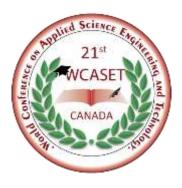


# 21<sup>st</sup> World Conference on Applied Science, Engineering and Technology

(WCASET-19)



Surrey, Canada 29<sup>th</sup> - 30<sup>th</sup> August, 2019

Organized by

Institute For Engineering Research and Publication

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#### Acknowledgement

IFERP is hosting the 21<sup>st</sup> World Conference on Applied Science, Engineering and Technology this year in month of August. The main objective of 21<sup>st</sup> WCASET is to grant the amazing opportunity to learn about groundbreaking developments in modern industry, talk through difficult workplace scenarios with peers who experience the same pain points, and experience enormous growth and development as a professional. There will be no shortage of continuous networking opportunities and informational sessions. The sessions serve as an excellent opportunity to soak up information from widely respected experts. Connecting with fellow professionals and sharing the success stories of your firm is an excellent way to build relations and become known as a thought leader.

I express my hearty gratitude to all my Colleagues, Staffs, Professors, Reviewers and Members of organizing committee for their hearty and dedicated support to make this conference successful. I am also thankful to all our delegates for their pain staking effort to travel such a long distance to attain this conference.

**Director Institute for Engineering Research and Publication (IFERP)** 

#### **Preface**

We cordially invite you to attend the 21<sup>st</sup> World Conference on Applied Science, Engineering and Technology (21<sup>st</sup> WCASET-19) which will be held at Surrey, Canada on August 29<sup>th</sup>-30<sup>th</sup>, 2019. The main objective of WCASET is to provide a platform for researchers, engineers, academicians as well as industrial professionals from all over the world to present their research results and development activities in relevant fields of Science, Engineering Management, Education and Technology. This conference will provide opportunities for the delegates to exchange new ideas and experience face to face, to establish business or research relationship and to find global partners for future collaboration.

These proceedings collect the up-to-date, comprehensive and worldwide state-of-art knowledge on cutting edge development of academia as well as industries. All accepted papers were subjected to strict peer-reviewing by a panel of expert referees. The papers have been selected for these proceedings because of their quality and the relevance to the conference. We hope these proceedings will not only provide the readers a broad overview of the latest research results but also will provide the readers a valuable summary and reference in these fields.

The conference is supported by many universities, research institutes and colleges. Many professors played an important role in the successful holding of the conference, so we would like to take this opportunity to express our sincere gratitude and highest respects to them. They have worked very hard in reviewing papers and making valuable suggestions for the authors to improve their work. We also would like to express our gratitude to the external reviewers, for providing extra help in the review process, and to the authors for contributing their research result to the conference.

Since June 2019, the Organizing Committees have received more than 90 manuscript papers, and the papers cover all the aspects in Electronics, Computer Science, Information Technology, Science Engineering, Management, Education and Technology. Finally, after review, about 46 papers were included to the proceedings of **21**<sup>st</sup> **WCASET-2019**.

We would like to extend our appreciation to all participants in the conference for their great contribution to the success of 21st WCASET-19. We would like to thank the keynote and individual speakers and all participating authors for their hard work and time. We also sincerely appreciate the work by the technical program committee and all reviewers, whose contributions made this conference possible. We would like to extend our thanks to all the referees for their constructive comments on all papers, especially, we would like to thank to organizing committee for their hard work.

**CEO** 

Institute for Engineering Research and Publication (IFERP)

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## WCASET-19

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# Tourism Infomercial Analyzer for Metro Vigan, Philipppines

Ana Leah Arquelada Alconis, Student, Saint Paul University Philippines

#### Abstract:--

Tourists are attracted in traveling to the historic City of Vigan, home of one of the New Seven Wonder Cities of the world. Since then tourism in the province has experienced continued growth and development. Today it has become a great challenge to meet and satisfy the needs and demands of tourists in getting vital information on the different tourism industries. When a large number of tourists arrive at the same time, the Ilocos Sur Provincial Tourism Office, the forefront of the province experience difficulty in catering all the information needs of tourists. All these cause an adverse impact on tourists.

To remedy this problem, the Tourism Infomercial Analyzer system is designed and developed with features of an infomercial, travel router, and analyzer. The System aims to advertise, educate, and promote the province to the world. Likewise, it showcases the hidden beauty of the place and provides a detailed explanation about the province, its attractions, accommodations, and native commodities. Moreover, the System is designed to assist tourists with the possible land route to reach one destination to another. Finally, the System is the most prominent product of Expert System suited to advertise and promote all tourist destinations in Metro Vigan.

#### Keywords:--

Tourism Industry, Infomercial, Analyzer, Recommender, Itinerary Planner, Promotion, Marketing

**29<sup>th</sup> - 30<sup>th</sup> August, 2019** 

# Utilizing Simultaneous Localization and Mapping (SLAM) in Augmented-Reality Shell Game for iOS Mobile Phone

Andrei Lorenz V. Herrera, De La Salle University, Dasmariñas Paul Dominic I. Tecson, De La Salle University, Dasmariñas Josephine T. Eduardo, De La Salle University, Dasmariñas Maryli F. Rosas, De La Salle University, Dasmariñas

#### Abstract:--

Augmented Reality (AR) has come to integrate with daily life to improve productivity and quality of experience. The goal of this study is to improve the performance of the participants on mental training and to utilize SLAM algorithm. The researchers created a game where user interaction and skills application are monitored in augmented reality environment. This game provides an exciting, entertaining and engaging Augmented Reality experience which will specifically enhance cognitive training and development. This work adopted the new tool for augmented reality, ARKit, which is introduced by Apple in 2017. ARKit enables smartphones to sense environment, comprehend world experiences and interact with context. ARKit is a great contribution in Augmented Reality technology evolution and growth. Through this tool it will soon remove the necessity of making marker-based applications for AR implementation. Further, this game focuses in utilization of Simultaneous Localization and Mapping (SLAM) algorithm. This uses mainly visual sensors of the camera in the iOS mobile phone which reveals innovations of SLAM algorithm to improve user experience on games especially on skills training

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## Encryption of Speech signal using multiple chaotic maps

Gurvir Kaur, Department of Electronics and Communication, GNDEC, Ludhiana, Punjab, India **Prof. Kuldeepak Singh,** Department of Electronics and Communication, GNDEC, Ludhiana, Punjab, India

#### Abstract:--

With the developments in technology, internet and wireless network based applications users prefer to do work online. They do online transactions, e-commerce, and e- business; they may share some personal information in the form of speech with each other using internet based applications. These wireless systems are vulnerable to illegal access and eavesdropping. Therefore, they need to be secure and private. Moreover, speech is the most vulnerable part of any information, so it should be protected. In order to accomplish this, there is a need to encrypt the speech signal. In order to protect this signal the proposed model uses 1D maps such as: Tent, skew-tent, Logistic and Quadratic map.

#### Index Terms:--

Speech Signal; Encryption; Chaotic maps; Scrambling

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# Abra iTour: A Semantic Web Recommender Using Hybrid Algorithm

Arpee M. Callejo, Instructor I, University of Northern Philippines and Saint Paul University Philippines, Tuguegarao

#### Abstract:--

Information on the web is increasing in an exponential rate. This has resulted to too many choices of users available on the web giving complex processes of the world's largest database, the Internet. This has also given birth to the development of data filtering algorithms used in recommender technologies that help users find their best decision from the large unstructured database of the World Wide Web.

