rajamani

Content Based Image Retrieval (CBIR) technique is used to retrieve relevant images from the Image database based on image content in the query image. Feature extraction is the key process in Content Based Image Retrieval. Many CBIR systems are being developed as in the way of feature extraction techniques used in them. Image features such as color, texture and shape are symbolized as a result of feature extraction. There are many ways to represent the image features. The choice of feature representation is depended on the nature of image database and the intended applications. This article is aimed to experiment how texture oriented feature representation acts upon in color images. Recent studies depict that texture is effectively signified by Local patterns. The well-known local patterns such as local binary pattern (LBP), local tri-directional pattern (LTP) and local neighborhood intensity pattern (LNP) are considered in this work. The relative efficiency of above-mentioned local patterns is compared in the retrieval of color images. Wang database is taken for the experimentation and the color images are considered as a grey scale image by combining three color planes into a single plane. The experimental results conclude that the relative retrieval efficiency of local patterns is not same for the retrieval of color images as in the retrieval of texture images.

[View Full Paper] [Download] [References] **1299-1305**

Literacy Rate Analysis Dashboard

Kavita Sheoron

Education is the foremost important tool for change of the society and betterment of

nation. Proficiency and level of training are fundamental pointers of the level of improvement accomplished by a general public. Spread of literacy is by and large connected with vital attributes of present day development for example, modernization, urbanization, trade and industrialization. Literacy shapes a vital contribution to generally improvement of society empowering them to understand their social, political and social condition better and react to it appropriately. Better education and literacy prompt a more noteworthy mindfulness and furthermore contributes in enhancement of economical and social conditions. Ministry of Human Resource Development (DISE) releases a data on literacy rate each year which can be exceptionally valuable in examining different elements influencing education rate of a state or an area. An all around structured dashboard that exhibits the best possible examination of the information will give a reasonable picture of proficiency in different locales of India. Data to be analyzed is handled and cleaned to draw out the most imperative and significant features. The data at that point analyzed gives the last outcome which is presented on dashboard making it easy to understand and comprehend.

[View Full Paper] [Download] [References] **1306-1309**

An Efficient Clustering Technique For Cluster Extraction From Unlabeled Datasets Using Nonlinear Methods

Satish Kumar Soni, Ramjeevan Singh Thakur, Anil Kumar Gupta

Clustering is an important task in machine learning to identify the unique groups within the data, based on some similarity measures. In this paper we are trying to study the effect of Nonlinear Methods to optimize clustering results and based on the findings thereafter we proposed a clustering optimization technique to further improve the quality of clusters experimented in Educational and Iris Datasets.

[View Full Paper] [Download] [References] **1310-1315**

Headmaster's Competency In Preparing Vocational School Students For Entrepreneurship

Dina Apriana, Muhammad Kristiawan, Dessy Wardiah

This study originated from the results of a preliminary study that the Headmaster of State Vocational school (SMK) 6 Palembang has an important role and function in achieving the vision, mission and goals of education. One form of competency development is developing entrepreneurship at State Vocational school 6 Palembang. The purpose of this study was to analyze entrepreneurial competency of the headmaster of State Vocational school 6 Palembang in preparing vocational students for entrepreneurship. This study uses a qualitative research model. The subjects in this study were the heads of State Vocational school 6 Palembang. The results of this study concluded that entrepreneurial competency of the headmaster of State Vocational school 6 Palembang played an important role in advancing the school. From the results of the Headmasters' entrepreneurial competency indicators in terms of innovative and creative competencies, it shows that Headmasters create new ideas/ideas about school plans and programs. The headmaster of the Palembang 6th State Vocational School cooperates with several industries. The Headmaster's entrepreneurial competency in terms of hard work competency, shows that the headmaster of State Vocational school 6 Palembang is always on time and comes home later than the teacher and staff, never satisfied with the success of the school, and works and is responsible as the Headmaster. The Headmaster's entrepreneurial competency in terms of motivational competency, efforts made such as the frequent holding of seminars with the release of famous entrepreneurs, invites alumni who have succeeded in entrepreneurship and are also given honorariums if these students get a large number of orders so the students become more enthusiastic and motivated. The Headmaster's entrepreneurial competency in terms of abstinence, this shows that when failing activities, the Headmaster builds up and rises to complete, the Headmaster is principled towards good direction for school, the Headmaster is calm and in no hurry to take action, and the Headmaster follows and applies the development of science and technology through the media.

[View Full Paper] [Download] [References] **1316-1330**

Comparison Of Datamining Techniques For Prediction Of Breast Cancer

Deneshkumar V, Manoprabha M, Senthamarai Kannan K

Breast cancer is one of the most challenging deadly diseases. Correct and in-time prediction of such disease is very important. Wisconsin breast cancer dataset with 569 patients and 32 features were included in this study. The Information Gain and Gini Index were used to determine the effectiveness of features on breast cancer. The performance comparisons of the most commonly used statistical methods were also studied to find the best predictive model. The main objective of this manuscript is to make use of the advanced technologies to develop a best predictive model for breast cancer. All performance assessments were carried out using Rapid Miner Studio software.

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The Impact Of Azotobacter Chroococcum And Liquid Organic Fertilizer On Nutrients Nitrogen And Phosphate

Gamaruddin, Arifin Tahir, Andi Suci Anita, Asri B

The aim of this experiment was to determine the impact of Azotobacter chroococcum and liquid organic fertilizer to the cocoa, and to get the amount of nutrient adsorption of N and P. We use a randomized group design (RGD) are arranged in two factorials with three replications. The first factor is the Azotobacter chroococcum, with concentrations of 0 CFU, 10x106CFU, 20x106CFU, 40x106CFU and the second factor is a liquid organic fertilizer with a concentration of 0%, 10%, 20%, 30%. As a result, both of Azotobacter chroococcum and liquid organic fertilizer are very significant to the cocoa on nutrients N and P in the leaves and also in the soils. The concentration of treatment 40 x 106 CFU and 30% liquid organic fertilizer produced the highest yield of the nutrients N and P in the leaves. Furthermore, the nutrient N in the soil were the highest concentration of 40 x 106 CFU to produce the two treatments and liquid organic fertilizer 20%, 40 x 106 CFU and liquid organic fertilizer 30%. In addition, observation of N and P in the soil showed the highest result is the concentration of treatment combinations 30 x 106 CFU and liquid organic fertilizer 30%.Futhermore, the effectiveness of N and P adsorption is the highest in the treatment with Azotobacter chroccocum concentration of 40 x 106 CFU and fertilizers 30% organic liquid.

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The Effect Of IT Audit On Security Incidents

Armend Salihu, Xhemile Berisha - Hoti

In this paper we present the effect of implementing IT Audit recommendations on organizations regarding the security incidents. From the data collected, we noted that with the implementation of IT Audit recommendations the security incidents are reduced. From the interviews we have seen that the IT Audit function is considered very important role in the prevention of the organization from security incidents and other cyber-attacks.

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A Review On Synthetic Hybrid Fiber Reinforced Concrete For Rigid Pavement Applications

P.Manoj Kumar, G.Ganesh Prabhu

Synthetic hybrid fiber reinforced concrete is an advanced embryonic construction material which can be described as a concrete having high mechanical strength, Stiffness and durable. Fiber reinforced concrete is one type of special concretes comprises of light weight concrete, high density concrete, fal-g concrete, polymer concrete, micro concrete and self compacting concrete. This paper deals with the effects of addition of various proportions of Polypropylene, Polyvinyl alcohol, Recron 3s fibers on the properties of M35 grade of concrete with locally available ingredients. The experimental program has been done to explore fibers effects on compressive, tensile and flexural strengths under different curing conditions. The main aim of the investigation program is to study the effects of Polypropylene, Polyvinyl alcohol, Recron 3s fibers in concrete and find out the optimum fiber content. The individual and combination of Polypropylene, Polyvinyl alcohol, Recron 3s fibers were added to the conventional concrete at 0%, 0.2%, 0.4%, 0.6%, 0.8%, and 1% by its total weight of concrete. The concrete specimens of cubes, cylinders and beams have been tested at various age levels of 7 days and 28 days to study the mechanical properties of hardened concrete such as compressive strength, tensile strength, flexural strength respectively.

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A Comparative Study Of Torsional Effect Of Earthquake On ﷿L﷿ And ﷿S﷿ Shaped High Rise Buildings

S. A. Powale, N. J. Pathak

Damage reports on recent earthquakes have indicated that torsional motions often cause significant damage to buildings, at times leading to their collapse. Asymmetric structures have irregular distribution of mass and stiffness and its centre of mass and centre of rigidity do not coincide and hence causes the torsional effect on the structures which is one of the most important factor influencing the seismic damage of the structure. In this paper, seismic performance of two buildings irregular in plan are analyzed and compared. Two 33 storey buildings with ﷿S﷿ and ﷿L﷿ plan shapes are modelled in ETABS 2016 using Time History Analysis..

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Influence Of Leadership Style, Emotional Intelligence And Job Satisfaction Toward Organizational Commitment (Survey At SMA Muhammadiyah South Sumatera)

Nova Asvio, Martinis Yamin, Risnita

This paper tested the influence of leadership style, emotional intelligence, and job satisfaction toward organizational commitment. This paper was quantitative by using survey method. The population was all teachers and educational staff at SMA Muhammadiyah South Sumatera. The sample consists of 120 people taken by using total sampling techniques and questionnaire was used as instrument. Data were analyzed by using path analysis. The results obtained indicate that 1) the direct influence of leadership style toward organizational commitment was 0.82; 2) the direct influence of emotional intelligence toward organizational commitment was 0.80; 3) the influence of leadership style and emotional intelligence simultaneously toward organizational commitment was 0.87; 4) the direct influence of leadership style toward job satisfaction was 0.81; 5) the direct influence of emotional intelligence toward job satisfaction was 0.78; 6) the influence of leadership style and emotional intelligence simultaneous toward job satisfaction was 0.84; 7) the direct influence of job satisfaction toward organizational commitment was 0.83; 8) the indirect influence of leadership style toward job

satisfaction organizational commitment was 0.27; 9) the indirect influence of emotional intelligence toward organizational commitment with job satisfaction was 0.41; 10) the leadership style, emotional intelligence, and job satisfaction simultaneously influence the organizational commitment by 0.75. The conclusion declared the leadership style, emotional intelligence and job satisfaction influence the organizational commitment. The implication is more effective leadership style, with good emotional intelligence and job satisfaction would upgrade the organizational commitment.

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Fuzzy Logic Based Vehicular Congestion Estimation Monitoring System Using Image Processing And KNN Classifier

Kent Edve Neil T. Rabe, Edwin R. Arboleda, Adonis A. Andilab, Rhowel M. Dellosa

Vehicle is one of the most valuable mode of transport human developed. This allows us to travel faster from point to point or different multiple destinations. But through years, population increase and congestion occurs on public road. The study proposes a different method of image processing – morphological feature extraction, KNN classifier and fuzzy logic on classification of common vehicular transport mainly found on the road namely bus, cars and motorcycle. The images were taken using a smartphone camera 8mp and 12 inches range from the 240 sample miniature vehicles. It is then processed using a laptop with MATLAB 2012 installed. The extracted feature is area and shows ranges of 42,000 to 57,000 for busses, 13,000 to 35,000 for cars and 4,000 to 13,000 for motorcycles. The data extracted were used for KNN classification for determining the vehicular type and for fuzzy logic decision making as the output is the degree of congestion which is dependent on the road area of the image taken and decision is converted to percentage (0-40% light, 41-70% moderate, 70-100% heavy). Input parameter is the number of area on a certain image which is rated as few (0-40%), moderate (41-70%), heavy (71-100%) for all vehicle samples. Consequently, the result of the study shows a great potential on vehicular congestion monitoring system using image processing, KNN and fuzzy logic algorithm used.

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Potential Polylactic Acid /Alginic Acid Films Reinforced With Molybdenum Disulphide For Packaging Purposes

Kalyani Sreekumar, B Bindhu

The Polymer composites with enhanced properties have widely gained the interest of researchers. Polymers play a crucial role in many of the industries and the limitations of the synthetic polymers like waste disposal management, makes researchers to rely on biopolymers from renewable resources. Polylactic acid and alginic acid are two biopolymers that are being widely used. In this paper we are reporting the preparation of exfoliated molybdenum disulphide reinforced polylactic acid/alginic acid composite films, synthesized via solvent casting method. The optimized addition of filler particles are seen to have effects in the polymer matrix. The water permeability along with photoluminescence makes these composite an excellent candidate for packaging applications.

[View Full Paper] [Download] [References] **1381-1384**

Design Of RAM Using Quantum Cellular Automata (QCA) Designer

R. S. Ernest Ravindran, K Mariya Priyadarshini, Dangeti Peda Manikya Pavana Teja, Popuri Nikhil Chakravarthy, Peruboyina Dharma Teja

Quantum-dot .cell automata (QCA) development as an alternative rather than Complementary MOS advancement on the nanoscale has a promising future; QCA is a captivating development for structure memory. The proposed structure and amusement of another memory cell structure subject to QCA with a base deferral, region, and multifaceted nature is shown to execute a static arbitrary access memory (RAM). This paper demonstrates the arrangement and propagation of a RAM with another structure in QCA. Since QCA is a pipeline, this RAM has a high working pace. It has the limit of a standard high working rate RAM that can give read/make exercises as regularly as conceivable with least postponement. Decoders and multiplexers (MUXs) in QCA are shown that have been organized with a base number of larger part entryways and cells. The new RAM, decoders, and MUXs are arranged, completed, and replicated in QCA using a banner dissemination framework to avoid the coplanar issue of convergence wires. The QCA-based RAM cell was differentiated and the RAM cell reliant on

CMOS. Results exhibit that the proposed RAM is progressively gainful to the extent region, difficulty, clock recurrence, and power use

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Travelling Salesman Problem Using Genetic Algorithm And Fuzzy C-Mean Clustering Algorithm

Ajendra Kumar, Preet Pal Singh, Pawan Joshi

This paper presents a new algorithm called Fuzzy C-Mean Genetic Algorithm (FCMGA) to solve TSP which is used to calculate the minimum travelling cost in TSP. FCMGA is a combination of both Fuzzy C-Mean (FCM) and Genetic Algorithm (GA). The role of FCM and GA is different in this algorithm. FCM is used to find the membership values of each chromosome, whereas GA is used to apply mutation on the variables of those chromosomes. The proposed algorithm is very helpful to find nearly optimized solutions of these types of problems, in order to give the best solution of the problem with the reduction of cost. The algorithm (FCMGA) proposed here is tested with some examples and the experiment shows that the algorithm can achieve good results as compared with GA.

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Multiple Server Based Sharing And Secured Data Management By Intrusion Detection System

Dr. Rekha Patil, Asmita Kadechur

The user information has gained the higher interest as to communication has increased between the end users. The data manipulation has been the key aspect in the real time data exchange. The data increases exponentially hence the use of the storage location such as cloud or remote database has been developed. The storing and retrieving of the data has been challenged by the security threats. In this paper, for data transmission the use of the Routing protocol like AODV with the IDS technology and Slepian Wolf coding methods have been used for the data encoding and decoding. The dynamic multipath routing has been enabled to re-route in case of the attack. The system works under multiple scenario for the user need. In the attacking scenario, on detection of the honeypot node, the network is re-routed and repaired which results in

achieving an optimal efficiency by adopting the Network Intrusion Detection System (NIDS) in the Trusted Network. The proposed concept of trace, repair or re-route has been a novel approach for secured and assured data manipulation in the cloud database.