Recommender systems have been widely used in e-commerce websites like Lazada, Amazon and other popular websites like Youtube and Spotify, Linkedin, Facebook and Instagram. Thus, the researcher came up with a research study on the development of a recommender system.

This study is a research and development of a recommender system for the province of Abra, Philippines, titled "Abra iTour: A Semantic Web Recommender Using Hybrid Algorithm". The system uses a hybrid algorithm, a combination of Collaborative and Content-based filtering to extract data for the recommendation lists offered to the users of the system.

Collaborative algorithm is used for recommending items to a user through preferences and tastes through user ratings and comments feature of the developed recommender system from many users collaborating. It utilized the use of the cosine similarity to get recommended items similar to other users. This filtering algorithm has limitations in giving recommendations to users, and in order to respond with this limitation, the researcher added a content-based algorithm on the developed recommender.

Another data filtering used is the Content-based algorithm which recommends items based on the searches of the users through the integration of meta tags and keywords in the database of the system to get the similar items from searches by an active user.

The hybrid algorithm used in the development of the recommender's level of efficiency acquired a weighted mean of 4.59, Very Great Extent to 10 IT experts. This implies that the IT experts agreed on the extent on the level of efficiency of the algorithm. Thus, the hybrid algorithm used in the development of the system is proven.

The recommender system ISO 25010 Software Quality Standards evaluation acquired an overall weighted mean of 4.52, Very Great Extent to one-hundred fifty (150) research participants composed of prospect tourist or travelers, hotel owners, tourism agency and IT experts. This implies that the recommender system is ready for deployment and implementation.

All factors on the evaluation between users and IT experts on the extent of compliance to ISO 25010 Software Quality Standards were resulted to no significant difference therefore; there is reliability of the data gathered from both users and IT experts in the questionnaire on ISO 25010 Software Quality Standards.

29th - 30th August, 2019

## Comparison of Sensation Seeking and Anxiety State Between Student Of Engineering And Physical Education

Nuft Naaz, Teacher, Education Department, Punjab, India

#### Abstract:--

It is seen that the reliably rising dimension of execution in different control isn't just related, but on the other hand is a result of an intricate connection of logical back-up containing, physiological, biomechanical, and nourishing and components. It is fought that if all other factor expressed above are indistinguishable, the last execution eventually relies on the mental working of understudy. It has been all around archived that the understudy extraordinarily varies on identity attributes which lead to varieties in their psychometric working. In light of this the present examination was intended to discover the critical distinction between understudy of the executives and physical training at college level with deference with sensation chasing and nervousness state. Over the span of survey of writing, it was seen that albeit numerous analyst in connection to execution of the understudy have examined the identity characteristics yet the equivalent has not been investigated considering with contrasting sensation chasing, uneasiness condition of physical Professional with Engineering Professionals.

#### Key word:--

Engineering Students, Physical Education understudies, Anxiety

29th - 30th August, 2019

# Technological Advocacy of Migrant Workers in the Pre Placement Based On Personal Legal Assistance

**Asri Wijayanti,** University Muhammadiyah of Surabaya, Indonesia **Yayuk Sugiarti,** University Wiraraja, Sumenep, Indonesia

#### Abstract:--

The right to work and live decently for humanity is often underestimated by some countries. The placement of Indonesian migrant workers abroad must get a serious attention. The impacts can be either the loss of private property of migrant workers and their families or even the loss of their life. Legal protection was needed in the form of prevention of violations of law through advocating assistance to Indonesian migrant workers during their pre-placement based on personal legal assistance. Due to the fact of this situation, the research focused on how to develop the design of legal advocacy which met with the right to work and decent livelihoods for Indonesian migrant workers. This study used a normative juridical socio-legal approach in Indonesia. The findings showed that the advocacy based on personal legal assistance can be a positive element so that the right to work and live decently for humanity for Indonesian migrant workers can be fulfilled.

#### Keywords:--

Indonesian migrant workers, the right to work, personal legal assistance

29th - 30th August, 2019

# Automatic Exchange of Information as a Technological Tool for the Protection of Customers of Financial Institutions

Bambang Sugeng Ariadi Subagyono, Airlangga University, Surabaya, Indonesia Agus Yudha Hernoko, Airlangga University, Surabaya, Indonesia Zahry Vandawati Chumaida, Airlangga University, Surabaya, Indonesia Asri Wijayanti, University Muhammadiyah of Surabaya, Indonesia

#### Abstract:--

This paper aims to determine a legal issues on taxpayer financial information by the Directorate General of Taxes (DGT). The other hand is to analyze whether or not the clash of norms between Law No. 9 of 2017 with Law No. 14 of 2008 concerning Public Information Openness. This study is normative legal research. This method is used to conduct analysis of laws and regulations, jurisprudence, and legal literature. The research approach used is the approach of the Act (statute approach) and the conceptual approach. The conclusion of this research is Law Number 9 of 2017 gives authority to the Director General of Taxes in terms of management of financial records that is submitted or deposited by financial services institutions, especially banking institutions. Sanctions given by law for banks and tax officers who leak customer records to third parties or who are not interested will be punished in accordance with the provisions in Article 41 of Law Number 6 of 1983 concerning General Provisions and Tax Procedures.

#### Keywords:--

Law, Openness, Access to Financial Information.

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# Optimization of Time and Temperature for Thermal Reclamation of Furan Resin Bonded Sand

Monish A, Professor, Department of Chemical Engineering, MIT, Manipal Academy of Higher Education-Manipal BSVSR Krishna, Professor, Department of Chemical Engineering, MIT, Manipal Academy of Higher Education-Manipal

#### Abstract:--

The moulding sand is an important material in foundries to produce the castings and there is no suitable substitute for this sand invented so far. The availability of good quality high silica sand suitable for foundry industry is becoming scarce due to high demand and also strict restriction in mining of sand due to ecological reasons. The reclamation of used sand is becoming mandatory in order to avoid the scarcity and also disposal of used sand has become a serious issue due to environment reasons. Hence an attempt has been conducted in detail on furan resin bonded used sand collected from various foundries in and around Coimbatore area. The furan based used sand properties like loss on ignition (LOI), total gas evolution, sulphur content & PH were measured. Experiments were conducted in muffle furnace on collected samples at different time and temperature to identify the suitable and feasible properties of thermally reclaimed sand with fresh/new sand.

#### Keywords:--

Thermal reclamation, loss on ignition (LOI), total gas evolution, sulphur content, foundry, high silica sand

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## User's response on core factors to consider on the choice of operating system and Evaluation of its effectiveness

Dannel A. Pon-An, Computer science department, De La Salle University, Dasmariñas, Philippines

Kristine Mae M. Daprosa, Student, Computer science department, De La Salle University, Dasmariñas, Philippines

#### Abstract:--

As colleges and universities compete to each other in terms of what they can offer students especially in terms of technology, the need for having computers in schools is a must. Computers will not run without the use of operating system and in choosing the best operating system to be implemented in computer terminals, security, productivity, capability, interface and reliability shall be considered. The point of this study is to identify the core factors that drive the choice of operating system of the people from colleges and universities in Dasmariñas City, Cavite to arrive at reasons why they chose the operating system they use today. This paper will try to consolidate which operating system is mostly used by the students and teachers / professors / instructors in the teaching and learning process and eventually explore and differentiate the core factors considered by the participants.