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The Role Of Alliances Formation In Organizational Ambidexterity And Firm Competitiveness: An Empirical Study In Indonesia Digital Startup Firms)

Prio Utomo, Boto Simatupang

The creation of a country's wealth depends on the competitiveness of its entrepreneurs and that fundamentally relies on the survivability and capabilities of its small and medium-sized enterprises (SMEs). In order to survive, an SME firm must become ambidextrous, with the capability to manage the paradox in learning, innovation, and transformation in their limited condition, so that they can become more competitive and offer products or services that meet the market demand. To become ambidextrous, a company needs many resources. One way to acquire resources is through alliances. This study models the relationship between alliances formation and firm competitiveness as mediated by organizational ambidexterity using partial-leased squares modelling using data from 137 startups in Indonesia. The results showed that organizational ambidexterity has a full mediation effect in the relationship between alliances formation and firm competitiveness. This study argues that the choice of an appropriate partner that is manifested in the Alliances Formation has the main purpose to enable the start-up company to acquire resources to manage the paradox of management in learning, innovation, and decision for transformation. This ability will make them competitive and can design, produce, and market its products superior to those of its competitors.

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Brain Emulation Machine Model For Communication

Lakshita Aggarwal, Deepak Chahal, Latika Kharb

Artificial intelligence revolves around our lives in each way. It is merely the act of intelligence of humans to make their

machines that smart and intelligent so that machines start behaving like a man and even more intelligently. Machines were made in history for reducing human labour but now in recent civilizations machines serve the dual purpose resulting in reducing manual and mental labour both for humans. AI plays great role from the computations till the reminders for daily routine tasks. It interacts with the outer environment making the devices to act intelligently. AI has entered in each and every place the sensor networks are bringing a changing phase from virtual reality to the reality especially in areas such as healthcare, military, forecasting seismic activity in volcanoes, smart cities, remote monitoring, cloud services and many more. These sensors and intelligent devices with the integration of IoT even have entered in the utilities such as smart phones, gadgets and many more. This paper basically focuses on the aspects of AI, independent machine models which just take pixels of input data and process those pixels to produce the relevant output. It also focuses on how the brain emulate the images and how hierarchical answering of requests occur by understanding their relevant meanings to produce a positive reply for the same. The focus is given on content rather than context making it a relevant information transforming it from the raw data sets enabled in communication and networking. In the paper, we have also used a simulator software to simplify the concept of how to generate and analyze images in a efficient manner.

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Acoustical Transmission Loss Performance By Using Various Absorptive Material

Dr. Amit Kumar Gupta, Sachin Jha

The acoustical performance of duct with the variation of number of baffle plate, with and without of absorptive material, with and without effect of perforation, with the percentage variation of flow area. Transmission loss which is the main acoustic performance parameter is evaluated and determines the reduction in exhaust noise. This is performed in the 3D duct with empty, rock wool, glass wool. Different component are present in the duct for transmission loss like baffle plate, perforated baffle plate, absorptive material etc. by which noise is reduced. Transmission loss using sound absorption material is the main feature. With all combination the rock wool is best in all frequency range but in some frequency range empty duct is best so if we are working in

this frequency range the empty duct has maximum transmission loss. Transmission loss of empty duct with all combination has not much change in the performance. But in the certain range of frequency transmission loss increasing very rapidly but also slope of curve very steep so if we are working before that then empty duct with 15% single baffle plate has transmission loss 50 dB. Finally rock wool has maximum transmission loss i.e 65dB in 5% perforation with single baffle plate if we go with same perforation rate i.e 5% with double baffle plate the best combination is 5% perforation and single baffle plate. If we are working at constant frequency i.e 2700 Hz the performance of empty duct is good well but not good for variable frequency.

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An Enhanced Preprocessing Algorithms And Accuracy Prediction Of Machine Learning Algortihms

S. Banumathi, Dr. A. Aloysius

Big Data is complicated to store, deal with, and analyze using conventional database and software techniques. Big Data includes high volume and velocity, and also variety of data that desires for innovative techniques to deal with it. Machine learning is a method of building data analytical models by analyzing data to identify hidden insights using algorithms that iteratively learn from the historical or stream data which helps in predicting unseen patterns. This pattern helps to make better decisions and predictions. The machine learning classification algorithm performances can be evaluated through training and testing representation of an efficient data pre-processing. This research work proposed enhanced pre-processing algorithms with feature selection and machine learning algorithms had been evaluated using performance evaluatory measures. The proposed pre-processing and feature selection algorithms have high impact on performance of ML algorithms.

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Design And Development Of Buckling Restrained Braces Using Matlab.

Rohan Polekar, Dr H.R. Magarpatil

Earthquake forces on structure are of great concern to the engineers. To minimize the

effects of an earthquake and lateral loads, the steel braced frames are used. It is one of the systems which plays an effective role in resisting the lateral loads the new type of bracing system called buckling restrained braces are introduced to overcome the drawbacks of conventional bracing system. The project work is to study buckling restrained braces. The analysis is done using MATLAB. In the present study, a code for a building model is developed to analyze the behaviour of the structure without BRB. Time history method is used to determine the dynamic response of the structure. A mathematical model was created to perform modal time history analysis. Time stepping was performed using Newmark's Beta modified for linear acceleration. The response parameters such as Base Shear, Story displacement, Time period, Inter-story drift are evaluated to study the structural performance. The same model results are validated in ETABS v16. Further, a code will be developed for a building structure with BRB to compare the response of both structures.

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Comparitive Study Of Steel Fibre Reinforced Concrete Panels And Ferrocement Panels Under Blast Loading By Fem Analysis

Pratik Shinde, Sumant Shinde, Dr. Mrudula Kulkarni

The increased number of terrorist attacks mostly in the last few years has shown that the effect of blast loads on buildings is a serious matter which we should be considered during design process of buildings. Although these kinds of terrorist attacks are exceptional cases, man-made disasters; dynamic loads i.e. blast loads are really need to be carefully calculated just like earthquake and wind loads. The investigation of behavior of Ferrocement composites and Steel Fibre Reinforced Concrete composites under blast loading is presented in this paper. Individual ferrocement panels and Steel Fibre Reinforced Concrete panels are tested analytically under blast load, and the behavior against blast loading is then studied.

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Meat Marbling Scoring Using Image Processing With Fuzzy Logic Based Classifier

Andrei E. Andaya, Edwin R. Arboleda, Adonis A.

The judgement of meat quality through image processing with automatic fuzzy logic based classifier is proposed. Grading of meat will be based on the marbling formation present on the sample carcasses. The number of clusters of marbling and their areas will be obtained using MatLab Image Processing Tool. The resulting fat-to-meat ratio will then be used as the input parameter to the fuzzy logic controlled classifier system. The paper generally aims to produce an automatic system that will be able to process, analyze and sort the meat samples according to their palatability condition.

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Morphological Based Grain Comparison Of Three Rice Grain Variety

Cyril L. Macalalad, Edwin R. Arboleda, Adonis A. Andilab and Rhowel M. Dellosa

In the Philippines, rice grains have their distinct characteristics from each other variety in terms of quality and on how they plant. The quality and variety of different rice grains is usually determined by visual inspection and pure instincts, which is subjective, laborious, and prone to error. Due to this errors, many consumers were deceived by the retailers in buying pure quality rice. In result, a formulation of an alternative method with the help of the current technology to determine the different rice variety is conducted. This research was conducted with the objective of developing an appropriate computer routine algorithm that can characterize rice grains of different origins in different parts of the Philippines. Morphological analyses through image processing techniques were employed to automatically classify and determine the ranges of the parameters of the rice grain samples according to their variety. Important rice grain features based in morphology such as area of the grain, perimeter, equivalent diameter and percentage of roundness from 60 training images and 20 testing images were gathered and evaluated. Fuzzy Logic technique was conducted to classify the rice grain as well as the K Nearest Neighbor (KNN) that was employed to automatically categorize the variety of the rice grains. In conclusion, the results of this study have revealed that imaging technique with the aid of artificial intelligence could be used as an effective method to classify rice grain characteristics.

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Implementation Of Template Matching, Fuzzy Logic And K Nearest Neighbor Classifier On Philippine Banknote Recognition System

Rodel Emille T. Bae, Edwin R. Arboleda, Adonis Andilab, Rhowel M. Dellosa

Currency recognition system is one of the most marked research topics at present. Lots of variety of applications triggered the researchers for a study like this. Monetary transaction is natural in human being for its daily transactions. The need to use an artificial intelligence to come up with determination and classifications of banknote may contribute to the improvement of artificial intelligence applications. An attempt was made in this study to apply image processing, fuzzy logic and K Nearest Neighbor for the improvement on the limitations of the existing currency recognition systems. The study has is divided into two parts: a template matching technique for feature extraction and comparison of accuracy between fuzzy logic algorithm and KNN based on the information gathered by the first part. Thus by implementing the Image Processing and FLC in the MATLAB with the help of MATLAB programming and fuzzy logic toolbox, recognition of Philippine currency will be more accurate. KNN shows it flaws to identify the features resulting to big errors unlike the first method.

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An Electronic Prescription System Powered By Speech Recognition, Natural Language Processing And Blockchain Technology

Jitendra Mahatpure, Dr Mahesh Motwani, Dr Piyush Kumar Shukla

This paper presents a new healthcare system that would change the way of storing and processing health records. It will digitize the complete healthcare process. There won&#65533;t be any need to carry paper prescriptions on revisiting doctors. The system will generate an electronic prescription using speech recognition and natural language processing. A QR code on a patient&#65533;s smartphone is used to retrieve the digital prescription record stored on a blockchain network. A patient will

be able to share historic prescription records to a new doctor. The System enables the patient to manage the privacy of their personal health record. Patient Health Record can only be accessed by using the QR code from the patient's smartphone as an identity. The system proposed in this paper is targeted to those doctors and clinics that are still using paper-based handwritten prescriptions and cannot afford the existing Electronic Health Record systems available. This system can be fully operated even through a single smartphone. It is a combination of a group of 5 modules working together. Those modules include Hyperledger Composer Blockchain Network, Node.js server REST APIs for communicating with the blockchain network, Python Django REST API server for Natural Language Processing or text processing, a React JS based admin panel and a React-Native based mobile application for Doctors and patients.

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Dual Band Slotted Filtering Antenna For LTE- Advanced Applications

Gurpreet Kour, Garima Saini

In this paper a miniature design for dual band antenna with integrated filtering realization for LTE-A (long term evolution advanced) system is presented. In the proposed investigation the ground plane and patch are defected by cutting different slots with different dimensions. Different shapes of slots are cut to get appropriate lower band (1880- 1920 MHz) and higher band (2570 to 2620 MHz) for which return loss is less than -10 dB. This slotted patch antenna employed for dual band operation provides satisfying filtering performance without using any extra filtering circuits. The antenna is designed to fit the specification of LTE -A bands (B38 and B39 bands). The proposed antenna offers improved radiation characteristics with good omni-directional patterns at both sampling frequencies in the E-plane (yz-plane) and the H-plane (xy-plane).These patterns are appropriate for application in most of the wireless communication like LTE and LTE-A. Gain of antenna is increased with frequency. Gain of lower band frequency is approximately -4.5db and 1.5 db for upper band frequency. The integration of the filter and the antenna leads to a reduction of size and weight.

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Efficient Fuzzy-based Multi-constraint Multicast Routing With Multi-criteria Enhanced Optimal Capacity-Delay Tradeoff

N.Sivapriya, T.N.Ravi

In Mobile Ad-hoc Network (MANET), a mobility of the nodes may impact the node capacity and delay during transmitting the data from source to the destination in the network. To avoid this, Multi-criteria Enhanced Optimal Capacity-Delay Tradeoff (MEOCDT) was proposed with Time-limited Neighbor Detector using Multi-criteria Node Rank metric that detects the neighbors and optimal paths for reliable forwarding node. Though this technique improves link stability and node reliability, the computational complexity was high. Hence in this paper, an Efficient Fuzzy-based Multi-constraint Multicast Routing (EFM2R) method is proposed with MEOCDT to reduce the computational complexity of optimal node selection. The major objective of this technique is to solve the uncertainty issues in the consideration of multiple network metrics such as delay, bandwidth, Link Stability Factor (LSF) and residual energy. In this technique, the fuzzy logic method is proposed to convert the considered network metrics as a single metric called fuzzy cost or communication cost. Then, the path with minimum fuzzy cost is selected as an optimal route to transmit the data from the source to the destination node in the network with reduced delay. Finally, the simulation results show the performance effectiveness of the proposed technique compared to the existing technique in terms of throughput, routing overhead, delay, packet delivery ratio.

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Comparative Study Of Effects Of Different Shapes Of Pitting On Mesh Stiffness Of Spur Gear Using MATLAB

Ashutosh Singh, Vijay Kumar Karma

The mathematical exhibiting of the vibrant analysis of gear has become essential with increased demand for high-speed mechanism. There are many numerical methods available for finding out the spur gear mesh stiffness like FEA methods and some numerical methods. In this present paper comparative study of effects of pitting shapes on spur gear mesh, stiffness is done using MATLAB Software. The pitting shapes considered are circular, Rectangular and Elliptical. Their effects on total deformation are also

considered.

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Phytocompounds Investigation, Isolation Of Flavan-3-Ol From The Stem Of Manilkara Hexandra (Roxb.) Dubard And Its Potential In Anti-Oxidant

S.Irudaya Monisha, J.Rosaline Vimala

The plant poly phenols are present adequately which has high impact on human drugs. Flavan- 3- ol consist in the stem of Manilkara hexandra and it has rich medicinal value like anti-oxidant. The physical and chemical properties were investigated from the stem of Manilkara hexandra. Proximate, histochemical, fluorescence, mineral analysis were examined by using standard procedures. The flavan-3-ol was isolated using chromatographics method such as coloumn chromatography and thin layer chromatography. Then it was characterized by UV, FT-IR, LC-Ms, NMR (1H & 13 C) and it is further extended to in-vitro anti-oxidant (DPPH method) potential. The flavanoid was identified by preliminary investigation after then flavan-3-ol was isolated and it gives good response for anti-oxidant activity. The isolated catechin has a unique biological behaviours, and act as a metal chelating agent. So it can be used for further research from this plant.

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Apparent Molar Volumes And Viscosity B Coefficients Of Chlorothalonil Pesticide In Binary Mixture DMF And DMSO At Different Temperatures.

Kalyan R. Langore, Arun B.Nikumbh, Sudhir V. Patil, Sanindhar S. Gaikwad

Apparent molar volumes (ϕv) and viscosity B-coefficients for Chlorothalonil in binary mixture DMF and DMSO was measured from density (d) and viscosity (η) at 298.15 to 313.15 K using a bicapillary pycnometer and Ubbelohde viscometer respectively. The density data were analyzed in terms of limiting apparent molar volume (□vo) and experimental slopes (Sv) obtained from Masson equation has been used to interpret the ion-solvent interaction and ion-ion interaction respectively. The viscosity data was analyzed in term of A and B coefficient

obtained from Jone-Dole equation and the obtained parameters were interpreted in terms of solute–solute and solute–solvent interactions.

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Insilico Analysis Of Docking Studies CGSP Strain Of Streptococcus Pneumoniae

Balasankar Karavadi, Sai Aakarsha S, Rajasekar. B, Premalatha. J

Various current examinations are done on the effectiveness of characteristic parts to battle the intrusion by Streptococcus pneumoniae strain CGSP14. The primary goal is to propose the most good simple exacerbate that could be viable to focus on the protein. This consideration has been picked up as before cases as a rule established in medication improvement. These cases and contextual investigations give interfaces between target proteins and the analogs. Numerous other comparative works have been found to discover most ideal ligand intensify that could be successful to focus on the target protein.

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Implication Operator On Pythagorean Fuzzy Set

I.Silambarasan, S.Sriram

Pythagorean fuzzy sets,involvoing membership, non membership and hesitancy considerations present mathematically a very general structure. Because of these considerations, if is possible to define several operations/ compositions of these sets. In the existing literature ten different operations on such sets are defined. These ten operations on Pythagorean fuzzy sets bear intersting properties. In this paper, we have identified and proved several of these properties, particularly those involving the operation A→B defined as pythagorean fuzzy implication with other operations.

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The Role Of Price, Promotion, And Viral Marketing In Improving Swiwings Chicken's Customer Satisfaction

Ardhian Hadi Mahendra, Diah Yulisetiarini, Arie N. Subagio

This study aims to analyze the effect of price, promotion, and viral marketing on the satisfaction of consumers of Swiwings Chicken in Jember, Indonesia. The population in this study are swiwings chicken Instagram followers at Jember @ swiwings.idn. The sampling method used was purposive sampling with the number of respondents as many as 112 people. The independent variables used are price, promotion, and viral marketing and the dependent variable is consumer satisfaction. The analytical tool used is multiple linear regression analysis. The results of the study show that: 1) There is a significant positive effect of price on consumer satisfaction at Swiwings Chicken in Jember. 2) There is a significant positive effect of promotion on consumer satisfaction at Swiwings Chicken in Jember. 3) There is a significant positive effect of viral marketing on consumer satisfaction with Swiwings Chicken in Jember and; 4) There is a significant positive simultaneous influence on price, promotion, and viral marketing on consumer satisfaction at Swiwings Chicken in Jember.

[View Full Paper] [Download] [References] **1510-1514**

Semiotic Analysis Of Indigenous Fashion In The Island Of Buru

Syaiful Rachman, Hamiru Hamiru, M Chairul Basrun Umanailo, Yulismayanti Yulismayanti, Harziko Harziko

Customary clothing becomes an important part in every ritual and customary activities for the community in the island of Buru, the function of traditional clothing in addition to body armor is also a symbol of identity attached to the outfit. This research is a qualitative study aimed at describing indigenous fashion for the community. The research location focuses on three villages namely Kayeli village, Kubalahin Village and Wasi Village with consideration of the traditional clothing use which is more often found in comparison of other villages in Buru Island. The number of informant interviewed by 25 people, consisting of customary figures, community leaders, leaders of indigenous institutions and village apparatus as well as local people residing at the research site. Analytical techniques used to follow the concept of Miles and Huberman where activities in the analysis of qualitative data are conducted interactively and continuously. The results showed that

customary clothing in all three locations had several similarities in the use as well as differences in the placement of custom fashions. The villagers of Kayeli and Wasi used traditional clothes for the activities of receiving indigenous guests and traditional activities that took place in the village, while the community was kubalahin using traditional clothes while the traditional ritual was carried out. For people of the village Kayeli customary clothing has a value of sacral that must be obeyed by everyone who uses it, as well as in the village of Wasi and Kubalahin, they assume that identity in the customary clothing should be maintained with not arbitrary use Or placing custom clothes in everyday life.

[View Full Paper] [Download] [References] **1515-1519**

Groundwater Assessment In Kota District (Rajasthan), India Using GIS Techniques

Gopal Rui Das, Suraj Kumar Singh, Sudhanshu

Kota district, situated in the focal part of Rajasthan, has developed and urbanized Rajasthan. An enormous measure of the water necessity of Kota district is provided from groundwater. The reasons for this examination were to give a diagram of present groundwater quality and to decide spatial dispersion of groundwater quality parameters, for example, electrical conductivity, Chloride, Total Dissolved Solids, Fluoride, and NO3 – fixations, and to delineate quality in the examination territory by utilizing GIS and Geostatistics systems. In this examination, the GIS technique was utilized to investigate the nature of groundwater in Kota district. Geostatistical Analyst were utilized for age of different Interpolation and index maps to create the groundwater quality map. Index Map clearly indicated that the southwest and east of the district has ideal groundwater quality and the groundwater in the investigation zone is adequate for drinking and household purposes.

[View Full Paper] [Download] [References] **1520-1527**

Implementation Of An Efficient Hybrid Classification Model For Heart Disease Prediction

Manjari Agarwal, Dr. Gaurav Kumar Ameta

The prediction analysis is applied for

predicting future possibilities based on the current information. Prediction for future possibilities has been made feasible following three major steps named as pre-processing, feature extraction and classification, in today's perspective. My research exhibits the work in two stages to increase the accuracy of prediction regarding cardiac issues. Whereas in the first stage, a novel method was proposed in which factors like pulse rate, cholesterol etc. are included along with the age of patient as compared to the previous research study in which only age was taken as a primary attribute for prediction. The primitive attributes are changed in the proposed study for better predictions to receive facts as compared to the older technique. In stage second, a new and efficient hybrid classification model was designed, which is the combination of two different classification methods i.e. support vector machine and k-Nearest Neighbour. The support vector machine (SVM) will extract the features of the dataset and k-Nearest Neighbour classifier will generate the final classified result. The performance of the proposed model in terms of accuracy and execution time is higher as compared to existing method.

[View Full Paper] [Download] [References] **1528-1532**

Status Of Basic Urban Amenities: A Case Study On Tarakeswar Town In Hugli District Of West Bengal

Pintu Shee

Basic amenities are fundamental determinants of quality of living in society. Basic amenities cover those provisions and facilities which are inevitable to human life in modern era. Access to safe drinking water, access to toilet and latrine facilities, well planned sewage system and having access to energy in the form of electricity etc. are certain fundamental determinants of quality of living. This paper deals with an intensive study on availability of urban amenities in the Tarakeswar municipal area. Mainly solid waste management, status and availability of drinking water, house lighting system, availability of latrine and bathroom facilities, sewage system have been highlighted in this research paper. Disparity of urban amenities in the municipal area has been identified. An overall survey report, dealing with the availability and disparity of selected urban amenities of this township area, has been presented here with recommendations for sustainable development of environmental condition.

[View Full Paper] [Download] [References] 1533-1540

Stock Price Index Movement Prediction Using Adaptive Firefly Algorithm Based Association Rule Mining

B.SHARMILA, DR. R. KHANCHANA

Stock market prediction is treated as important for the finding the economy growth of a country. Success of multiple investors is dependent on prediction of future stock market, but the prediction is based on three factors namely economic, technical and fundamental. Not all countries depend on the same factors or all factors, but developing countries like India depends on all three factors. Prediction of future stock price index movement will provide a step ahead towards success. In this paper, bio-inspired based classifier namely Adaptive Firefly Algorithm based Association Rule Mining is proposed to address the issues in predicting the stock price index movements. Optimization plays a major role towards increasing the classification accuracy of association rule mining algorithm. This research work considers the selected Indian based stock market companies, namely CNX Nifty, S&P BSE Sensex, Infosys, and Reliance. Benchmarks performance metrics in data mining are chosen to measure the performance of proposed algorithm against existing algorithms. The results shows that the proposed algorithm outperforms the existing algorithms in all the chosen performance metrics.

[View Full Paper] [Download] [References] 1541-1545

Simple Risk Analysis Of PLBN Entikong Development, West Kalimantan

Maria Handayani Setyaningrum

Given the important and strategic functions of immigration in the development of border areas, especially in maintaining the gate at the Cross Border Post, it is expected that the massive infrastructure development at the border can increase the visit of Malaysians to Entikong. Moreover, if Entikong is developed into a new tourist destination to boost the economy. This is a manifestation of the government's program to develop Indonesia from the periphery and make cross-border posts as Indonesia's proud front porch. In its

implementation, it is necessary to identify risks that are the cause of project constraints. Even though an activity has been planned as well as possible, it still contains uncertainty that it will run fully as planned. For the types of risks that exist, qualitative assessment is needed to determine the probabilities and impacts of the risks. This is useful to determine the management and response to existing risks so as to minimize and avoid the impact of the risks that might occur. Risk analysis is crucial to do on every project so that the contractor is not wrong in making decisions in overcoming risks and has prepared the right strategy in dealing with risk.

[View Full Paper] [Download] [References] **1546-1549**

Geotechnical Study On The Development Plan Location Of Randugunting Dam

Adib Lathiful Huda

The geotechnical condition of an area is very decisive in choosing the location of a dam to be built because it affects the stability and seepage of a dam. The Randugunting Dam is a dam that will be built in the Blora area, Central Java, so it is necessary to study the geotechnical feasibility around the planned dam. The purpose of this study was to determine the geological conditions and geotechnical aspects of the area planned for the construction of the Randugunting Dam. The method used in this study is to conduct surface analysis (mapping) and subsurface analysis (drilling) on the planned location of the dams. The morphological conditions of the planned dam area and its surroundings are corrugated hilly areas that have a river width of around 10-20 m, with steep cliff morphology on the right side and a relatively sloping left side. Lithology in the study location can be grouped into three rock units, namely topsoil (gravel, gravel sand, silt, and clay), Calcareous Siltstone units (Ledok Formation) and Calcareous Claystone units. The foundation of the dam will be above the bedrock which is composed of calcareous siltstone from the Ledok formation which is classified as varying into rock class (D), (D - CL) and (CL - CM). Permeability in dam foundations generally has a lugeon Lu value of < 3, so that the foundation is quite impermeable and there is no need for treatment using the grouting method.

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Particulate Matter Trends In Alwar: An Application Of Anova And Kruskal-Wallis Test

Shalini jain, Dr. V. L. Mandowara

In this paper, an attempt has been made for analysing and finding trend in the data of Air quality factor Particulate matter (PM10) of Alwar city of Rajasthan State for a period of 8 years (2010 to 2017). The analysis covers 3 air quality monitoring stations in Alwar. The study area covers a substantial portion of Alwar district. First, a normality check of the distribution of data series values has been performed using Shapiro wilk test as well as graphical methods and findings suggested that for years 2015 and 2017 data is distributed non-normally and for rest of the years data is distributed normally. But due to these two years whole data series is affected. For Testing homogeneity of variances, Levene test has been used and presence of outliers has also been detected using Box plots. Second, from the class of Parametric tests Analysis of variance technique (ANOVA) has been applied for testing the homogeneity of several means year wise and as well as Kruskal Wallis test has been applied being a non parametric test for the same. As a finding, no increasing or decreasing trend is present in the monthly values of PM10 but there is a difference in yearly mean PM10 values. Both parametric test and non parametric test has given the same result that there is significant difference between the mean values of the pollutant PM10 year wise.

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A Novel Synthetic Route For Cerium Nickel Mixed Oxide (CeNi0.5Oy) Nanoparticles And Study Of Its Hydrogen Storage Property

P.J. Elsa, C.B. Jeena, P.P. Moly, K.J. Ambily

Cerium nickel mixed oxide nanoparticles (CeNi0.5Oy) were synthesized by a novel method involving co-precipitation of nickel dimethyl glyoxime and ceric hydroxide from a solution of ammonium cerium nitrate [(NH4)2Ce(NO3)4] and nickel nitrate [Ni(NO3)2] using dimethyl glyoxime and ammonium hydroxide as precipitating agents. The dried powder was then converted to mixed oxide (CeNi0.5Oy) by calcination in air at 500 °C for 2 hours. The calcined powder was characterized by X-ray Diffraction (XRD), FT-IR spectroscopy, UV-Vis absorption spectroscopy and Fluorescence spectroscopy.

From the XRD data, the average primary crystallite size was found to be 4-5 nm. On heating with oxalic acid at 400 °C for 30 min, the CeNi0.5Oy powder was found to be partially reduced as evident from XRD data. The hydrogen insertion properties of the CeNi0.5Oy were studied by temperature-programmed reduction method (TPR), and maximum hydrogen of 22.46 mLg−1 (20 wt %) was found to be inserted at 468.6 °C.

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AN APPROACH FOR IoT SECURITY USING QUANTUM KEY DISTRIBUTION

A. Beatrice Dorothy, S. Britto Ramesh Kumar

Quantum cryptography is a way to deal with cryptography dependent on the laws of quantum mechanics. Cryptography depends on key sharing which plays a vital role. For providing a provable security during key distribution, quantum cryptography is used. There are many secure protocols and algorithms were proposed already in quantum cryptography. The Quantum Key Distribution faces several security issues, one among them, is Eavesdropper during the communication. It is an important issue which leads to thrashing of security by Man-in-the-middle (MITM) attack. In this paper, to detect eavesdropping and to enhance security during encryption, a Modified RSA method for encryption is proposed. The BB84 protocol for private key generation and distribution through quantum channel is used. Therefore, the proposed technique provides secure quantum key generation and distribution by which it prevents Eavesdropping security threat.

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Computationally Simpler And Fast Convergence Algorithm For Neural Network Based Ldpc Encoder/ Decoder

Rajasekar.B, Logashanmugam.E, Nandhitha. N.M

Soft computing technique for computationally less complex encoder / decoder for LDPC is proposed. The novel learning technique is computationally less complex than Ordinary Gradient Learning (OGLN) and highly accurate than AGL. Performance of the proposed technique is compared with the conventional techniques in terms of maximum error,

minimum error and computational complexity. In order to emulate a codec Artificial Neural Network based LDPC encoder/decoder is developed. The performance of the proposed LDPC codec is compared with that conventional codecs in terms of learning algorithm. The proposed learning algorithm has X-L multiplication in contrast to X2 and X multiplication of the conventional techniques.

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Physical, Thermal And Mechanical Characterization Of Aloe-Almond Hybrid Biopolymer Film.

M.Muthulakshmi, T.S. Subha

Natural polymers are biocompatible, non toxic and abundant. The natural polymers such as gums and mucilage are preferred over synthetic materials for their characteristics of sustainability, biodegradability and biosafety. Natural gums and mucilages are the polysaccharides or complex of one or more monosaccharides or their derivatives linked in bewildering linkages and structures. The gums has huge and broad application in both food and non-food industries being frequently used as thickening, binding, emulsifying , stabilizing agents and matrices for drug release in pharmaceutical and cosmetic industries. The present study describes the preparation and characterization of polymeric sheets in which almond gum is blunded with Aloe was prepared by casting / solvent evaporation technique. The prepared films were characterized by thickness, folding endurance, antibacterial activity, tensile strength, Differential scanning calorimetry, Fourier transform-infrared spectroscopy, Scanning electron microscope, water absorption test and antimicrobial activity. The Results show that the aloe vera enhances the thermal and mechanical properties of the films. It also revealed that the film had appreciable antibacterial activity. The prepared and characterized films were further used for the wound healing studies.

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Typical Challenges Faced In The Slum Transformation Construction Project

Tejal S. Solanki, Rohit. R. Salgude

Nowadays, timely completion of the project has become a crucial part in the construction industry. The responsibility of cities is to mobilize in order to improve housing circumstances in slums as a medium of meeting fundamental human needs. Slum areas are highly populated regions created without adequate planning and lacking the key elements of day to day life. The slum rehabilitation is a critical project for any contractor or owner. Generally, consistent delays in the project show up in the preplanning and initial stages of the construction projects, for example, getting the general plans, getting the license, permissions, various legal clearances and so on. The complete construction stage is the shaping phase of any project where numerous unforeseeable events could occur. Lack in determination of the delay factors in the slum transformation project would contribute to the project delays, schedule overrun and capital overruns. This study aims to recognize the possible challenges faced in the construction of a slum rehabilitation project. This study classifies delay factors of the project in different stages i.e., pre-planning and construction stage and proposing a better type of approach to overcome delay related challenges in slum rehabilitation construction project.

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Solve Integral Problems In Perspective Of Visual Thinking Ability

Ummu Sholihah, Toto Nusantara, Cholis Sa&#65533;dijah, Hery Susanto

Visual thinking is the ability, process, and results of creating, interpreting, using, and imagining ideas on images / diagrams, both on paper and with technological tools that aim to describe and communicate information / ideas and develop earlier ideas and to improve understanding. Integral is a mathematical concept that requires several representations in its discussion. This study aims to describe students' ability to think visually to solve integral problems, especially the concept of broad areas. This study used a descriptive qualitative approach, the subjects were 3 students of the Faculty of Mathematics of the IAIN Tulungagung . The results showed that visual thinking skills can be divided into three levels: Semi Local Visual, Local Visual and Semi Global Visual.