29th - 30th August, 2019

# Microfinance Institutions and Women Entrepreneurship Empowerment: A Case Study of Minna, Nigeria

Olalekan Busra Sakariyau, Federal University of Technology, Minna, Nigeria Safwanat Babanmalam, Federal University of Technology, Minna, Nigeria Lawal Kamaldeen, National Open University of Nigeria Amina Sani, Federal College of Education Zaria

#### Abstract:--

**Purpose** - Microfinance is a powerful means to empower the poor people especially women, mainly in developing countries. Its activities can give a means to scuttle out of poverty, an opportunity to entrepreneurship empowerment and promote sustainable livelihood and better working condition for women. The rise of the Microfinance institutions in the country is identified as an important occurrence which has implication for the development prospects of the women. This research is designed to identify the role of microfinance banks in women entrepreneurship empowerment and to analyze the result of loans from Microfinance interventions. Thus it has been made to focus on the activities and impacts on women, after receiving loans from Minna Microfinance Banks.

**Design/methodology/approach-** The research is focused on female borrowers of Microfinance banks in Minna through the use of empirical materials such as case study, personal experience, life story, interview, observational, historical and interactional so therefore; the research was conducted through a notable contact with life situation. In fulfillment of the purpose of this study, it was important to talk with the borrowers of some these banks, to know how the micro credit program has influenced their everyday life. A sample size of 105 respondents were interviewed through a structured questionnaire, in-depth interview and observation from Minna Township.

**Findings-** The study aimed at finding out whether the loan given to women beneficiaries had any impact on them. Though microfinance banks through its services is doing its best to provide women beneficiaries the necessary assistance to better their lot. It was realized that they use the same procedure in servicing their clients all over the country. Efforts should therefore be made to ensure that they take the culture of the women of Minna in consideration and faction out specific products that will address/ meet the very needs of these women beneficiaries

**Research limitations/implications-** The major limitation of this study is that it was carried out in a single district, hence the findings cannot be generalized for the whole country. Notwithstanding these, it was realized that there is a causal relation between elements of microfinance scheme and women entrepreneurship empowerment. A further study can be carried out to see which of their facilities that facilitates faster the empowerment of women.

*Originality/value-* This study is the first to provide a comprehensive analysis of the impact of micro credit on women entrepreneurs in Minna, by identifying the, awareness accessible and exposure (if any) to micro-credit in their locality; more so if these exposure has enhanced women's personal and business skills, and improved their confidence.

#### Keywords:--

Women Entrepreneurs, Empowerment, Microfinance Banks, Minna

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## Investigating dynamic co-movements and correlations in the European Union (EU)'s financial sector: An empirical analysis

**Cristi Spulbar,** Professor, Habilitated Doctor, Ph.D, DHC, University of Craiova, Faculty of Economics and Business Administration Craiova, Romania

Andrei Cosmin Tenea, PhD student, University of Craiova, Faculty of Economics and Business Administration, Craiova, Romania

#### Abstract:--

This article studies co-movements and correlations between financial sectors in European Union over the last decades, by using a Dynamic Conditional Correlation model. The financial sectors have been severely affected by the extreme events triggered in the aftermath of the global financial crisis and European debt crisis. Therefore, we consider important to document the patterns of the time-varying co-movements for the European Union financial sectors. This will allow us to identify how each country's financial system responded in turmoil periods and to document the integration paths within European Union. The findings reveal an increased asymmetry with respect to the integration level. Also, the co-movements have been influenced by the crises effects. In our view, the lack of financial integration raises important questions regarding the functioning of the European Union, in particular, and the banking and capital market union, in particularly. The internationalization of financial sectors and global economic inter-linkages provide growing investment opportunities in the context of diversification.

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29th - 30th August, 2019

# Teleconsultation System for Rural Health Units (RHUs) for Metro Vigan Philippines

Eileen Rose C. Quilon, Student, St. Paul University, Philippines, Tuguegarao

#### Abstract:--

The inequality in healthcare access remains more serious by the shortage of health workers and providers as well as inadequate and makes the delivery of healthcare run slower and less efficient in the Philippines. In the Province of Ilocos Sur, one of the main problems is the prolonged waiting time for the consultation and not having Municipal Health Officer (MHO) in some of the municipalities in the upland. However, there are Rural Health Midwives assigned in every Rural Health Units (RHUs) and Barangay Health Stations are being established where Barangay Health Workers (BHWs) are dynamically working in order to respond to the immediate primary health care needs of the community.

Teleconsultation System for Rural Health Units (RHUs) for Metro Vigan Philippines is an android application that serves as a tool for checking symptoms that are related to the patient's health concerns. The system is consists of different symptoms and diseases in the Family and Community Medicine which is associated with those symptoms. However, the developed system can never be an absolute substitute for medical practitioners' knowledge and expertise, as this is only perceived as a helpful tool to support consulting services. The developed system will only be served as a guide for the user's illnesses.

#### Keywords:--

Healthcare, Symptoms, Teleconsultation, Mobile Application, Primary Care, Rural Health Units

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# Measuring brand equity for higher education: A case study of CFVG in Vietnam

Vu Tri Dung, French-Vietnamese Center For Management Education (CFVG), National Economics University

Le Thuy Linh, French-Vietnamese Center For Management Education (CFVG), National Economics University

Hoang Thi Thu Phuong, French-Vietnamese Center For Management Education (CFVG), National Economics University

Thi Phi Hoai Do, Department of Economics, Academy of Finance, Hanoi, Vietnam

#### Abstract:--

Higher education is a unique industry that considers branding as important function to create competitive advantage for universities and business schools. Measuring brand equity plays an important role in providing educational institution a necessary strategic analysis before critical branding decisions. This study applies the CBBE brand equity model by Keller (2000) to measure the higher education brand with a case study of CFVG School of Management in Vietnam. With a mix approach combining qualitative and quantitative methods, the CBBE brand equity model is adapted for use in higher education context with prospective and retrospective higher education students as the research subjects. Findings provide rich understandings about the concept of brand equity in higher education settings. The research makes a novel empirical contribution through testing the CBBE brand equity model in Vietnam as an emerging higher education market. Practical implications were highlighted for higher education practitioners in their efforts to establish strong brand equity.

#### Keywords:--

Higher education, branding, brand equity, higher education branding, brand management

29th - 30th August, 2019

# Buk CaTrike: A Mobile Application Analyzer for Metro Vigan

Honey Aninag-Avo, Student, St. Paul University, Philippines, Tuguegarao

#### Abstract:--

Gone were the days when the word travelling would be mostly associated to businesspersons and trade. Nowadays, getting from point A to point B is much convenient with the various modes of transport available to the public.

Way back during the Spanish colonization, the use of calesa was introduced, made available to the upper-class of the society and it was soon declined in Second World War. During the American occupation, where the advancements arrived, the use of jeeps, cars, bus, and trucks were prevalent and these modes are still popularly to this day.

Ilocos Sur's Vigan City was enlisted by the United Nations Educational, Scientific and Cultural Organization (UNESCO) as one of the best-preserved heritage sites in 1999 and entitled as one of the Seven New Wonder Cities of the World. It is on this note that the researcher has decided to develop Buk CaTrike, a booking application for Vigan calesas and tricycles.

The researcher intends to determine the quality evaluation of the Buk CaTrike application using the ISO 25010:2011 Framework, as perceived by various stakeholders, specifically the kutseros, tricycle drivers, commuters and tourist.

Furthermore, the researcher made use of descriptive and software development design in order to gather information needed to test the hypothesis or answer the questions concerning in developing the Buk CaTrike: A Mobile Application Analyzer for Metro Vigan, the Interaction Design Model as Systems Development Life Cycle (SDLC) as a guide in the development of the application.