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A Study Of Nutritional Disorders: With Special Reference To Sabarkantha District, Gujarat, India

Delliswararao Konduru, Dr. Rajesh Gururaj Kundargi

Malnutrition is a one of the biggest problem in India, as well as in the world. It is also one of the main factors for growing of nutritional anaemia, Maternal Mortality Rate (MMR) and also Infant Mortality Rate (IMR) in developing countries in the world including India. According to the National Family Health Survey – VI (2015-16), more than 53 % of women in India were malnourished, and more than 50 % of below 6 yrs children were suffering with malnutrition. Furthermore micronutrient deficiencies particularly, vitamin A, zinc, iodine, and iron deficiencies, are estimated to affect more than 2 billion people in worldwide. The consequences due to these deficiencies are premature death and other deprived health conditions, loss of eye sight, stunting, reduced cognitive improvement, and low productive capacity. This article highlights about the assessment of malnutrition and other nutritional disorders. The author also discusses the causes of malnutrition in the society, and how they affect to maternal health. The present paper attempts to pull together information, relevant to malnutrition and nutritional anaemia, and it is provides useful insights to policy makers.

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Strategies For Rescuing Banking In The Economic Crisis: A Study Of The New Institutional Economic Perspective

Dato– Sri Tahir, Wihana Kirana Jaya, Muhadjir Muhammad Darwin, Agus Heruanto Hadna

This research intends to carry out an intensive study to the public policy case for producing the strategy of banking policy formation after the monetary crisis. The methodology consists of qualitative research approach. In this research, the case study method is employed. The data are analyzed by using the interactive analysis moving ones from the data collecting, condensation, and performance, until the conclusion or verification. The result shows that the bad governance has led to unclear contract between the principal and the agent. This increases the transaction cost. The government (the principal) through the banking liberalization policy gives the big freedom to the banks (the agents) to carry

out the business extensification without the support of strict supervision. This has caused the bad bank management was not detected and corrected by the central bank. In addition, the incentive structure in allocating resources does not stimulate the bank obedience to the given formal rules.

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Compact Antenna For Future Short Range Communication Among Automobiles

Keerthana Sathiamoorthy, Selvakumar Muthaiah, Karuppasamy Vignesh Subramanian

Intelligent transportation system is being made possible by properly selecting reliable antennas. It enhances driver safety and traffic efficiency if the selected antenna properly operates at 5.9 GHz band. Dedicated Short Range Communication Systems (DSRC) guarantees high data rate in the Vehicle to Vehicle (V2V) communications. Proper antenna selection acquaints high system performance. Directional antennas are demanded for vehicular communication to support different wireless operating environments. This work deals with the design of low profile hexagonal shaped microstrip antennas suited for Vehicular communication. Shorting pins and two sets of v shaped slots are provided to achieve broadband performance. The proposed antenna is designed using ANSYS HFSS software and its performance measures such as return loss, and radiation pattern are analyzed. The subsequent section reveals the design formulae and steps in HFSS (High Frequency Structure Simulator) for the proposed antenna.

[View Full Paper] [Download] [References] **1605-1611**

Evaluation Of Noise And Incurred Social Cost Due To Infrastructure Construction Activity

Junaid Z Shah, Smita V Pataskar

Construction activities result in various types of hazards and discomforts at the time of operation. These problems may seem quite low in comparison with the benefits of any project, but economically they affect the environment around the site. This, in monetary terms, is known as social cost, often not taken into account while evaluating the total cost of the project. Of many

different parameters for social cost, Noise pollution due to construction activity is identified as one of the few major threats to the environment surrounding the site of construction. Any Construction project benefits the society as a whole. Yet the problems of Noise due to its construction activity are faced by a very small part of the society, under-influence population. This study is focused on the evaluation of Noise levels due to Metro Construction project, evaluating area under influence and population under influence of Noise. This data is a requirement in evaluating the social cost with the help of Contingent valuation technique. The study gives the framework in evaluating the Noise levels and incurred social cost due to Metro Infrastructure construction project. The site taken for the survey was Nal square to Paud Phata of Pune Metro Reach 2. Noise levels are evaluated for equivalent values of noise at equal intervals for various hours. The day-time Noise levels were evaluated which were found to be as high as Leq 80-85dB (A), equivalent to sensitive to human hearing. The Social cost accounted for about 0.29% that of the project cost from Paud Phata to Nal square with 0.015% increase in the project cost for every single rise of decibel.

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Strain Measurement With Fiber Mach-Zehnder Interferometer Using Spatial Phase Measurement Techniques

Kamal Rani, Ajay Shankar

Fiber Mach-Zehnder interferometer (MZI) provides sensing applications with optical fiber for measurements like stress, strain and temperature. Over time MZI has been realised and studied with a beam splitter, mirror and detectors and has been improved using couplers, single mode fiber and detectors as well as inline fiber MZI. In these MZI setup input light is splits into two equal parts which then propagates separately through both reference and measurement fibers. With this set up we demonstrated producing stable detector width compensated fringes suitable for phase measurement due to strain in measuring arm applying spatial phase measurement(SPM) techniques for strain sensor applications.

[View Full Paper] [Download] [References] **1617-1622**

Physicochemical And Antioxidant Properties Of Red Rice Varieties Of Wakawondu And Wangkariri From North Buton, Indonesia

Muhammad Syukri Sadimantara, Asranudin, Holilah, Fahria Nadiryati Sadimantara, Nur Asyik

Wakawondu and Wangkariri varieties of red rice are consumed by the community as a source of carbohydrates. The red pigment of rice shows a high anthocyanin content,which has a high potential for development. The proximate and antioxidant characteristics of the two cultivars did not show significant differences. Both rice cultivars had different pasting characteristics (peak viscosity, troughviscosity, breakdownviscosity, setback viscosity, final viscosity).The pasting properties of Wangkariri cultivar rice were 50% higher than Wakawondu cultivar on all pasting variables. These results indicate that both cultivars should be applied to different food products.

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Rejuvenation Of Burn Infection Through Medicinal Plants Incorporated Collagen

Gunasheela.N, Manovina.M

Collagen is a major natural constituent of connective tissue and structural protein of any organ which has the applicability as biomaterial drug delivery system. Fish collagen has gained increasing interest as the alternative for mammalian counterpart. Collagen acts as regenerative biomaterial for treating burn infection. Burned tissue or skin gets easily infected because the skin has lost its ability to protect the underlying tissues from microorganisms .Gram-positive bacteria are some of the first to colonize burns, followed quickly by gram-negative. Two bacterial species, Methicillin-Resistant Staphylococcus aureus and Pseudomonas areuginosa will be examined in depth in this work as they are two of the most prevalent infective agents. These two species have proven particularly difficult to treat because they possess a large number of virulence factors and antimicrobial resistance genes. A plant with multi-potent pharmaceutical activities offers better treatment option. The extracts made from Euphorbia hirta and Triphala can speed the healing process by stimulating blood flow to the skin. In the present research work fish collagen was extracted from scales and the molecular weight was determined. The plant extract

were prepared and unified with collagen membrane. The antimicrobial activity of Euphorbia hirta coated collagen membrane was performed against wound causing pathogens such as Staphylococcus aureus and Pseudomonas aeruginosa for eliminating burn infection along with wound healing property.

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Biodegradation Of Used Lubricating Oil Containing Hydrocarbon Using Rhodococcus Erythopolis

Frentina Murti Sujadi, Yahya, Andi Kurniawan, Abd. Aziz Amin

Engine oil is a complex mixture hydrocarbons and organic compounds used to lubricate parts car engine so the engine works smoothly. After usage period the oil as a lubricant ends, then the oil will be used more metals and polycyclic aromatic hydrocarbons (PAH). One friendly way environment is by bioremediation, namely biodegradation of pollutant compounds become simpler products and harmless. So far, research on contamination of hydrocarbon compounds, especially used oil in fishing ports is still rarely done, especially with the addition of exogenous bacteria. This study aims to analyze the ability of the bacterium Pseudomonas aeuriginosa, Rhodococcus erythropolis and the combination of both in the bioremediation process of used oil hydrocarbons and determine the best bacterial formulations to degrade hydrocarbons from used oil waste. The method used in this research is the experimental method. Significant reduction results occurred in the treatment Rhodococcus erythopolis with concentrations of used oil 30 ppm by 70% with the value of used oil concentration of 9 ppm, then in the treatment of Rhodococcus erythopolis with 45 ppm concentration of used oil there was a percentage the lowest decrease of 22% with the value of used oil final concentration of 35 ppm. If referring to the Regulation of the Minister of Environment No. 19 of 2010 concerning waste water quality standards for businesses and/or petroleum processing activities the maximum TPH level is 20 ppm, then bioremediation of used oil waste using a Rhodococcus erythopolis for 14 days at a concentration of used oil waste 30 ppm can produce a final value pollutants that are still allowed for the harbor's aquatic environment.

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Study Of Concept Mastery Of Binocular K-11 Students Through The Implementation Of A Multi-Representative Approach

Nuzulira Janeusse Fratiwi, Setiya Utari, Achmad Samsudin

Mastery of the concept becomes the basis for use in the process of solving problems in science learning today, such as scientific literacy and 21st-century skills. However, generally mastery of concepts only revolves around solving scientific issues associated with the use of binocular formulas. Therefore, research is conducted that aims to obtain mastery profiles of binocular ideas through the implementation of a multi-representation approach. Qualitative descriptive research uses a sample of 26 students from a population of 142 students of class XI in one of the public high schools in Bandung. The researchers did randomsampling. The instruments used were in the form of tests and non-tests with the validity of 27.1% (valid) and reliability of 0.70 based on Rasch analysis. The data obtained were presented in the form of a percentage for each Competency Achievement Indicator (CAI), by grouping student answers into three categories namely Novice, Intermediate and Advance. Each type of answers gets a score for later converted to value and analysis with SPSS 23. The results show that the highest percentage is in CAI 1 (explaining binocular function) by 58% in the Intermediate category and 42% in the Advance category, while the lowest rate found in CAI 3 (drawing sketches of shadow formation by two convex lenses) which is equal to 4% in the Advance category. Besides, the average value of students in binocular concepts is 65.77, which indicates that the mastery of binocular concepts is still low. Some suggestions for improving the learning process are also elaborated.

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Acceptability Of Veggie-Steamed Bun

Rosario Gutierrez Catapang

The purpose of this experimental study was to determine if assorted vegetables can be used as Steamed-Bun filling. Specifically, it aimed to determine the following: 1. Perform the steps involved in preparing Veggie-Steamed Bun., 2. Find the level of acceptability of Veggie-Steamed Bun in terms of the sensory qualities such as appearance; aroma; taste; and texture, 3. Determine the significant difference on the level of

acceptability of the Veggie-Steamed Bun based on sensory qualities as rated by teenagers; housewives; and food experts, and lastly was to compare the cost of Veggie-Steamed Bun to those available in the restaurants. The study employed experimental method which is a process of arriving at dependable solutions to problems through the planned and systematic collection, analysis and interpretation of the data. The palatability of the Veggie Steamed was highly acceptable as to its sensory qualities as rated by teenagers as seen in the overall mean of 4.28 and standard deviation of 0.513. Acceptable as rated by housewives and food experts with the same overall mean of 4.14 and standard deviation of 0.647. There is no significant difference on the palatability of Veggie-Steamed Bun as to its sensory qualities as rated by the different group of respondents.It was concluded that the methods in making veggie-steamed bun were considered acceptable, since it does not require state of the art equipment. The palatability of the Veggie Steamed was highly acceptable as to its sensory qualities as rated by teenagers while only acceptable as rated by housewives and food experts and the cost of Veggie-Steamed Bun is highly competitive to those readily available in the restaurants. Furthermore, the following recommendations were given: 1. The Veggie-steamed bun is recommended for laboratory testing and patenting. 2. Further study should be conducted to test the shelf life of the Veggie-steamed bun. 3. A study on marketability of this study must be conducted. 4. Develop other recipe like empanada, bread roll and savory tarts based from this study.

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Mobile Commerce Pattern Mining Behavior Prediction Based On Kernel SVM

N.Karthikeyan, Dr S.Selva Brunda

We suggest an implementation for the mining and prediction of mobile user's actions and purchase transactions together. The implementation gives the user with data about that all shops a specific product is accessible and that shop gives the best proposal. With the help of this application we can create the Live shopping by the user without having to go to each shop and query. Mobile Commerce, also called as M-Commerce or commerce, is the aptitude to conduct commerce with the help of a mobile device. Research is performed using Mining and Prediction of Mobile Users' Commerce Behaviors like their movements and purchase

transactions. In our projected research we have envisioned to suggest a mobile commerce behavior prediction primarily the input information are taken from a mobile transaction database it comprises a store item information and item store information we have transform this information with the help of transformation have extract a data$s on the basis of a similarity bases now we have a store data and item data also it encompasses a store similarity and item similarity data$s from that we have taken a similarity data$s and stock that data$s these data$s are provided in to the Similarity Inference Model SIM for calculating the similarities amongst stores and items that are two basic mobile commerce entities measured in this paper these are given n to the prediction engine also it have a user transaction, identification and movement from these engine, we have envisage the user behavior with the help of Kernel based SVM.

[View Full Paper] [Download] [References] **1648-1657**

Examination Of The Influence Of Leadership Integrity Provision Of Holistic Training On Student-Teachers In Public Primary Teachers Training Colleges

Lydiah N Kamamia, Dr. Ruth W. Thinguri, Dr. Mary M. Chui

Leadership practices influence the education system in any society. Integrity being a core value in leadership has a great effect on educational issues that influence people and their environmental interactions. The study examined influence of leadership integrity on provision of holistic training on student-teachers in public Primary Teachers Training Colleges (PTTCs).The study adopted a mixed methodology and an explanatory design. Out of a target population of 2061 participants, a sample size of 633 respondents (30% of two groups -student-teachers and lecturers and a total of 21 respondents of other groups drawn from the offices as whole independent units: principals, Deputy principals, BOM chairmen, Deans and the student-leaders) participated in the study. The study revealed that there is indeed lack of leadership integrity on provision of holistic training on student-teachers in the public PTTCs leading to the lack of inculcation of transparency and accountability skills into the graduates. This led to reduced ethics and poor performance on duty performances of the teacher-students. The study therefore recommended that the student-teachers be trained as

teachers of integrity who would prepare pupils in the primary schools as conscious and cohesive national citizens capable of facing global challenges courageously.

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Transmutation Of The Two Parameters-Rayleigh Distribution On The Effect Of Physical Training On Age-Related Reduction Of GH Secretion During Exercise In Normally Cycling Women

M. Kaliraja, K. Perarasan, Vimala Subramanian

Several life-time data are investigated using statistical analysis based on a respective statistical distribution. However, many of the life time data are still needed an attention in favour of statistical view. In this paper, we have employed a Transmuted Two Parameters Rayleigh Distribution to offer the mathematical elucidation for the effect of physical training on age-related reduction of GH secretion during exercise in normally cycling women.

[View Full Paper] [Download] [References] **1664-1668**

Journey From Optical Neural Networks To Photonic Chips

Neha Soni, Enakshi Khular Sharma, Amita Kapoor

In recent years, there has been a rapid expansion in two fields, photonics and artificial neural networks (ANNs). ANNs based on the basic property of a biological neuron, has become the solution for a wide variety of problems in many fields, such as prediction, modeling, control, recognition, etc. and many of them have reached to the hardware implementation phase. Photonics on the other hand, with several advantageous features like inherent parallelism, high speed of information processing (photon), high capacity data storage, etc. has become a natural choice for researchers for the implementation of ANNs. This combination of photonics and ANNs has resulted in novel realizations of various ANN models. In this paper, we attempt to survey the optical realizations of various neural network models made in last the 30 years. We focus on self organizing neural networks, associative memories, and perceptron neural networks. We also survey the state-of-the-art photonic chips for the realization of ANNs.

[View Full Paper] [Download] **1669-**

[References] 1673

Flexural Behavior Of Ferrocement-LGS Composite Under Monotonic Loading

Darshit Rudani, M.S Kulkarni, Amrut A. Joshi

The main objective of this investigation is to study the flexural behavior of Ferrocement-LGS composite section when subjected to 4 point monotonic load. Ferrocement panel and LGS is connected with self-tapping screw at different spacing. 3 different spacing of 125mm, 150mm and 250mm screw connection is analyzed under flexural loading to understand the deflection behavior and moment capacity of section. Experimental study & research determine the result in terms of load-carrying capacity, central deflection, bending moment capacity, Load vs Deflection curve and failure pattern. These results will be compared with each other. Expectation from this research is that this research will be used as guidance for future research on composite system for building construction.

[View Full Paper] [Download] 1674-1677 [References]

The Dynamics Of The Development Of Baitul Maal Wa Tamwil In Indonesia With The Swot Analysis Approach

Uus Ahmad Husaeni, Tini Kusmayati Dew

This research is motivated by the fundamental changes in micro finance industry map caused by the many penetration done by big players (rich people), so Baitul Maal Wa Tamwil (BMT) position began to lose its identity and must be transformed to face competition in micro finance sector. The purpose of this study is to prove the total change of microfinance business and analyze the position and role of BMT in the economic empowerment of people. This research is qualitative with library approach, where primary data are collected from primary sources in the form of related literature and secondary data in the form of publication report and interview. The data are then presented and analyzed by descriptive-analytical method using SWOT approach. The main conclusion of this research is that there has been a commercialization of microfinance business in Indonesia, so that BMT who carry out the mission of economic empowerment of people should focus on choosing the role as well as transform themselves. The

transformation is done by changing its role and position to two alternatives; commercial or social, which is then supported by good corporate governance.

[View Full Paper] [Download] [References] **1678-1685**

Performance Analysis On Metaheuristic Based Hybrid Neural Network To Predict The Stock Movement

K Venkatanarayana, B. Satyanarayana

Stock market prediction is a time series forecasting problem. For an efficient stock price prediction, in this paper optimization based neural network learning scheme has been developed that alleviates the existing Artificial Neural Network (ANN) limitations such as local minima and convergence issues. The existing gradient descent based algorithms are local search algorithms. To find global optimum solution, Metaheuristic based Hybrid Neural Network (HMNN) has been developed. The hybrid neural network executes optimization of activation nodes, optimization of weights and learning parameters. To illustrate this, we apply the proposed HMNN method to study the movement of closing prices of stock market. The algorithm has been practically examined for performance in terms of Mean Absolute Percentage Error, accuracy, precision, recall, completeness, F-measure where it has performed better as compared to major existing schemes. The proposed scheme exhibited 94.97% prediction accuracy while guarantee optimal precision, F-measure and recall.

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Comparative Analysis Of Various Noise Types Using Empirical Mode Decomposition Based Hurst Exponent Techniques

Poovarasan Selvaraj, Dr.Chandra Eswaran

Generally, Speech enhancement aims to develop a speech quality and intelligibility of a noise corrupted speech signal by using various Speech Enhancement techniques. Speech enhancement approach, Empirical Mode Decomposition and Hurst-based (EMDH) approach was proposed for signals corrupted by non-stationary acoustic noises. In this technique, Hurst exponent statistics was adopted for identifying and selecting the set

of Intrinsic Mode Functions (IMF) that are most affected by the noise components. The results show that the EMDH improves speech quality were evaluated by the performance matrices of Cross Correlation, Mean Square Error, Peak Signal to Noise Ratio and the perceptual evaluation of speech quality (PESQ). An experimental study was also done on various types of noise added in clean speech like Gaussian White Noise, Random Noise and Colored Noise.

[View Full Paper] [Download] [References] **1693-1696**

Implementation Of Fuzzy C-Means And Fuzzy Possibilistic C-Means Algorithms To Find The Low Performers Using R-Tool

T.Thilagaraj, Dr.N Sengottaiyan

Data mining research continuous in the field of education by dealing with a large amount of data with more number of techniques. The clustering is a suitable technique to deal with the disjoint group of data sets by assign the objects which are similar to the corresponding group. This paper discusses the use of Fuzzy C-Means (FCM) and Fuzzy Possibilistic C-Means (FPCM) algorithms to predict low performers for placement in the software industry. The fuzzy clustering plays an active role by solving real-world tough tasks. In fuzzy clustering, the FCM algorithm is efficient, popular and it is easy to implement in different data sets. The FPCM is also having high efficiency to deal unlabeled data which may generate membership and typical values. The early prediction of low performers will support academia to analyze and provide necessary training to them on a premature stage. Here the factors like academic, aptitude, technical and interpersonal skills are needed to analyze all students to provide better placement for low performers.

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Movie As An Environmental Conservation Media: Content Analysis On ﷺBumikuﷺ (My Earth) Movie

Redi Panuju, Daniel Susilo

This article discusses the message contained in the ﷺBumikuﷺ (My Earth) movie. This movie was prepared by an 11-year-old teenager (Natasha Dematra) and won many

awards at both the national and international level. Issue was appointed in this film to cover environmental issues such as geothermal energy, forest burning and deforestation, use of non-recyclable goods, increased exhaust gas and excessive use of electrical energy. This movie raised another issue, i.e. floods due to damaged forests, crop failure due to drought and unhealthy environment due to littering. This article used a narrative approach, which assumes the movie acts as a delivery media. All aspects of the film, from stories, dialogues and images can be converted into a series of words (narrative). The series of words can reflect the front stage of film's contents, which merely outline facts or realities that develop in the community, possibly acting as a backstage that reflects important messages from the film or something more essential than mere facts. Bumiku offers cultural conservation through two important things; first, the need for enculturation of environmental awareness through the role of the character of agents of change, as exemplified by the figure of Heru, environmental volunteers who mobilized village women to practice recycling recycled goods into economically valuable crafts. Second, using traditional arts as a communication medium, namely Dances, Tabuh Lesung and Wayang Beber.

[View Full Paper] [Download] [References] **1702-1710**

Energy Literacy-Based Learning Activities On Female Students

Lingga Nico Pradana, Andri Putra Kesmawan, Swasti Maharani

Energy resources an important topic to be explored and become national issues. Education has become an important sector in overcoming energy problems. This study aims to enhance student's energy literacy in energy literacy-based learning activities. The study involved 47 vocational school female student. The activities had been held 10 weeks (90 minutes each week). Energy literacy in the activities focus to improve knowledge of scientific facts, knowledge of issues related to energy sources and resources, awareness of the importance of energy, understanding of the impact energy on society, understanding of the impact energy on the environment, and cognitive skills. Energy literacy-based learning implemented by student's research on energy issues. The result of this study shows that energy literacy-based learning activities improve student' energy literacy. Moreover, student have ability to assimilate and resolve

current problems relevant to energy problems, analyze and assess information relevant to energy issues, and evaluate energy costs and benefits related consumer purchases.

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Underwater Sensor Networks: A Heuristic Approach For Void Avoidance And Selection Of Best Forwarder

Kamal Kumar Gola, Bhumika Gupta, Gulista Khan

This work presents a routing algorithm based on heuristic function to avoid the void region in underwater sensor networks. A void region has become a serious issue in underwater sensor networks where a sensor node does not have a forwarder node to forward the data packet. Hence, results is packet loss, sometimes may be delay that affects the overall performance of the networks. The objective of this work to address the void region problem without any delay. This work bypass the void region by selecting the best forwarder based on heuristic function, depth, distance and holding time etc. This work ignores all the routes that leading to void region. The simulation results show a better performance in terms of void region as compared to existing E2RV algorithm.

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Do Technological Capabilities Influence Innovation In Creative Industry: The Case Of Handicraft Sector In Indonesia

Yayan Hendayana, Suryana, Eeng Ahman, Hari Mulyadi

This study examines the effect of technological capabilities on innovation in small and medium enterprises (SMEs) in the handicraft sector's creative industries in Indonesia. The number of samples in this study was taken as many as 253 SMEs in proportion. Data collection is done by a questionnaire directly to respondents. The data analysis technique in this study is the structural equation model (SEM) approach with the AMOS program. The findings show that technological capabilities has a positive and significant influence on innovation in the craft industry's SMEs creative industries in Indonesia. The results of this study indicate that the appropriate technological capabilities

can help SMEs to innovate processes, products, and marketing. The low technological capabilities will have an impact on the ineffective and efficient work process and the difficulty of developing a variety of products produced.

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Preliminary Screening Of Media Formulation Through One Variable At A Time Methodology

Rajesh Singh Tomar, Neha Sharma

Optimization of media component through changes in one variable at a time was used to enhance the biomass and antioxidant activity of selected microorganism (Escherichia coli MTCC no. 40) on different formulated media. For the present study, different types of carbon, nitrogen and mineral sources were used to formulate media composition. On the basis of absorbance, components were selected to formulate new medium and finally formulate a new medium by using all variables in one medium. It was reported that unaltered media showed 0.126 ±0.001 absorbance, media 1 (altered carbon source) showed 0.143 ±0.001, media 2 (altered nitrogen source) showed 0.150 ±0.001, media 3 (altered mineral source) showed 0.124 ±0.012 and media 4 (Altered medium) showed 0.090 ±0.005 absorbance at 492 nm wavelength. The component comparison and analysis was based on changes in one factor in medium. Significant result i.e. increase in biomass was reported in altered nitrogen and carbon medium compared to the unaltered medium. These components will be further used in the formulation and optimization of medium component for response surface methodology which are the primary steps involved in bioprocess technology to enhance the biomass of the particular microorganism.

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Using Deep Learning Technique To Query Relational Data Using Multi-Lingual Query Generator And Translator With NLP Support

Sunilkumar N. Beghele, Pallavi V. Kulkarni

A smart and intelligent interface utilized & enhance effective interaction between its' users with the underlying databases. Such a system application needs for complex query problem as faced by the user who has an

understanding of databases. The database should be efficient and should allow quick access. However, all users are unfamiliar and accustomed to queries and structural implementation in structured_query_language (SQL) because of lack of knowledge, of structure info database. Therefore, naiveusers need an intermediate system interact RDB natural_language that is English. For the same, (Database_Management_System) with the ability to inter-compile natural_language (NL). In the research proposal, we intend to create-develop an interface using Meaningful matching techniques that will translate natural search terms as SQL using a predefined set of written production rules and predefined data dictionaries, the data dictionary will consist of a set of definitions for relationships and properties. Pair of steps, such that lowercase conversion, tagging, tokens, database elements, and SQL separation elements are used for conversion the natural language query (NLQ) in SQL query.

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Education 4.0: Technology Integration In Calculus Course

Suwarno, Nerru Pranuta M.

This study aims to determine the effectiveness of the use of technology in calculus courses. The technology used is the integration of Mathematica software in teaching integral concepts. This study used a quasi-experimental method. The population in this study were students from one of the private colleges who took calculus courses. Two groups were selected by purposive sampling as a control group and experimental group. Each group consists of thirty students. Both groups were given pretest and posttest related to problem-solving skills. The results showed that improvement in problem-solving abilities of students who received calculus courses with Mathematica was better than students who received calculus courses without Mathematica.

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Analytical And Experimental Investigation On Voided Slab

Abhishek R. Pandharipande, N. J. Pathak

In buildings, slab is one of the important structural member as well as the largest

member consuming concrete. Therefore by using high density polyethylene balls the consumption of concrete can be optimized. The advantages of bubble deck slab are less energy consumption both in production, transport and less emission of exhaust gases. The main aim is to study the practicality of hollow plastic balls in a reinforced concrete slab. The range of the study involves evaluating the flexural strength and behavior of light weight slab and conventional slab by analytical and experimental work. The slab specimen casted were of three types namely, conventional slab, B.D.S of 50 mm diameter and B.D.S of 100 mm diameter having dimensions of 750 mm X 500 mm X 150 mm. The testing of slab specimen was done on universal testing machine by giving one point line loading. Finite element analysis on slab specimen is also done by using ANSYS WORKBENCH 16.0. From the results it can be concluded that Bubble deck slab of 50 mm and 100 mm diameter can be used in practice, as the deflection values of the particular slabs are within the permissible limit as stated in IS Code.

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Real Time Monitoring And Controlling Of Solar Panel Using Labview

Preethi G, Lavanya D, Sreesureya V, Boopathimanikandan S

This paper aims at the development of real time process to track the sun position and maintain maximum efficiency using Arduino UNO and LabVIEW. The parameters such as voltage, current, light intensity of solar panel are acquired continuously. Voltage is measured by using voltage divider, current is measured by using acs712 and light dependent resistors(LDR) is used for capturing maximum light source and the acquired data are processed in Arduino and send to LabVIEW. Arduino compares the value of two LDRs which are placed in the opposite sides of the solar panel and accordingly sends signal to the stepper motor. The stepper motor rotates the solar panel to the maximum light source location sensed by LDR with better resolution than servomotor. In software development, the Graphical User Interface (GUI) is constructed by using LabVIEW. The tracking process of sun is made in both automatic mode and manual mode by using an external switch in the circuit. When the switch is in ON position, it is in the manual mode and vice versa. The automatic mode is governed by Arduino-stepper motor interface. In manual mode, the desired step angle is entered manually in

Arduino or LabVIEW. The energy from the solar panel is stored in battery. That stored energy is used to supply the arduino board and also load.

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The Instructional Strategy In Inclusive Classroom: In Inclusive Teachers' Opinion

Rasmitadila, Widyasari, Teguh Prasetyo, Reza Rachmadtullah, Achmad Samsudin

The purpose of this research is to determine the inclusive teacher problems in designing and using instructional strategies in inclusive classrooms. The research method used is survey research involving 102 inclusive teachers spread across various inclusive schools in several major cities in the Indonesian region. Data were collected using questioners with Likert Scale and interviews. Data analysis using quantitative analysis namely percentage of the problem. Qualitative analysis data model consisting of 3 stages, namely (1) thematic analysis of all participant (2) within-participant thematic analysis (3) cross-participant analysis. The results showed that the problems faced by teachers in designing and using instructional strategies in inclusive classrooms include the lack of mastery of personality competencies, pedagogic competencies, and professional competence. Teachers have difficulty in determining instructional methods, instructional media, instructional strategies used are still not optimal, difficulty in determining the sequence of learning; teachers are only focused on cognitive and emotional aspects of learning.

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Schemata's Influence On Mathematical Problem Solving Skills

Wahyudi, S.B. Waluya, Hardi Suyitno,Isnarto

Schemata is one of the factors that influence a person's ability to solve problems creatively. Schemata in one's memory will determine how new information is processed into a new concept. This study aims to describe schemata's influence on solving mathematical problems. This research is categorized as qualitative research. Data of thinking schemata and solving mathematical processes are collected by the method of think out a loud and task analysis, namely by giving test questions and conducting

interviews according to student responses and viewed from mathematical problem solving skills. The data are analyzed using Miles and Huberman's analysis techniques, through the three stages of reduction, presentation, and conclusion. The results showed that students' schemata varied according to their mathematical problem solving skills. Students with complete and systematic schemata (formal, content, and linguistic) structures had high mathematical problem solving skills. The process of problem solving was arranged in coherent and systematic ways with diverse answers. This happened because the adaptation process (assimilation and accommodation) and the formation of a concept scheme run well, neatly and completely. New schemata were well formed and produced balanced new knowledge. This Schemata will facilitate students to connect among concepts so that problems could be solved properly.

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IOT Based Model For Smart Monitoring Of Network Related Infrastructure Using Integrated Iot Platform (Boltiot)

Ajay Kumar Maurya, Dr. Shish Ahmad

IoT (Internet of Things) is poised to transform the real world objects into intelligent virtual objects in the near future. As sensing, communication, and control become ever more complex today, this technology is applied in transforming the Internet into a fully integrated ecosystem. IoT is the next revolutionary technology in transforming the Internet into a fully integrated future ready Internet. IoT allows people and things to be connected at any time, any place, with anything and anyone, by using any path/network and any service. The advances in computer hardware, embedded system devices, networking devices, display devices, control devices, software enhancements, etc. have hugely supported IoT to grow rapidly. The main objective of this paper discusses actual implementation of IoT based monitoring of network infrastructure and its associated peripheral devices/equipment's for parameters like temperature and power supply etc. using appropriate sensors. The main utility of the work presented, is in 24x7 monitoring of remotely located devices where it is impractical to monitor manually with direct physical presence. The implementation has been done using an integrated IoT device BOLTIoT.