#### Index Terms:--

Booking Application, Mobile Application Analyzer, Transportation

21<sup>st</sup> WCASET

29<sup>th</sup> - 30<sup>th</sup> August, 2019

# Assistive Arduino Smart Blind Cane for the Visually Impaired Person

Israel Carino, Jose Rizal University
Rhonnel S. Paculanan, University of Makati

#### Abstract:--

This project is created in order to help and provide assistance to the visually impaired, mainly in giving an easier way of navigating and avoiding obstacles for the blind person by this Arduino application called as "Assistive Arduino Smart Blind Cane for the Visually Impaired Person". The Project Scope are (1) The cane can detect flat obstacles (2) The Cane has 3 ultra-sonic sensors that can detect from .5-5 meters (3) The Cane has Voice Navigation System (4) The Cane has vibration motor to alert the visually impair physically (5) The Cane had a built in potentiometer for distance adjustment from 0-3 meters and (6) The Cane has 2200mah rechargeable battery.

The Test Driven Methodology is the process used to gather and analyze data needed to answer the research questions guiding this study. Strive for clarity and accuracy when describing each step of the methods used in conducting research and in developing the prototype the TDM is quickly adopted by agile software for developing of application codes that includes database. These are the 3 Phases of TDM RED PHASE (tiral and error), BLUE PHASE (search for bugs and errors) and the GREEN PHASE (passes the test and ready to propose)

A prototype is a rudimentary working model of a product or information system, usually built for demonstration purposes or as part of the development process.

The prototype was evaluated by seventy – seven (77) respondents composed of five (5) experts and seventy- two (72) non-experts. The experts are Visual impaired while the non-experts are the random people. And as the result of overall mean 4.14 gives the general interpretation that the study is accepted. This is the result of the mean scores respondents from different criteria such as Efficiency, Functionality, Usability, Reliability, and Accuracy. The average mean ratings of possible users both for experts and non-experts in Blind Cane are from the range 4.50 to 5.00 that means excellent.

As a Conclusion, the findings of the project were a successful simulated, as well as practical implemented based on the indicators.

As a Recommendation of the evaluators give based on the analysis of the project are: to conduct more tests in order to improve the efficiency and in order to identify the possible enhancement of the functionality and to conduct an in-depth study whether the project can be integrated to other existing project related to tracking.

#### Keywords:

Arduino, Smart Blind Cane, Visually Impaired Person

29th - 30th August, 2019

# Predicting the Relationship between Parent-Teaching Activities and Emergent Literacy in Preschool Children of Oxford Louise Academy of Dasmarinas Using a Correlation and Clustering Analysis: A Data Mining Approach

Jennifer E. Galarosa, De La Salle University-Dasmarinas
Ma. Micah R. Encarnacion, De La Salle University-Dasmarinas
Dr. Maryli F. Rosas, De La Salle University-Dasmarinas

#### Abstract:--

Generally, children's language development lies in the foundation for their literacy development, though it is difficult for preschool teachers alone to consistently engage in the individual interactions necessary to boost children's language skills. Given that parents are their children's first teachers, it is imperative to consider how parents can help improve their children's language and emergent literacy development prior to formal schooling.

The purpose of this study was to determine the relationship of the parent's intervention on the emergent preschool children student of Oxford Louise Academy of Dasmarinas in relation with teaching activities for emergent literacy by conducting an assessment survey form out of 31 out of 54 samples. And to predict the students need to undergo a summer class based on the teacher's evaluation prior to child learning capabilities. This paper concentrates primarily to the application of the data mining method in area of higher education, in which such methods have not been applied yet. In addition, a model, useful for strategic planning of additional mechanisms to improve the efficiency of studying, is also suggested.

#### Keywords:--

Preschool, emergent literacy, data mining, correlation, clustering

21<sup>st</sup> WCASET

29th - 30th August, 2019

# Fuzzy Logic: A Technique for Assessing Students' Learning Performance

**Josephine T. Eduardo**, Faculty, Computer Studies Department, De La Salle University, Dasmarinas **Dr. Maryli F. Rosas**, Faculty, Computer Studies Department, De La Salle University, Dasmarinas

#### Abstract:--

Students Performance plays significant role in the learning assessments of students. It is important for the faculty members to know the type of their learners. With this, the researchers aimed to evaluate and identify the impact of student performance using the fuzzy inference system. This study focuses on students who were taking up Bachelor of Science in Information Technology at De La Salle University - Dasmarinas. The students' performance depends on exam results both in lecture and laboratory classes; and it is evaluated as success or failure. By applying a fuzzy logic approach, the input will analyze to gain the final output. This paper also describes the fuzzy logic basic concepts applied in evaluating students' performance. Forty students took part for the statistical course considered as study samples. Fuzzification of exam results was carried out using input variables and their membership functions of fuzzy logic system. As a result, the researchers have come up that the students perform well in laboratory exam than in lecture examination.

#### Keyword:--

Fuzzy logic, triangular membership function, students' performance, fuzzy sets theory, defuzzification method.

29th - 30th August, 2019

## Identifying Drivers of m-Commerce Adoption by Indian Youth using Technology Acceptance Model

**Joydeep Biswas,** Assistant Professor, KIIT School of Management, KIIT Deemed to be University, India **Surya Narayan Mishra,** Assistant Professor, KIIT School of Management, KIIT Deemed to be University, India

#### Abstract:--

Technology Acceptance Model (TAM) has been used to predict adoption of technology in various contexts. This study was done to discover the critical factors leading to adoption of mobile commerce by applying TAM. The research has incorporated additional variables of Hedonic Motivation, Subjective Norm, Perceived Risk and Trust which are postulated as determinants of user acceptance along with Perceived Usefulness and Perceived Ease of Use, provided in TAM. The study is done in India where there are large numbers of mobile subscribers (1033 million) and mobile commerce is expected to grow at Compound Annual Growth Rate of 55%. A survey collected data related to mobile commerce behavior and demographic profiles of respondents. Exploratory factor analysis was applied and then regression was conducted on reduced statements. Results indicated that Perceived Usefulness, Perceived Ease of Use and Subjective Norm have a significant relationship with Attitude towards m-commerce. Perceived Usefulness also has a positive impact on Intention to Use m-commerce. These results further confirm validity of TAM in predicting consumer acceptance of technology. Amongst the three Hedonic Motivation factors, Pleasure influenced intention to use m-commerce significantly while Dominance and Arousal did not impact the user intention significantly. Finally, Subjective Norm, Perceived Risk and Trust did not significantly affect Intention to Use m-commerce.

**29<sup>th</sup> - 30<sup>th</sup> August, 2019** 

# Sugeno –Based Fuzzy Logic Evaluation on the Effect of Weather in Coconut Scale Insect Infestation

Juliet O. Niega, Professor, Computer science Engineering, University of Perpetual Help System DALTA, Calamba Campus, Philippines

#### Abstract:--

The purpose of this study is to evaluate the significant influence of weather in Coconut Scale Insect (CSI) Infestation happened in Batangas, Philippines using the Fuzzy logic approach. The CSI and weather historical data covering the years of 2012-2014 were utilized in the study. The weather parameters used are temperature, relative humidity, and wind speed. Fuzzy logic applying the Sugeno fuzzy inference system (FIS) in Matlab was used to simulate the effect of each weather parameters in the infestation. The developed FIS was comprised of the application of triangular membership function, formulation of 27 If-Then rules, and the center of gravity for the defuzzification process. The developed system was evaluated and tested by generating 100 data samples. These results were compared with the actual data of infestation, and the zero (0) value of true error was computed. The results from the developed system verified the findings of the Philippine Coconut Authority (PCA) and several experts and coconut farmers, that weather is the foremost reason for the CSI infestation.