[View Full Paper] [Download] **1764-**

[References] 1769

Investigation On Twin Screw Compressor Rotor Profile

Abhishek G. Yewale, (Dr.) Ratnakar R. Ghorpade, Suraj K. Abdan.

The screw compressor is a favorable rotating displacement compressor with a screw-shaped piston. The primary components are male and female rotors that move towards each other while the volume between them and the housing reduces. In an industry, the compressors are one of the highest power consuming machines. Hence, to decrease the power consumption, the efficiencies of these machines need to be at the highest level at all operating conditions. There are different geometric and installation parameters of the screw compressor that influence screw compressor efficiency such as inlet and outlet ports, rotor size, lobe mixture, rotor length to diameter ratio, clearance and primarily rotor profile. There are very limited or no literature available with open access for the design of a screw rotor profile. This paper focuses on the initial steps to be followed during the design of screw rotor profile. Various curves have been used to generate rotor profile. The curve used in a particular area of the main profile is the sine curve. The study presents profile generation using above mentioned curve. An analysis and comparison of the performances of this profile with widely used profile in the commercial market. Profile used here for comparison is &#65533;N&#65533; profile developed by City, University of London, UK

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A Study Of Fault Tolerance In High Speed VLSI Circuits

Somashekhar, Dr.Vikas Maheshwari, Dr.R. P. Singh

The main motive for introducing fault tolerance in VLSI circuits is yield enhancement, by increasing the percentage of fault free chips. In nm technologies, circuits are more and more sensitive to a variety of perturbations. Transient faults can take place in a processor as a result of electrical noise, and alpha particles. These faults are able to cause a program running on the processor to behave inconsistently, if they propagate and change the architectural state of the processor. These faults can occur in memory arrays, sequential elements or in the combinational logic in the processor.

Protection against transient faults in combinational logic has not received much attention traditionally because combinational logic has a natural barrier stopping the propagation of the faults. This paper presents fault tolerance in VLSI circuits.

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Partial Replacement Of Cement With Waste Paper Sludge In Addition With Activated Charcoal Powder

Sumit Gaikwad, Sudhanshu Pathak, Mahesh Tatikonda

The global cement industry contributes about 5% of greenhouse gas emission to the earth's atmosphere. In order to reduce bad environmental effects associated with cement, there is a need to develop alternatives which make the concrete industry sustainable. The industrial waste paper sludge (PS) is used for study which is generally dumped to the nearest site which polluted the land and atmosphere as well as it also affects the aesthetics of urban environment. The study examines the possibility of using waste paper sludge (PS) as partial replacement of cement in a quantity of 5%, 10%, 15% and 20%. Coconut shell based activated charcoal powder (ACP) is used as an additive in concrete with 1%, 2% and 3% by weight of cement. The target strength of the concrete mix is 40 N/mm2. Mechanical properties of combination and their individual performance were studied and compared with conventional concrete. Compressive strength, Split-tensile strength, and flexural strength tests were conducted at the age of 3, 7 and 28th days and it has been observed that optimum value of PS is 10% and ACP is 1%. A durability test was conducted by Rapid Chloride Penetration Test (RCPT) confirming to ASTM C1202. PS 10% replacement results observed raise in 13.15% as compared to conventional concrete and addition of ACP observed raise in 10.58% as compared to conventional concrete. In Durability study, it has been observed that a combination of PS10% + ACP 1% is more durable compared to conventional concrete.

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Aromaticity Of Nano Structural Almond Oil Soot Particles In Different Environment

Rakhi Tailor, Minal Bafna, Y.K.Vijay

Carbon soot is a fine dispersion of black carbon particles in a vapor carrier.Formation of soot by incomplete combustion on different substrate to investigate water soluble carbon nanoparticles around 40nm in size.Here we demonstrate a smart type of carbon nano soot. However the production of carbonaceous soot in natural environment as well as in humidity environment by a simple way of incomplete combustion of almond oil by flame deposition method,is an very simple,inexpansive method for synthesis of soot. synthesized soot particles were analyzed by Field emission scanning electron microscopy (FESEM),Energy dispersive X-Ray (EDX), X-Ray diffraction (XRD), Fourier Transfer infrared spectroscopy (FTIR), and UV-visible spectroscopy and Raman spectroscopy. Morphology study of synthesized carbon soot nano particles indicates the presence of large amount of amorphous carbon nano material. Infrared spectroscopy results indicate the small size clusters present in soot particles as well as UV & FTIR results shows the presence of aromaticity.The humidify environment is an important factor for morphology and formation of carbon nano particles.

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Institutional Study Of Fisheries Community Pengambeg In Puger Wetan Village, Sub-District Puger, Jember City

Bintang Hanggara

The purpose of this study is to describe the conditions that existed at the time the research was conducted and examine cause and effect through the identification of existing symptoms of the problem. Through a descriptive qualitative approach, where fishermen in Puger Wetan Village become the analytical part of this study, it is known that the pengambeg and fishing communities have institutional relationships that have been formed from time to time. The institutional function of the pengambeg and fishermen in Puger Wetan Village, Puger District, Jember Regency has a very important role for the sustainability of the marine fishing industry, seen from the stability of supply, the lack of ambitiousness and the sustainability of fishermen's lives. This research contribution can be used as a reference for the government in determining policies for the lives of fishermen in Puger Wetan Village.

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Performance Analysis Of Proposed D1FTBC Approach For Improving Consistency In Cloud Data Transactions

J.Antony John Prabu, Dr. S Britto Ramesh Kumar

Cloud is a computing technology; it provides several services in the application for a reliable services. The main feature of cloud is an ability to handle large amount of data without knowing about hardware form and maintenance. Although, the maintenance of consistency in data transaction is considered as a major problem of cloud database. It's one type of ACID properties. So data transaction in cloud requires better approach to maintain the consistency state. In existing, most of the researchers have developed several approaches for this issue but still it is in the infancy level. To solve this problem, this paper concentrates on developing a new approach that is D1TFBC to ensure higher level consistency. Further, the performance of the proposed approach is analyzed and results are verified with existing approaches.

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Tandem Synthesis And Antibacterial Studies Of Novel 3-Substituted Tetrahydrobenzo [4,5] Thieno [1,2,4] Triazolo [4,3-B] Pyridazine And 2-(5- (Substituted) -4h-1,2,4-Triazole-3-Yl) -Tetrahydrobenzo [B] Thiophene-3-Carbonitirile Derivatives

N. Devika, J. Sembian Ruso, M. Mariyappan, N. Sivakumar

A series of novel 3-substituted tetrahydrobenzo [4,5] thieno [1,2,4] triazolo [4,3-b] pyridazine and 2- (5- (substituted) -4H-1,2,4-triazole-3-yl) -4,5,6,7-tetrahydrobenzo [b] thiophene-3-carbonitrile derivative were synthesized. The structures of all derivatives were characterized by LCMS, 1H NMR 13C NMR spectroscopy. Newly synthesized compounds (8a-8f) and (9a-9h) were subjected for their invitro antibacterial screening against Bacillus substilis, Staphylococcus aureus, Klebsiella pneumonia, Escherichia coli R. solanacearum Among the tested compounds, compounds 7d, 7f and 8f exhibited significant antibacterial activity.

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Fast Charging Techniques And Material Specifications Requirement For Lithium Ion Batteries Used In Electrical Vehicle: A Review

Suyog S Hirve, Dr. Deepak S Bankar, Parag Choudhari

In todays world, the mobility of goods and people is its peak. To make this happen there are numerous vehicles which can deliver this service. In most recent trends, to avoid damage to the environment Electric Vehicles are extensively used. Tremendous amount of research is going on the field of Electric Vehicle such as Battery Types for improvement in overall performance, inclusion of other factors such as Ultra capacitors for betterment of overall performance, advancement in Brushless DC motors which will be more suitable to use in E- Vehicles. Many of research units have solved the issues related with the above topics. The more focus is to be given on the charging and discharging time for E Vehicles. In this paper, various charging discharging methods used for Lithium ion batteries are discussed. The methods such as constant current (CC) method, constant voltage (CV) method, constant current constant voltage method(CC-CV), constant temperature constant voltage method(CT-CV).Not only the Fast Charging methods will be sufficient to make real change in the Li-ion Batteries but also the materials that are used in these batteries should have the capacity to handle the fast charging. So, according to material properties and specifications the battery needs to be designed and as per fast charging methods suitable fast charging technique can be implemented to it.

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Indoor Air Quality Monitoring System With Fuzzy Logic Control Based On IOT

Fadli Pradityo, Nico Surantha

Air pollution is the biggest challenge of health in the world. Air pollution in a room, as inside home, is 2-5 times greater than outdoors. In this study, we developed an indoor air quality monitoring system to detect and dispose bad air out of the room. Proposed system applied internet of things concept to do monitoring of air quality for gases of carbon dioxide (CO2) and PM10 gases. The sensors of CO2 and PM10 are connected to Arduino UNO to process analog to digital signal.This system has a mamdani fuzzy logic rule to efficiently

set the working interval of exhaust fan. To process fuzzy logic rules, it used Raspberry Pi 3 in this proposed system.Based on result, Proposed System can maintain PM10 and CO2 AQI for safety level in longer periods compared to the system that used sugeno fuzzy logic system. For AQI PM10 values, if using the proposed system in 30 minutes, the interval of safe AQI values obtained in 30 minutes is for 1501 seconds. Whereas the safe AQI value interval obtained with fuzzy sugeno system only 1018 seconds. And for the value of AQI CO2, if using the system in 30 minutes, the interval of safe AQI value obtained in 30 minutes is for 816 seconds. Whereas the safe AQI value interval obtained with fuzzy sugeno system only 686 seconds.

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Determining The Probability Of Survival And Its Factors For The Infected Hemodialysis Patients

Badreddine Jerbi

Hemodialysis patients are highly exposed to infections because the blood has to circulate out of the body through a cleaning machine. Usually an apparatus such as fistula or catheter is used to manipulate the blood access. Grafts and blood factors are thought to be major causes of morbidity and mortality. In this paper, sixty patients are considered, the whole population of the infected hemodialysis patients who came to the infectious service of Hedi Chaker hospital in Sfax Tunisia over 10 years period. The data are not available on all the patients. Statistics on: (1) Clinical factors such as age and gender and (2) Blood factors such as type and resistance of the germs are computed. A univariate analysis for each factor and its effects on the probability of survival are presented. A multivariate analysis is performed in which the probability of survival is found to be related to the non-presence of prosthesis, higher hemoglobin level and stable heart beats per minute. Monte Carlo methodology helped to refine the result by making inferences on the global population of the infected hemodialysis patients.

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Village Institution Relations In The Utilization Of Village Funds In Namlea District

Salma Yusuf, M Chairul Basrun Umanailo, Rizkiyah

The Village fund is a government effort to support the development of the village through financing schemes that are regulated and implemented directly by the village government, the involvement of village institutions in the management of village funds into an institutional relationship that is able to Village Fund Management. This research is a qualitative study aimed to describe the relationship of village government with village institutions in the planning and implementation of development based on the allocation of village funds obtained. The research site is focused on Namlea subdistrict with the consideration of density and heterogeneity of society. The number of informant that will be interviewed as many as 40 people taken in purposive. The analytical techniques used follow the concept given Miles and Huberman. The results showed that the relationship that awakened has a positive impact on the planning, implementation and supervision of the use of the village funds with the presence of the engagement, the sense of having and responsibility to the management Village funds are not merely the responsibility of the villagers but rather to be a responsibility with the parties involved.

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Design And Implementation Of Model Predictive Controller For MIMO System

P.Vaishnavi, K.Sneha, K.M.Nandhini

The evaporator is a Multi Input Multi Output (MIMO) system. The controlling of MIMO system is little difficult when compared with SISO (Single Input and Single Output) system. The flow rate of feed and vapor were considered as an input, then the dry matter content and flow rate of product were considered as an output. For superior controlling of the evaporator the model has to be developed accurately. For better accuracy more number of data has to been taken, and then the system identification was done by using MATLAB toolbox. Different controllers were available to control the process. In this work advanced controller like Model Predictive Controller and the conventional controller like PID controller were designed. By giving the different step input and disturbance to the system at various instance, the output of both controllers were evaluated using an error performance criteria. The simulation result shows how MPC

give better result than the PID controller by comparing the time response of the system like rise time, settling time and overshoot.

[View Full Paper] [Download] [References] **1843-1846**

Energy Efficient Routing Protocol Prolonging Network Lifetime For MANETs

Himanshu Sharma, Omkar Singh, Vinay Rishiwal, MIH Ansari

Mobile Ad-hoc Network (MANET) is a group of mobile nodes, each of which communicates over wireless channels. Wireless networks have perceived a detonation of attention from patrons in recent years due to their solicitations in mobile and peculiar communiqu&#65533;. One of the foremost restraints in MANET is high prospect of letdown due to energy-exhausted nodes. So, if the path selected for communication has minimum battery life then the path breaks early and re-discovery of path occurs again which causes overheads in network. In this paper, an Energy Efficient Routing Protocol (EERP) has been proposed and evaluated. This protocol selects an energy rich path amongst alternative disjoint paths between a source and destination pair. EERP prevents unequal consumption of nodes&#65533; energy. In other words, it felicitates the balanced energy consumption in order to minimize the breakages. As a result, probability of communication path breakage gets reduced. This approach also reduces routing overheads caused by frequent node failures during communication. Simulation results show that EERP reduces E2E delay 36%-38%, prolongs network lifetime 28%-33%, packet delivery ratio 18%-23%, minimizes energy consumption 26%-30% and reduces packet loss 32%-36%. All over EERP performs well as compare to its counterpart of EE-HRP, SEEC and MC-TRACE for all considered performance parameters over different network size.

[View Full Paper] [Download] [References] **1847-1853**

News Classification Using Hybrid Approach Of PSO-KNN

Megha Singla, Brahmaleen K. Sidhu

There are different applications which are producing the data in a big way for example various social media platforms. These data need to be analyzed and processed to extract new useful information. This information can

also be useful for the decision making process for the organization. In current research there is a news related dataset. This dataset includes various types of news under different categories like technology, entertainment, political etc. various general news are to be categorized into its different categories. These categories correct entry will fine tune the whole system. Later on single sports category news are being categorized into different sports categories like cricket, rugby, football etc. Various classification techniques has been used like SVM, KNN, decision tree etc. over to it new genetic based hybrid approach has been used. This hybrid approach is PSO-KNN. It has been used for classification of the inter news classification and the intra news classification. The results have been compared on different parameters like accuracy, specificity, sensitivity etc. In all the parameters the results have shown improvement over to the SVM, KNN and Decision tree.

[View Full Paper] [Download] [References] **1854-1860**

Conversion Of Farmland Namlea Subdistrict

Rosita Umanailo, Mansyur Nawawi, M Chairul Basrun Umanailo, Sofyan Malik, Idrus Hentihu

The phenomenon of agricultural land conversion in Namlea subdistrict becomes a problem when the number of productive land is increasingly reduced and affects land availability for agricultural production. Research was conducted to describe the conversion of agricultural land and its utilization in Namlea subdistrict. The research site focuses on Namlea District Buru Regency with consideration of the availability of the number of agricultural land that is less than other districts in Buru Regency. The number of informant interviewed as many as 40 people consisting of land owners, farmers, business owners and village apparatus. Analytical techniques used to follow the concept of Miles and Huberman where activities in the analysis of qualitative data are conducted interactively and continuously to find saturation in data processing. The results showed that the reduction of farmland in Namlea district was due to the conversion of land for various activities including housing and development of the Trade Center. In addition, the use of converted land is caused by the system of personal ownership that is secured by the Government through the right to building or proprietary rights but has not fully set the long-term oriented land utilization pattern.