#### Keywords:--

Coconut Scale Insect, infestation, weather parameters, fuzzy logic, Sugeno fuzzy inference system, defuzzification

29th - 30th August, 2019

# An Empirical Analysis on E- Retail Service Quality Measuring 3PL in Supply Chain, E-SERVQUAL, and E-RSQUAL

**Pavan Praharshith Rapoor,** MBA, School of Management, MAHE **Kavitha T C,** Associate Professor, School of Management, MAHE

#### Abstract:--

Electronic commerce brings huge business opportunities and revenue growth to companies like e- retailers, mainly due to its convenient, interactive, lower costs and high degree of customization and personalization to their customers. With respect to logistics outsourcing, online shopping takes place in the chain consisting of the third party logistics providers, e-retailer, and the customer, which represents a service triad. Since, the delivery service is provided by the third party logistics (3PL) service providers, the satisfaction level of the end customers depends on the combination of both product delivery service and e-retailers service. Therefore, the level of service quality of product delivery service providers is vital to the e-retailers. The operations in logistics plays a critical role in the success of e-retailer's service performance. The study proposes a research model that integrates both the e-service quality, e-recovery service quality, and the logistic service quality that are provided by the e-retailers, which furthers influences both customer satisfaction and loyalty. The service quality dimensions provided by the eretailer included efficiency, system availability, privacy and fulfillment. The logistic service dimensions included order condition, order accuracy and timeliness. Further, the recovery service quality involved contact, compensation, and responsiveness. The constructs developed in the research model were tested for validity and reliability. The outcome of the data analysis, with the sample size of 350, concludes that e-service quality strongly influences customer satisfaction and customer loyalty when using online retail websites. Similarly, when customer satisfaction is achieved it also has a strong relationship on customer loyalty. The outcome of the analysis also evaluated that e-service recovery quality has a strong influence on customer satisfaction. The relationship between logistic service quality and customer satisfaction and customer loyalty are strongly significant, than the e-service quality and e-recovery service quality.

#### Keywords:—

3PL, Logistics Service Quality, E-Service Quality, E-Service Recovery Quality, Customer Satisfaction, and Customer Loyalty

29th - 30th August, 2019

# Log-Linear Model of Cardiovascular (CVD) Patients Data in Jigme Dorji Wangchuk National Referral Hospital, Bhutan

Lhamo, Department of Mathematics, Faculty of Science, Mahidol University, Bangkok, Thailand Suntaree Unhapipat, Centre of Excellence in Mathematics, CHE Bangkok, Thailand

#### Abstract:--

Cardiovascular disease (CVD) is one amongst many non-communicable diseases which is world's leading cause of death. Developing country like Bhutan encounters extensive challenges in combating such deadly disease for being lately exposed to an advanced medical facilities.

The log-linear model is used to study the associations between variables with the good purpose in advocating risk factors of CVD to public. The total of 5463 CVD patients' observations from the year 2006 to 2016 availed from Jigme Dorji Wangchuk National Referral Hospital (JDWNRH) is used to carry out the study. We figure out the associations between variables through independence test based on Chisquare test and Cramer's V statistics. Associated variables with highest Cramer's V were considered as significant at the level of p-value which obtain estimate parameters, expected frequencies and standard residuals using two dimensional log-linear models.

#### Keywords:--

Clinical Data/ Cramer's V/Chi-Square/ Heart Disease / Log-Linear Model

21<sup>st</sup> WCASET

29th - 30th August, 2019

# Exploratory Study Using Bacteria (Bacillus Subtilis) As A Self-Healing Concrete: A Basis For Strengthening Infrastructure In The Philippine Setting

Lagazo, Magil A, Student, Civil Engineering / University of Perpetual Help System Dalta Calamba Campus, Philippines

Montecalvo, Marlou A, Student, Civil Engineering / University of Perpetual Help System Dalta Calamba Campus, Philippines

Noriesta, Carla Pamela D, Student, Civil Engineering / University of Perpetual Help System Dalta Calamba Campus, Philippines

#### Abstract:--

This research shows that the use of bacteria *Bacillus Subtilis* is fruitful for construction of durable infrastructures and apply self-healing concrete as a method for crack control to enhance service life in concrete structure. In this paper, the technique Microbiologically Induced Calcite Precipitation (MICP) is adopted. It is the use of Bacillus Subtilis along with its nutrients which is the sodium bicarbonate (NaHCo3), ammonium carbonate (NH4Cl), and calcium chloride dehydrate (CaCl2) and nutrient broth. The mixing proportion used is 1:2 ½:5:0.45 along with 30 ml liquid form of *Bacillus Subtilis* with the cell concentration of 10<sup>5</sup> cells/ml. The strength of concrete mix is evaluated by conducting test on 150mm x 150mm x 150mm cube for compressive strength test, 6in x 12in cylindrical mold for split tensile strength test, 21in x 6in x 6in rectangular beams for flexural strength text and 3in x 6in for water absorption test. 3 specimens each test. The specimen used for healing is 4in x 2in x 2in which is intentionally cracked. The study shows that there is a significant increase in the strength of concrete added with bacteria compared to conventional concrete and therefore calcium carbonate precipitation is visible after 3-4 weeks in micro cracks.

29th - 30th August, 2019

## Portable Solar Powered Flood Water Purifier System

Sonido, Mark Darwin T, University of Perpetual Help System Dalta, Philippines Balcueva, Blizelda M, University of Perpetual Help System Dalta, Philippines Pinpin III, Juanito Carlo A, University of Perpetual Help System Dalta, Philippines Mosquera, Rizal M, University of Perpetual Help System Dalta, Philippines

#### Abstract:--

During heavy typhoons, an adapted remote community area in Calamba City, Laguna, Philippines suffers from lack of drinking water, for they only rely on low lying deepwell that may be contaminated by flood water during heavy storm surge as the community were proximate to Laguna Lake. This study aimed to provide an ideal potable water during heavy drinking water shortage in a calamity scenario at Sitio Runggot, Brgy. Lecheria, Calamba City, Laguna and to stand for the waste reproduction by converting liquid water wastes into a safe drinking water. This research established a Solar Powered Portable Water Purifier System that its integrated components can convert flood water into clean drinking water. This water purifier system can purify and eliminate most types of bacteria and microorganisms on a data gathered specific location for water purification. The combination of 5 technologized filtration industrial membranes made up this study possible: Industrial Reverse Osmosis, 7 – pore Ultrafiltration, Sediment Filter (Fine), Carbon Filter and Ultraviolet Sterilizer. The designed portable prototype was modified to its maximum portability state that will allow solar energy to be harnessed and used all throughout its whole process as the source of power. Several tests from different locations were collected and settled within 7, 14, 21, 28 and 35 days for the consideration of flood water stagnancy and possible microbial growth factor within the time span. This allowed the researchers to determine and set a high bar of standard and category that will be allowed to subject for water purification using the flood water purifier system.

The study resulted with a concrete finding of having an acceptable value in terms of pH, Conductivity, Coliform count, Silica and Lead content, Color (Turbidity) and Alkalinity physical water quality tests conducted and analyzed by an accredited water laboratory in the philippines and a maximum allowable flood water stagnancy of 35 days.

#### Keywords:--

Water purification, Water filtration systems, Antibacterial activity

21<sup>st</sup> WCASET

29th - 30th August, 2019

# Returning Green through Engineering: Utilization of Monte Carlo simulation in Assessing Potential Lifetime Value of Conventional and Sustainable Building

Mark Kenneth M. Lindo, Masteral Student, Mapua University Dante Silva, Professor, Mapua University

#### Abstract:--

Entering into the age of information where you can quickly access almost anything that happens globally has proven itself beneficial. This study was conducted to assess the performance of conventional buildings and sustainable or green buildings in terms of their potential lifetime value. By analyzing the standard specification of green buildings, people can have a better understanding of this innovation. Data gathered through statistics, literature review, and evaluation from companies, will determine the quantitative information for the creation of the Mathematical Model by the use of Monte Carlo simulation. The Monte Carlo simulation was executed using a software to provide histograms. In order to create scenarios to produce various results, a What-If analysis was also conducted. Consequently, evaluation and analysis of the costs of conventional and green building, gave way for the researcher to make a conclusion with regards to their efficiency. The validity of the results was determined based on anecdotal information by professionals who practiced building sustainable infrastructure. Nevertheless, this research serves as a pilot study to identify the breakeven points between conventional and green buildings. Furthermore, the researcher believes that a deeper enhancement of the data might yield to more accurate results.

#### Keywords:--

Green building, conventional building, Mathematical Model, Monte Carlo

29th - 30th August, 2019

## Brand Image Transfer through Event Sponsorshipthe Case Of Habeco Sponsorship For Happy Colour Run Event

Nguyen Dinh Toan, Ph.D, Faculty of Marketing, National Economics University, Vietnam
Nguyen Ngoc Quang, Ph.D, Faculty of Marketing, National Economics University, Vietnam
Vu Tri Dung, French-Vietnamese Center for Management Education (CFVG), National Economics University, Vietnam

#### Abstract:--

This article focuses on brand image transfer through event sponsorship. The brand image and event image, however, can be further divided into three constructs, which are functional, symbolic and experiential. Having reviewed the literatures and aranged the hypotheses, a research case of Happy Colour Run and Habeco. The data has been gathered by distributing the questionaire to participants of Happy Colour Run in Hanoi Capital, Ho Chi Minh city, and Da nang city. Research results show that event image has a positive impact on the sponsor's brand image on all three constructs, which are functional, symbolic, and experiential. Besides, Involvement with the sponsored event is also a key variable in the brand image transfer through sponsorship. It is of course a strong determinant of exposure to the event but also a positive influencer of the sponsored image. The article also gives some implications for managers and suggestions for future studies .

#### Keywords:--

Event sponsorship, event image, brand image

29th - 30th August, 2019

### Virtual Reality Fear Treatment

Paul Gilbert V. Maglaya, Jose Rizal University Keaton Martin M. Varlez, Chaos Game Lab Dan Jayson Panergo, Chaos Game Lab

#### Abstract:--

Virtual Reality is a simulated computer generated experience taking place within a virtual environment that incorporates mainly auditory and visual senses, motion, and perception or the ability to grasp something. In this study and development, VR will be used as a tool to aid psychologists and psychiatrists in assessing and treating the different fear levels of patients. VR will simulate different fear scenarios to help patients get used to what they are afraid of, aka "facing your fear" simulator. This study will cover the flooding and gradual exposure method of treating fear and phobia. With the help of VR, different scenarios can be recreated with cheaper costs and safer risks.

The experience is made up of 3Dimensional images and animations, and actual video footages that simulate a scenario that triggers s patient's fear. The scenarios are loaded in a virtual reality headset and the process is monitored by a psychiatrist. Scenarios can be customized based on the requirements and fear level of a patient.

A prototype of the project is built on platforms such as, HTC Vive, and Mobile VR.

The prototype was evaluated by fifty (50) respondents composed of five (5) experts and forty five (45) non-experts. The experts are psychologists and psychiatrists, while the non-experts are from animation and game development industry. And as the result of overall mean 4.26 gives the general interpretation that the study is accepted. This is the result of the mean scores respondents from different criteria such as Efficiency, Functionality, Usability, Reliability, Accuracy, and Immersion.

As a Conclusion, Virtual Reality Fear Treatment is a unique and customizable experience that can be used as an aid in treating fear and anxiety as a tool in the exposure therapy.

As a Recommendation of the evaluators give based on the analysis of the project are: to conduct more tests in order to improve the efficiency and in order to identify the possible enhancement of the functionality and to conduct an in-depth study whether the project can be integrated to other existing project related to psychological treatments and virtual reality.

#### Keywords:--

Virtual Reality, Fear Treatment, Exposure Therapy

21<sup>st</sup> WCASET

29th - 30th August, 2019

## Design and Development of Banana Stem Decorticator with Wringer

**Pedrito M. Tenerife Jr,** Chief, Open University Learning Management System, Polytechnic University of the Philippines **Arvin R. De La Cruz,** Faculty College of Engineering Department of Computer Engineering, Polytechnic University of the Philippines

Alexis Christellene M. Arce, Student College of Engineering Department of Computer Engineering, Polytechnic University of the Philippines

Ma. Arianne N. Pabularcon, Student College of Engineering Department of Computer Engineering, Polytechnic University of the Philippines

Kathleen Meriel D. Ortega, Student College of Engineering Department of Computer Engineering, Polytechnic University of the Philippines

Ralph Lorenz R. Rafallo, Student College of Engineering Department of Computer Engineering, Polytechnic University of the Philippines

#### Abstract:--

The demand for fiber as raw materials to make various products is increasing. It can be extracted from the seed, leaves, fruits and stem of a plant. Banana is one of the leading fruits grown in the Philippines. It provides food and a source of industrial raw materials. Aside from the fruit, banana blossom and its trunk pith that can be eaten, natural fiber can be extracted in the trunk (pseudo-stem) that is usually thrown as waste after the harvest season. The study aims to develop a machine that can extract fiber in a pseudo-stem which can be used in handicrafts, ropes, clothing and other products. A prototype was designed, developed and was tested for banana trunk fiber extraction. During the extraction process, the stem which is 45.72 cm in length and 1 cm thickness is fed manually in the prototype machine. Fiber is extracted from the pseudo-stem using a decortication process where a roller with scratched surface is compressed into a stationary bar that will crushed and scraped the trunk. During the decortication process the banana stem is also undergoing the wringing process wherein the fiber loses its water content. The extracted fiber is already dried and can be used in making domestic products. However, to have a good quality fiber, after the process, it should be washed and dried. Results indicated that the recovery rate of the banana fiber has increase by 2-3% in an average of 35.5 cm pseudo-stem. The device has a great potential and should be used for the growing fiber industry in the country.

#### Keywords:--

Pseudo stem, fiber, handicrafts, decortication, wringing

21<sup>st</sup> WCASET

29th - 30th August, 2019

### Design of Stable Slopes in Surface Excavations and Mines Vi-A-Vis Modified Slope Mass Rating-Case Studies

Dr. Singam Jayanthu, Professor, Mining Engineering Department, NIT Rourkela, Odisha

#### Abstract:--

Know-a-days, massive slope failures are noticed in various parts of the world in surface excavations including natural slopes/cut slopes, and are most commonly accompanied by significant loss of structures and manpower. Many approaches such as numerical modeling, analytical models, probabilistic analysis, rock mass/slope mass rating are generally used for design of stable slopes. The Slope Mass Rating (SMR) system is an extension of the RMR(Rock Mass Rating) approach, for specific ap-plication to rock slopes. This paper presents the application of SMR to ten Indian limestone, manganese, coal and copper mines to verify its suitability. As part a of Science and Technology project sponsored by Ministry of Coal & Mines, Govt. of India the results were critically examined keeping in view the actual field conditions. It was found that SMR predictions are not in consequence with field conditions at the mines studied. This calls for modification to the SMR system. Therefore a modified slope mass rating (MSMR) system based on studies in ten mines was developed. From application of MSMR in the above mines it was established that MSMR of 50 and above indicates stable slopes, and the value below 40 indicates instability. When the MSMR was used for the actual cases, the designed bench slope angles were coming within 10% variation as compared to the results of numerical / limit equilibrium analyses.