[View Full Paper] [Download] [References] 1861-1864

Local Consumption Diversification

Bambang Sigit Amanto, M Chairul Basrun Umanailo, Rina Sri Wulandari, Taufik Taufik, Susiati Susiati,

The research was conducted in Waimangit Village of Buru Regency with the objectives to analyze community food security planning, make projections for diversification of local food consumption and food security in Waimangit Village. The approach used is qualitative with the basic method of descriptive analysis. The results showed that, Local food consumption is still low with the level of diversification of food consumption is also still low, factors that affect the level of diversification of food consumption is, expertise in processing, number of household members and social interaction, There is no shift of rice consumption pattern to local food, local food consumption condition only occurs at certain age segmentation, Food security level generally belong to food vulnerable where household is long term plant based farmer.

[View Full Paper] [Download] [References] 1865-1869

Sensor Based Water Management For Irrigation System Using Iot

Geetha.V, Marshiana.D, Ramadevi.R, Meenadevi.R

India is a developing country with Agriculture as the major source. Still now they are using traditional methods of farming which yields less when compared with other developed countries. Modern methods are implemented to reduce the work and risk factors arising during farming. The system provides modern tools to enhance the work load of the farmers. Implementation of Global System for Mobile Communication (GSM) along with sensors, PIC16F877 microcontroller and transmitting the data using IOT plays a major role in soil irrigation.

[View Full Paper] [Download] [References] 1870-1871

Comparison Of Fuzzy Time Series And ARIMA Model

K. Senthamarai Kannan, M. SulaigaBeevi, S. Syed Ali Fathima

Crude Oil price, deregulated commodity,

which plays a vital criterion in the global economy. Government of India give permission to Oil Companies to revise the price of fuel daily based on the change of international crude oil price and Dollar currency exchange rate. Forecasting is the one of the essential tool to predict the future environment of the fuel price. This paper collates the applications of two Forecasting models such as Auto Regressive Moving Average (ARIMA) model and Fuzzy time series model, on petrol price prediction. The error values, Root Mean Square Error (RMSE), Mean Square Error (MSE) and Mean Absolute Error (MAE) are calculated numerically and graphically for the forecasted values.

[View Full Paper] [Download] [References] **1872-1876**

Female Feminism In The Customary Island Of Buru

Belinda Sam, Risman Iye, Mirja Ohoibor, M Chairul Basrun Umanailo, M Rusdi, ABD Rahman, Ibnu Hajar

The existence of women in the customary structure often has a position as a complement of males so that their existence is limited by the stigma and norms that apply to the society. The existence of women in customs in Buru Island became an idea of how women are placed on the social economic space based on the intepretation of men as customary rulers. This research is a qualitative study aimed at describing the existence of women in the customs of Buru Island. The research location focuses on three indigenous villages namely Kayeli village, Kubalahin and Wasi with consideration of the existence and the existence of adat that is still preserved. The number of informant that will be interviewed as many as 30 people taken in purposive. The analytical techniques used to follow the concepts given by Miles and Huberman include data reduction, data presentation and withdrawal of conclusions. The results showed that the distinction between men and women occurred through the process of socialization, strengthening and the construction of socio-cultural, even through the power of tradition. Women with all abilities and limitations only placed on complementary positions on customary structures ruled by men even though women are given certain status and awards but remain in male domination.

[View Full Paper] [Download] [References] **1877-1880**

The Thought Of Emile Durkheim In The Contestation Of Development In Indonesia

M Chairul Basrun Umanailo, Marse Yulisvestra, Kamilaus Konstanse Oki, Wisda Mulyasari, Ridwan Ridwan

This research aims to dissect the thought of Emile Durkheim on solidarity and mechanical organist associated with contestation in the development. Contestation became a staple as study objects that are dissected with a social fact, solidarity and the law. Framework of theory used include social facts to the frame that has the ability to compel an individual in a social symptom. The result of the research was going on against contestation elaboration of development in Indonesia that includes, in a social symptom that is external, contestation became a part of which is positive when the external nature of it has constructive functions for the purpose of development, solidarity became an important element in setting the Division of labor in society as well as social safety valve for the threat of a conflict, contestation is become a great power with the logical consequence will be stuck on the value of mechanical solidarity is very easy and gave rise to the conflict.

[View Full Paper] **[Download]** **[References]** **1881-1885**

A Novel ICT Tool For Interactive Learning For Electronics Engineering Based On Augmented Reality

Dr. Gayatri Phade, Krishna Goverdhane, Omkar S. Vaidya, Dr. Sanjay Gandhe

According to survey of India today, the present engineering education system, is now concluded to be insufficient to fulfil the current industrial market requirements. It is due to lack of required skill sets in the students. Talking about some engineering students, initially they anticipates some courses are difficult courses as an example, Electronics Engineering. Thus teaching such subjects becomes quite a challenging task for the teacher. Effective teaching learning of an engineering education mainly depends on theoretical and practical knowledge. As an example, Electronics Engineering includes logical and conceptual subjects in which things are to be imagined and visualized. Classroom teaching is provided through real papers, or books with additional web links, videos, or presentations, or static 3D model, simulations software helps up to some extent. Still there is need to develop some ICT based tools for conceptual understanding

of the subject. Augmented Reality (AR) is one of the platforms to develop an ICT based tools. AR provides integration of both real and virtual world. Proposed system is developed using AR with which it is possible to find solutions to both the theoretical as well as practical approach by embossing the 4D images in the real world that include sound. Since high-end AR applications could be used on smart phones, Tablet PC's etc., updated knowledge regarding the subjects can be easily made available for the students to understand the concept. This paper explores design and development of a novel and interactive ICT tool using AR. It include concept of AR Labs and AR classroom for engineering students. With this, AR Classroom which are virtual class room, will be available in student's smart phone in the form of Mobile Application and AR Labs for lab experimentation will also be there whose output can be seen on Desktop or projector too.

[View Full Paper] [Download] [References] **1886-1893**

Analysis Of The Needs Of Road Network Development Ini Baturaja City, Indonesia Using Macro Simulation Model

Paramitha Syafarina, Joni Arliansyah, Erika Buchari

Baturaja City is the capital of Ogan Komering Ulu Regency in South Sumatra Province. The transportation modeling study of Baturaja City was conducted by using the Visum Program of macrosimulation program to disclose the pattern of travel movements in Baturaja City and to find out the traffic loading as a reference for the development of further transportation infrastructure. In addition, alternative route choices with relatively closer distance and shorter travel time are also obtained. In this study, Baturaja City's transportation model was modeled by using the Visum Program, whose modeling was based on a four-stage transportation model. The model reliability test resulted in the determinant coefficient (R2) of 0.965. This result stated that the result of the volume of traffic loading that was modeled using the Visum Program resembled the volume of loading of existing traffic conditions in the field. Then, after loading analysis with the Visum Program on several road sections and on the 5 existing bridges, it was found that the value of the degree of saturation obtained was not more than 1 for each road segment and bridge both in the existing condition and after the additional bridge was constructed which meant that the

road sections and bridges were still able to accommodate the existing traffic load. In addition, with the construction of 2 additional bridges, there is a change in the flow of the 4 existing bridges. That means the construction of this additional bridge helps spread the traffic volume on existing bridges to the new bridges so that it helps reduce the traffic load and this greatly affects the condition of the traffic in Baturaja City.

[View Full Paper] [Download] [References] **1894-1897**

Application Of Viterbi Algorithm For Efficient Transportation Forecasting

Manas Kumar Yogi, Koondrapu Koushik Sri Sai, Afreen Jaha

This paper discusses a novel application of probabilistic models which can uncover a hidden sequence of states thereby helping us predict the transportation needs during time where people will travel in huge numbers. We advocate the application of Viterbi algorithm for serving our purpose. The Viterbi algorithm has been already applied in various domains with remarkable efficiency forcing us to think about its role in supporting development of robust prediction models for railway transport. Our paper enlightens the strength of Viterbi algorithm and how its efficiency is comparable to other prediction models which considers the standard factors only limiting their conclusive prediction power. The experimental results prove that our proposed strategy improves prediction accuracy significantly than other forecasting models.

[View Full Paper] [Download] [References] **1898-1901**

The Impact Of Azotobacter Chroococcum And Liquid Organic Fertilizer On Nutrients Nitrogen And Phosphate

Gamaruddin, Arifin Tahir, Andi Suci Anita, Asri B

Abstract— The aim of this experiment was to determine the impact of Azotobacter chroococcum and liquid organic fertilizer to the cocoa, and to get the amount of nutrient adsorption of N and P. We use a randomized group design (RGD) are arranged in two factorials with three replications. The first factor is the Azotobacter chroococcum, with concentrations of 0 CFU, 10x106CFU, 20x106CFU, 40x106CFU and the second factor is a liquid organic fertilizer with a concentration of 0%, 10%, 20%, 30%. As a result, both of Azotobacter chroococcum and liquid organic fertilizer are very significant to the cocoa on nutrients N and P in the leaves and also in the soils. The concentration of treatment 40 x 106 CFU and 30% liquid organic fertilizer produced the highest yield of the nutrients N and P in the leaves. Furthermore, the nutrient N in the soil were the highest concentration of 40 x 106 CFU to produce the two treatments and liquid organic fertilizer 20%, 40 x 106 CFU and liquid organic fertilizer 30%. In addition, observation of N and P in the soil showed the highest result is the concentration of treatment combinations 30 x 106 CFU and liquid organic fertilizer 30%.Futhermore, the effectiveness of N and P adsorption is the highest in the treatment with Azotobacter chroccocum concentration of 40 x 106 CFU and fertilizers 30% organic liquid.

Keywords --- Nutrient N and P, Azotobacter chroococcum, liquid organic fertilizer, cocoa.

1 INTRODUCTION

Bantaeng Regency is a cocoa-producing area in South Sulawesi with a total area of 4,677 ha and a total production of 2,864 tons (Statistics of Bantaeng Regency, 2018). One cause of low productivity is land degradation. As a result of the use of anorganic fertilizers are too high and continuous so that they decreased productivity of plants[1].

According to (Makarim & Suhartatik, 2006), to address the decline in production and productivity of the land, the necessary farming technologies can reduce the use of synthetic fertilizers. By increasing the use of "Microbe Fertilizer Technology" as a biological nutrient source/biological fertilizer, and the use of organic materials. This technology is able to improve fertilizer efficiency and sustainability of production cocoa systems. The presence and microbial population in the rhizosphere can maintain plant root health, nutrient uptake, and increase plant tolerance to environmental stress (Chen et al., 2019; Nasaruddin, 2012a)[2]

One of these microbes is Azotobacter chroococcum, known as an agent of nitrogen-fixing that convert dinitrogen (N2) in the form of ammonium (NH3), which is able to tie up nitrogen in high enough quantities and is able to synthesize substances that are biologically active can improve seed germination, stand and the growth of plants such as vitamin B, indole acetic acid, gibberellins, cytokinins (Wedhastri, 2002) and various organic acids that play an important role in stimulating the growth of root hairs (Hindersah & Tualar, 2004).[3][4]

The main factors that must be considered in the application of Azotobacter chroococcum as a biological agent is organic matter content in the soil is a source of nutrients for the bacteria. Each type of soil microbes requires organic compounds that are different from other types of biota, so that the necessary diversity of plants as a source of organic matter (Nasaruddin, 2012b; Wakelin et al., 2012).[5][6]

Liquid organic fertilizer is a liquid organic material which have advantages compared to solid organic materials.Solid organic fertilizer weakness are some nutrients will dissolve first and lost along the water percolation or undergo fixation by soil colloids, which can not be absorbed by plants. In water-saturated conditions (rainy season) the infiltration process is not smooth to the soil which causes nutrients do not get to the roots of plants. Furthermore, liquid organic fertilizer is more effective fertilization and efsien because sprayed onto the leaves and be absorbed directly by the plant. In addition, the chemicals have a maximum of 5%, and contain certain materials such as microorganisms that are rarely found in solid organic fertilizer, and also contains amino acids and hormones that Giberelin, cytokinin and IAA (Parnata, 2004).[7][8][9]

The results showed liquid organic fertilizers on volume of 30 ml L-1 water gives the highest yield on the parameters plant height, leaf number and stem diameter (Nasaruddin & Rosmawati, 2011). In connection with the foregoing, by (Wedhastri, 2002) that inoculation Azotobacter chroococcum effective in increasing crop yields by 12% compared with control plants on soil fertilized with organic matter fairly. such as wheat, barley, corn, sugar beets, carrots, cabbage, and potatoes.

The same thing of the research results Nasaruddin (2012), showed that the use of Azotobacter chroococcum (20x103 CFU), (40x103 CFU) significantly affected the number of flowers and fruit. The higher the concentration given to the treatment the higher the number of flowers and fruit.From the description that has been said above, it is necessary to conduct further research by combining both the "Impact of Azotobacter chroococcum and Liquid Organic Fertilizer Against Nutrients N and P".[10]

2. METHODOLOGY

2.1. Materials and tools

This study was conducted in Bantaeng and at Laboratory of Plant Physiology and Soil Science, Faculty of Agriculture, University of Hasanuddin in Makassar.The plant material used in this study is the cocoa plant clones graft that entries of Sulawesi Two which have a uniform (area, age, type of soil and climate are the same), Azotobacter chroococcum material

and liquid organic fertilizer.
Equipment used includes tools for Inoculating Azotobacter chroococcum and manufacturing of liquid organic fertilizer as well as at the time of application (beakers, scales, flask and pipette), atomizer, oven and stationery supplies.

2.2. Research methods

This study used a Randomized Block Design method (RBD) of two factorials. First factor,Azotobacter chroococcum, on four levels of concentration. Second factors, Organic Liquid Fertilizer on four levels of concentration. Thus,they will be obtained 16 combination treatment with three replications so that the total treatment 48 pieces of experimental plots. Each treatment is taken 4 plants so that there are 192 units. The treatment is as follows: Treatment on the first factor, Azotobacter chroococcum, A0 = Without Azotobacter chroococcum (0 cfu), A1 = Azotobacter chroococcum 10 x 106 cfu, A2 = Azotobacter chroococcum 20 x 106 cfu, A3 = Azotobacter chroococcum 40 x 106 cfu. Next, the second factor, Liquid Organic Fertilizer, P0 = Without Liquid Organic Fertilizer (0%), P1 = Liquid Organic Fertilizer 10%, P2 = Liquid Organic Fertilizer 20%, P3 = Liquid Organic Fertilizer 30%, with variable observations include; of N in the leaves, of P in the leaves and in the soil of nutrients N and P nutrients in the soil.

2.3. Data analysis

Data from the observations were analyzed and processed statistically using Variety Analysis or variance analysis (ANOVA).If the interaction effect is real (P <0.05) on the observed variables, then it is followed by Least Significant Difference (LSD) α of 0.05.

3. Result and Discussion

3.1. NutrientN in Leaves

LSD α of 0.05 in Table 1 shows that the interaction of treatment of 30% liquid organic fertilizer with the treatment of Azotobacter chroococcum 40x106 CFU (A3P3)showed more nutrient N and only significantly different from the A1P0 treatment combination, but it was not significantly different from the interaction treatment others.

Table 1. Average of N leaves.

PDC	*Azotobacter chroococcum*				BNJ α 0,05
	A_0	A_1	A_2	A_3	
p_0	$1,99^{\frac{a}{pq}}$	$1,73^{\frac{b}{q}}$	$2,19^{\frac{a}{p}}$	$2,27^{\frac{c}{p}}$	0,30
p_1	$2,09^{\frac{a}{q}}$	$2,11^{\frac{a}{q}}$	$2,32^{\frac{a}{q}}$	$2,67^{\frac{b}{p}}$	
p_2	$1,98^{\frac{a}{r}}$	$2,17^{\frac{a}{qr}}$	$2,39^{\frac{a}{q}}$	$2,76^{\frac{b}{p}}$	
p_3	$2,08^{\frac{a}{r}}$	$2,32^{\frac{a}{qr}}$	$2,48^{\frac{a}{q}}$	$3,35^{\frac{a}{p}}$	
NP BNJ α 0,05	0,30				

Description: Numbers followed by the same letter in the column (abc) and the line (pqr) not significant at the level of 5%.