## Strategic Forest Management Using Decision Tree

Richard C. Arruejo, Instructor I, University of Northern Philippines and Saint Paul University Philippines, Tuguegarao

#### Abstract:--

Decision-making of the top-level management requires accuracy and irrevocability. Most organizations today already use a data-warehouse for a data-mining strategy to extract data based from the historical and transactional data to create meaningful decisions. This strategy creates an imperative business perspective to direct the organization's future.

This research is a development of a forest management for the Department of Environment and Natural Resources- Provincial Office of Abra. The system integrated the use of an ID3 decision tree algorithm data mining.

ID3 decision tree algorithm is used for the data mining technique on the identification of the suitable species of trees to be planted according to location, elevation, soil type and tolerance to the different diseases and pests. The system also helped the PENRO in the determination of renewable of the People's Organizations (POs). People's Organizations or the Non-Government Organizations (NGOs) are responsible in managing the forests. The Unamanned Aerial Vehicle (UAV) is also integrated for the purpose of monitoring of trees in the forest.

RapidMiner Version 9.2 was used for knowledge discovery from data (KDD). This also helped the researcher to get the decision-making process for the development of the Forest management system.

29<sup>th</sup> - 30<sup>th</sup> August, 2019

## A Machine Learning Approach for Classifying Speech Detection to Filipino and Korean Language

Rolando B. Barrameda, Faculty of Computer Science Department, De La Salle University, Dasmariñas, Philippines Jovele Belmonte Baccay, Computer Science Department, De La Salle University, Dasmariñas, Philippines

#### Abstract:--

Everybody speak it owns language, these are essential for communication among the member of the society, identity, and races can classify in its group. A diversity of speech has a different method and form and that is the natural way of speaking entailing self-identity. This paper presents the classification of Filipino and Korean Speech Assessment based on various machine learning algorithm. The data are trained using various algorithms such as Naive Bayes, K-Means, Support Vector Machine and MultiLayer Perceptron. The dataset in recorded voices assesses and evaluate with the said classifiers. There are 100 respondents and collect recorded audios. Dataset is split into a half 50 came from Filipino and 50 from Korean. The assessment and evaluation are measured through correctness and accuracy. Based on the result shown in figures MultiLayer Perceptron (MLP) got the highest and best performance with the 99.49%, followed by Support Vector Machine (SVM) with 98.6%, third in rank is the Naïve Bayes garnering 97. 74 % and K-means falls in the lowest place with 94.78%.

29th - 30th August, 2019

## The convergence between tradition and modernity and between innovative design and the history of culture-Irbid city as a case study

Samia Ayyoub Salim Ayyoub, Faculty of Architecture Engineering Department Yarmouk University, Irbid, Jordan

#### Abstract:--

The aim of this paper is to present the reader with the practices, the challenges and the benefits of the changing patterns in urban planning.

There is a need to implement measures that focus on the population's needs, and to merge the potential of urban planning and the townspeople's memories in response to the phenomenon of the redevelopment of downtown. The opportunity of the insertion of municipal administrators, developers, designers and most importantly townspeople in the operational process ensures the commitment to arising outcomes and enhances the potential of urban planning. Also, the process should have a restricted number of clear goals to avoid losing the space potential and the connections to the memories of the city's residents..

Redeveloping cities' downtowns have been a critical issue to tackle as the need arises to revive and modernize the old parts of the cites, usually ending with the destruction of the history and the place memories in those parts leading to the loss of its connection with the city's residents and erasing the spirit of the city piece by piece. One example of such approaches is observed on the reconstruction of Beirut, Lebanon Central District (BCD), starting from 1991 and the reconstruction of Al Abdali which is one of the most strategic and older locations in the city of Amman, Jordan in 2004

For this reason, this paper is devoted to new information, which can form the basis for the urban development. And set theoretical ground rules for cooperation with the public and allowing for their participation in the urban development process.

#### Keywords:--

Urban Design; Heritage; economic integration; urban design; urban perception; urban planning, memory of the space

### Statistical Model for Personal Loan Prediction in Bhutan

**Sonam Choden,** Department of Mathematics, Faculty of Science, Mahidol University, Bangkok, Thailand **Suntaree Unhapipat,** Centre of Excellence in Mathematics, CHE Bangkok, Thailand

#### Abstract:--

Banking plays a vital role in functioning the economy of a country. One of the major role of banks is to provide credits. Time series models help to predict and forecast the number of future credit borrowers, which would help the concern authority to plan and work accordingly. In this study Box-Jenkins approach were used to model and forecast the number of personal loan consumers at Bhutan Development Bank in Bhutan. The study shows that ARIMA(2,1,2) works well in forecasting future number of personal loan borrowers. The best fitted models were tested based on forecast accuracy test such as Root Mean Square Error (RMSE) and Mean Absolute Error (MAE).

#### Keyword:--

Box-Jenkins, Loan, Bayesian Information Criterion, Banking

29th - 30th August, 2019

## A research on Parents decision of buying toys for children in Hanoi

Vu Huy Thong, National Economics University, Vietnam Vu Thuy Duong, National Economics University, Vietnam Do Thi Phi Hoai, Finance Academy, Vietnam Do Khac Huong, National Economics University, Vietnam

#### Abstract:--

Recently, Vietnam's economy has grown enormously. Together with the development in the fields of science, economics, information technology, etc., education and culture also achieve great development. The development of society improves the living standard and children's caring becoming more and more important because children are the priority and core target in the social development objectives.

However, the toy industry in Vietnam seems to be neglected although the industry. Up to now, there have been rare studies assessing the situation of children's toy consumption in the country as well as in Hanoi. For that reason, this topic of research is to understand the behavior of customers on children's toys in Hanoi.

Preliminary research was conducted by qualitative research through opinion poll and group discussion to find out five most influencing factors that affect the toy's purchasing decision of parents. Some parents' groups of under 15-year-old-children in Hanoi were selected for gathering opinion by taking the first-round survey. Then, the quantity of 200 forms were distributed equally (applying non-probability sampling method) among 4 main/central districts in Hanoi (50 forms per district). After collecting questionnaires, the data was encoded, analyzed and processed by SPSS.20 software.

This paper to explore and verify the main factors that led to parents' choice of toy products, which included children's impact assessments – as children are the primary users of this product - to their parents' buying decision in order to provide productive approach, suggestions and recommendations to Vietnam children's toy market.

21<sup>st</sup> WCASET

**29<sup>th</sup> - 30<sup>th</sup> August, 2019** 

# Assess the extent to which market selection and mode of entry choices contribute to the success of international marketing

Ako MOHAMMED Tofiq, University of Halabja

#### Abstract:--

The organisations engaging in worldwide trade are made one of the significant decisions is the intercontinental market selection. So far, in spite of which significance, many organizations are taking the approaches in identifying profitable markets in the international context that are often based on ad-hooch decisions and intuition, Instead of an Officially attempt of competition the organization with suitable foreign target markets. This paper will discuss some of the salient issues and the Assignment is to Assess the extent to which market selection and mode of entry choices contribute to the success of international marketing, drawing from the available and relevant Assess the extent to which market selection and mode of entry choices contribute to international marketing. In this paper, several foreign market entry modes are discussed which is related to the following question: what are the issues and methodologies involved in the selection and mode of entry of internal markets? Also which of them has stronger choices contribute to the success of international marketing? The discussion will be followed by a summary and conclusion.