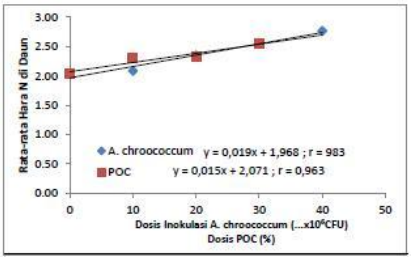

Figure 1. Graph of the regression relationship between Azotobacter chroococcum, Liquid Organic Fertilizer with an average of N in the leaves.

Regression test in Figure 1 shows that treatment of inoculation Azotobacter chroococcum and treatment of liquid organic fertilizer on nutrient N in the leaves follows the equation y = 0,019x + 1.968; r = 0.983 and y = 0,015x + 2.071; r = 0.963. The higher the concentration of the treatment, the higher the nutrient content of N in the leaves. Each increase of one unitAzotobacter chroococcum inoculation concentration and liquid organic fertilizer will show of N in the leaves as many as 0,019 at a constant Azotobacter chroococcum 1.968 and 0.015 liquid organic fertilizer at a constant 2,071. From the regression equation above can be interpreted that, the concentration value incremented by 1, then the average value of N in leaf tissue will grow 0.019 and 0.015, or any concentration value increased 10 then the average value of the results will increase 0.19 and 0.15.

3.2. Nutrient P in Leaves

LSD α of 0.05 in Table 2 shows that the interaction of treatment of 30% liquid organic fertilizer with the treatment of Azotobacter chroococcum 40x106 CFU (A3P 3) showed more nutrient P in
leaves and significantly different from the combination treatment A0P0, A0P2, A1P2, A2P1, and A2P2, but it is not significantly different from other treatment interactions.

Table 2.Average price or leaves.

PDC	*Azotobacter chroococcum*				BNJ α 0,05
	A_0	A_1	A_2	A_3	
p_0	$0,41^{\frac{b}{q}}$	$0,43^{\frac{b}{pq}}$	$0,43^{\frac{c}{p}}$	$0,44^{\frac{d}{p}}$	0,02
p_1	$0,42^{\frac{ab}{r}}$	$0,46^{\frac{a}{q}}$	$0,45^{\frac{bc}{q}}$	$0,49^{\frac{c}{p}}$	
p_2	$0,40^{\frac{b}{r}}$	$0,40^{\frac{c}{r}}$	$0,47^{\frac{b}{q}}$	$0,55^{\frac{b}{p}}$	
p_3	$0,44^{\frac{a}{r}}$	$0,46^{\frac{a}{r}}$	$0,52^{\frac{a}{q}}$	$0,57^{\frac{a}{p}}$	
NP BNJ α 0,05	0,02				

Description: Numbers followed by the same letter in the column (abcd) and the line (pqr) not significant at the level of 5%.

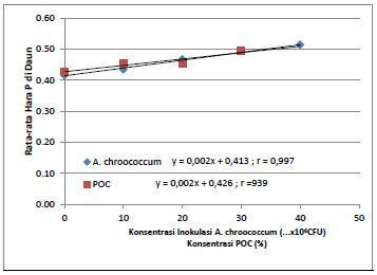

Figure 2. Graph of the regression relationship between Azotobacter chroococcum, Liquid Organic Fertilizer to the average of P in the leaves

Regression test in Figure 2 shows that the inoculation treatment A. chroococcum and treatment of liquid organic fertilizer to the nutrientP leaf follows the equation y = 0,002x + 0.413; r = 0.997 and y = 0,002x + 0.426; r = 0.939. The higher the concentration, the higher the treatment of P in the leaves. Each increase of one unit A. chroococcum inoculation concentration and liquid organic fertilizer will show the number of fruit per tree as much as 0,002 in the constants 0.413 and 0.002 at 0.426 constants. From the regression equation above can be interpreted that, the concentration value incremented by 1, then the average value of P in the leaf tissue will increase the concentration value of 0.002 or each added 10, the average value of the results will increase 0.02.

3.3. Nutrient N in Soil

LSD α of 0.05 in Table 3 shows that the interaction of treatment 30% organic liquid fertilizer with Azotobacter chroococcum treatment 40x106 CFU (A3P3) shows the nutrient of N in the soil more and significantly different treatment combinations A0P0, A0P1, A0P2, A1P0, A1P1 , A1P2, and A2P1, but had no significant interactions with other treatments.

Table 3. Average content of N in the soil.

PDC	*Azotobacter chroococcum*				BNJ α 0,05
	A_0	A_1	A_2	A_3	
p_0	$0,11^{c}_{r}$	$0,14^{c}_{q}$	$0,18^{ab}_{q}$	$0,18^{c}_{p}$	0,01
p_1	$0,13^{b}_{r}$	$0,16^{b}_{q}$	$0,17^{b}_{q}$	$0,21^{ab}_{p}$	
p_2	$0,13^{b}_{s}$	$0,16^{b}_{r}$	$0,19^{a}_{q}$	$0,20^{b}_{p}$	
p_3	$0,15^{a}_{r}$	$0,18^{a}_{q}$	$0,18^{ab}_{q}$	$0,21^{a}_{p}$	
NP BNJ α 0,05	0,01				

Description: Numbers followed by the same letter in the column (abc) and the line (pqrs) not significant at the level of 5%.

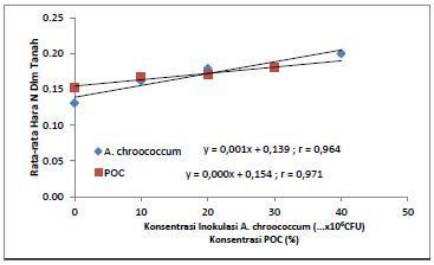

Figure 3. The graph of the regression relationship between Azotobacter chroococcum, Liquid Organic Fertilizer with an average of N in the soil

Regression test in Figure 3 shows that inoculation treatment Azotobacter chroococcum and treatment of liquid organic fertilizer to the soil nutrient N follows the equation y = 0,001x + 0.139; r = 0.964 and y = 0,000x + 0.154; r = 0.971. The higher the concentration of the treatment, the higher the nutrient content of N in the soil. Each increase of one unitAzotobacter chroococcum inoculation concentration and liquid organic fertilizer will show the content of N in the soil as much as 0,001 at a constant 0,139 and 0,000 at 0,154 constants. From the regression equation above can be interpreted that, the concentration value incremented by 1, then the average value of N in the soil will increase to 0,000 or 0,139 and each concentration value increased 10 then the average value of the results will increase 1.39 and 0.00.

3.4.Nutrient P in Soil

The observation of the average of P in the soil and the analysis of variance in appendix 14 showed that Azotobacter chroococcum very significantly, and treatment of liquid organic fertilizer very significant effect. Similarly, the interaction of the two treatments was highly significant.

Table 4.The average content of P in the soil.

POC	*Azotobacter chroococcum*				BNJ α 0,05
	A_0	A_1	A_2	A_3	
p_0	$9,04^{b}_{s}$	$9,73^{c}_{r}$	$10,60^{c}_{q}$	$11,15^{c}_{p}$	0,40
p_1	$9,31^{b}_{r}$	$11,51^{a}_{q}$	$12,35^{a}_{p}$	$11,79^{b}_{q}$	
p_2	$9,29^{b}_{r}$	$10,91^{b}_{q}$	$12,01^{ab}_{p}$	$11,65^{b}_{pq}$	
p_3	$9,87^{a}_{s}$	$10,98^{b}_{r}$	$11,76^{b}_{q}$	$12,78^{a}_{p}$	
NP BNJ α 0,05	0,40				

Description: Numbers followed by the same letter in the column (abc) and the line (pqrs) not significant at the level of 5%.

LSD α of 0.05 in Table 4 shows that the interaction of liquid organic fertilizer 30% with the treatment of Azotobacter chroococcum 40x106 CFU (A3P3) shows the nutrients of P in the soil more and significantly different treatment combinations A0P0, A0P1, A0P2, A1P0, A1P2 , A1P3, A2P0, A2P3, and A3P1, but had no significant interactions with other treatments.

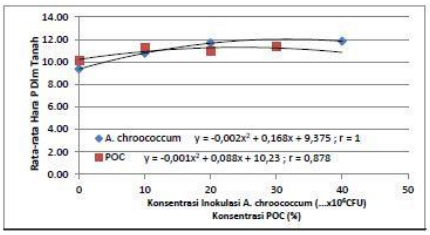

Figure 4. Graph the regression relationship between Azotobacter chroococcum, Liquid Organic Fertilizer with an average of P in the soil

Regression test in Figure 4 shows that inoculation treatment against Azotobacter chroococcum of P in the soil following the equation y = -0,002x2 + 0,168x + 9.375; r = 1, the higher the concentration of Inoculation Azotobacter chroococcum the higher the amount of P in the soil until it reaches a maximum at a concentration of 40x106 CFU Azotobacter chroococcum by the number of P maximum of 12.903 and will further decline. The treatment of liquid organic fertilizer to the soil nutrient P follows the equation y = -0,001x2 + 0,088x + 10.23; r = 0.878 (Figure 4), the higher the concentration of organic liquid fertilizer the higher the amount of P in the soil until it reaches a maximum at a concentration of 44% organic liquid fertilizer with the maximum amount of P 12.17 and will further decline.

3.5. Effectiveness of Nutrient adsorption of N and P

Based on laboratory analysis that the average N adsorption between 86.91% - 168.79% and interaction Azotobacter chroococcum 40x106 CFU and Liquid Organic Fertilizer 30% per tree showed the highest nutrient adsorption. P leaf nutrient content increased from 0.14% in the treatment without Azotobacter chroococcum and POC 0.42% to 0.57% with effective absorption of 97.54% to 140.98% (Table 5).

Table 5. Effectiveness of N and P adsorption cacao plants after administration of Azotobacter chroococcum and Liquid Organic Fertilizer

	Treatment	Nutrient levels Leaves		effectiveness of Nutrient Adsorption	
		N	P	N	P
1	A0P0	1,99	0,41	-	-
2	A0P1	2,09	0,42	105,03	102,46
3	A0P2	1,98	0,4	99,5	99,18
4	A0P3	2,08	0,44	104,7	107,38
5	A1P0	1,73	0,43	86,91	104,92
6	A1P1	2,11	0,46	106,38	112,3
7	A1P2	2,17	0,4	109,4	97,54
8	A1P3	2,32	0,46	116,78	112,3
9	A2P0	2,19	0,43	110,4	106,56
10	A2P1	2,32	0,45	116,78	109,84
11	A2P2	2,39	0,47	120,13	115,57
12	A2P3	2,48	0,52	125	127,05
13	A3P0	2,27	0,44	114,43	109,02
14	A3P1	2,67	0,49	134,56	121,31
15	A3P2	2,76	0,55	139,09	134,43
16	A3P3	3,35	0,57	168,79	140,98

The results showeds that treatment of Azotobacter chroccocum 40 x 106 CFU and Liquid Organic Fertilizer 30% showed an average of the top results in the treatment of N in the leaves, of P in the leaves, of N in the soil and nutrient P in the soil. Regression analysis also showed that the inoculation Azotobacter chroccocum and Organic Liquid Fertilizer positively correlated linearly on each masingparameter observations. This shows the real effect of the treatment showed that the higher the concentration of the treatment given, the higher the nutrient content in the soil to optimum limit each treatment which will then impact on the plant's ability to assimilate and mentranslokasikan nutrients to the leaves up around the plant.

Laboratory analyzes showed that the levels of N leaf tissue inoculation A. chroococcum on average higher than the leaf tissue of cocoa plants without inoculation A. chroococcum that only 1.99% of the dry weight of tissue were analyzed. Research William (1975) in Nasaruddin and Rosmawati (2011) reported that the nutrient content of nitrogen in leaf tissue of cocoa plants to grow normally> 2.00% and if the levels of N in leaf tissue is less than or equal to 1.50% of the dry weight the network being analyzed, the cocoa plant is already deficient N. According Loué et al. in Nasaruddin (2012) that the cocoa plant began showing symptoms of nitrogen deficiency when nutrient levels in leaf tissue N <1.80 to 2.00%, the higher the concentration of inoculation A. chroococcum the better the effect on plant growth.

Plant growth is likely to increase and show the results of the analysis are largely linear and quadratic showed that the plant is still in a state of non-adequacy of nutrients or nutrient deficiency. It is indirectly affected by the activities of Azotobacter chroccocum and liquid organic fertilizer that is able to quickly overcome nutrient deficiency, not problematic in nutrient leaching and nutrient rapidly.However able to provide optimum limit the provision of each treatment can be seen from the maximum value results before experiencing symptoms of toxicity shown by a decrease in the yield on each parameter of observation.

4. CONCLUSION

Giving either separately or together Azotobacter chroococcum and liquid organic fertilizer to cocoa impact very significant on nutrients N and P in the leaves and in the soil. The concentration of Azotobacter chroccocum treatment 40 x 106 CFU and 30% liquid organic fertilizer produced the highest yield of the nutrients N and P in the leaves. Instead the nutrient N in the soil to produce the two treatments were the highest concentration of Azotobacter treatment chroccocum 40 x 106 CFU and liquid organic fertilizer 20%, Azotobacter chroccocum40 x 106 CFU and liquid organic fertilizer 30%. On the other hand, observation of N and P in the soil showed the highest result is the concentration of Azotobacter chroccocumtreatment combinations 30 x 106 CFU and liquid organic fertilizer 30%. The effectiveness of N and P adsorption is the highest in the treatment with Azotobacter chroccocum concentration of 40 x 106 CFU and liquid organic fertilizer 30%. Thus, it is advisable to apply such treatment does not exceed the concentrations above.

5. REFERENCES

[1] "Nasaruddin. (2012a). Cocoa, introduction of clones, rehabilitation, rejuvenation and intensification. Makassar: Masagena Press."

[2] "Chen, Y., Jiang, Z., Wu, D., Wang, H., Li, J., Bi, M., & Zhang, Y. (2019). Development of a novel bio-organic fertilizer for the removal of atrazine in soil. Journal of Environmental Management, 233 (December 2018), 553–560. https://doi.org/10.1016/j.jenv."

[3] "Hindersah, R., & Tualar, S. (2004). Potential Rizobakteri Azotobacter chroococcum in Improving Soil Health. Natur Indonesia, 5(2), 127–133."

[4] "Makarim, A. K., & Suhartatik, E. (2006). Rice cultivation with insitu input to the future that is towards rice. Plant Food Science and Technology, 1(1), 19–29."

[5] "Nasaruddin. (2012b). Utilization Effectiveness Chroococcum azotobacter and Mycorrhiza Fungi (Glomus sp) on Growth and Nutrient Availability Crop Cocoa. Hasanuddin, Makassar."

[6] "Nasaruddin, & Rosmawati. (2011). Effect of Organic Liquid Fertilizer (POC) Fermentation Gamal Leaves, Stem Banana, and Coconut Fiber on Growth Seed Cocoa. Agrisistem, Journal Biologycal, 7(1)."

[7] "Parnata, U. S. (2004). Liquid Organic Fertilizer Applications and Benefits. In Agromedia Library Bandung."

[8] "Statistics of Bantaeng Regency. (2018). Bantaeng Regency in Figures 2018. In Afirin (Ed.), Catalog: 1102001.7303 (2018th ed., p. xl + 326 pages). Bantaeng: Statistics of Bantaeng Regency. https://doi.org/1102001.7303."

[9] "Wakelin, S., Mander, C., Gerard, E., Jansa, J., Erb, A., Young, S., … Callaghan, M. O. (2012). Response of soil microbial communities to contrasted histories of phosphorus fertilisation in pastures. Applied Soil Ecology, 61, 40–48. https://doi.org/10.1016."

[10] "Wedhastri, S. (2002). Isolation and selection of Azotobacter spp. producers grow and nitrogen-fixing factors of acid soils. Soil Science and Environment, 3(1), 45–51."