#### Keywords:--

Market selection, international marketing, foreign target markets

29th - 30th August, 2019

## A Comprehensive Study of QoS Models, Frameworks & Protocols in MANETs

Arslan Tariq, Department of Computer Science and Information Technology, University of Lahore
Iqra Tariq, Department of Computer Science and Information Technology, University of Lahore
Muhammad Aadil Butt, Department of Computer Science and Information Technology, University of Lahore
Maimoona Shahid, Department of Computer Science and Information Technology, University of Lahore

#### Abstract:--

Mobile ad hoc networks (MANETs) are a combination of mobile nodes that are specifically configured and are connected by wireless connections automatically according to the routing protocol. A mobile ad hoc network (MANET) is a combination of different mobile nodes, which dynamically form a temporary network, without using any infrastructure such as wireless access points or base stations [1,10,13]. Quality of service guarantees is much more difficult, and very important in mobile ad hoc networks. There are many interesting applications such as multimedia services, health care, and disaster recovery and other support if they can support quality of service (QoS) for MANETs. But the quality of service providing in MANETs is very difficult problem in comparison to wired IP networks [14]. This is because certain node mobility, wireless multi-hop communication, contention for battery power, range of mobile devices and wireless channel, as well as the lack of a central coordinating authority. Therefore, the design of an efficient and reliable routing and quality of service support for such applications is a challenging task. This paper evaluates the performance analysis of some protocols and models of QoS.

29th - 30th August, 2019

## Systematic review of body image: Socio-cultural, Intrapersonal and Marketing constructs

Asad Ur Rehman, PhD Scholar, Uni SZA, Malaysia Dr. Zainul Din Awang, Assistant Dean, UniSZA Malaysia Dr. Raja Irfan Sabir, Associate Professor, UCP Pakistan Ayesha Nawal, PhD Scholar, Uni SZA, Malaysia Hamid Mehmood, PhD Scholar, Uni SZA, Malaysia

#### Abstract:--

Systemic review measure the effect of socio-cultural, intrapersonal and marketing constructs on female body image concerns. Present applied systemic review to clarify the effects of deformational models from varies fields which lead females to feel dissatisfied with their own body. Part I of paper review the extensive literature related to socio-cultural variables (peer, parents, media), part II review literature related to intrapersonal variables (self concept, social comparison and internalization of thin ideal beauty) as well marketing variables (fashion magazines, advertisement and mass media). Researcher examine how should these variables cause body image issue in females. It was proved from findings that socio-cultural, intrapersonal and marketing constructs are strong predictor of body image.

**29<sup>th</sup> - 30<sup>th</sup> August, 2019** 

## Strategy Development for Wind Turbines NACA 6412 Decision making

Bambang Sugiyono Agus Purwono, Politeknik Negeri Malang, Indonesia Nur Candra Dana Agusti, Politeknik Negeri Malang, Indonesia Ida Bagus Suardika, Institut Teknologi Nasional Malang, Indonesia Charles Soetyono Iskandar, Universitas Negeri Makasar, Indonesia Ali Nasith, Universitas Islam Negeri Maulana Malik Ibrahim, Malang, Indonesia

#### Abstract:--

The increasing of the population impact to the increasing of the energy demand. Indonesian nonrenewable energy and the renewable energy demand increased faster but the energy supply is decreased, and the gap between demand and supply of energy is wider and wider. The government of Indonesia tries to shift and to look for an alternative energy to prevent future scarcity of energy resources. One alternative energy used is to utilize wind energy. The wind energy is no pollution, cheaper, and easier to maintain it. Wind energy potential in Indonesia is more than 90 GB and the production electric energy using wind energy has not been explored optimally. The research objective is to analyze the effect between the wind speed and number of turbines blades and the electric power generated by Vertical Axis Wind Turbine (VAWT) using NACA 6412. VAWT used 4, 5, and 6 unit turbine blades and the variation wind speed is 3.0 till 6.0 meter per second. The research variables are variation of wind speed and number of turbines blades, and the electric power is generated by VAWT. This research applies quantitative method is experimental design using two way classification and data simulation. The finding of this research reveals is 1). null hypothesis 1 is rejected, it is means that there is a difference effect between variation of wind speed to the electric generated power by VAWT. 2) The null hypothesis 2 (alpha 15 degrees) is rejected, it is means that there is a difference effect between variation of turbine blades to the electric generated power by VAWT. 3) The null hypothesis 3 is rejected, it is means that there is a difference effect between interaction of variation of wind speed and variation of turbine blades to the electric generated power by VAWT.

#### Keywords:--

VAWT, Simulation, Energy, wind energy, strategic, turbine blades, NACA 6412

21<sup>st</sup> WCASET

29<sup>th</sup> - 30<sup>th</sup> August, 2019

### IceWater: 3D Mobile Game

**Leonardo, Jotam,** Bachelor of Science in Information Technology, De La Salle University, Dasmariñas **Galinato, Lorena,** Bachelor of Science in Information Technology, De La Salle University, Dasmariñas **Escobido, Bryan,** Bachelor of Science in Information Technology, De La Salle University, Dasmariñas

#### Abstract:--

"IceWater" is a 3D multiplayer game. In multiplayer, the game is played by a maximum of six players and a minimum of three. The game can be also played in single player.

The concept of the game is adapted to the classic Filipino game "Ice Water". It has similar mechanics, except the researches added more features to the game. It is also partly like a tagging game, but it does not include the freezing part. The game has difficulty level of Easy, Medium and Hard. Each stage has three levels.

"IceWater" is an "Action-Multiplayer" game. Complete challenges by fighting with enemies and use a character of the player's choice to represent yourself and jump into the action all together with many players. The target audience of this 3D Multiplayer Game "IceWater" are those children starting at the age of twelve years old and above. Simply because, they are known as the Gen Z. The reason for choosing them is because they are in the era of "techy" generation where most of the kids won't go outside to play. In this way we want them to learn and appreciate how it feels like to play a classic Filipino game even though they are just playing with their mobile devices. The Theme of the "IceWater" is more of low poly type with different kind of ambience and entertaining design to make it more appealing to children.

The goal of the proponents for this thesis is to promote the culture of traditional Filipino games and to exhibit the fun of them to the children of today's generation.

### Deterrorize: 3D Mobile Game

Barcelon, Kenneth Louise A, Bachelor of Science in Information Technology, De La Salle University, Dasmariñas Caayao, Jayvee A, Bachelor of Science in Information Technology, De La Salle University, Dasmariñas Monzon, Simon John C, Bachelor of Science in Information Technology, De La Salle University, Dasmariñas

#### Abstract:--

Deterrorize: 3D Mobile Game is a mobile game/application for Android mobile platform. This game is about terminating the evil within the terrorists that are invading different parts of the Philippines.

The game's main concept was inspired by the recent event that happened here in the Philippines. A place in Lanao Del Sur called Marawi was invaded by a terrorist group who claimed to be associated with Islamic State of Iraq and Syria (ISIS).

Deterrorize is a game that instead of killing the bad guys, the weapons of the protagonist make the bad guys, good. The weapon removes the evil thoughts and personality from the terrorists and increases the goodness within them, helping them turn over a new leaf. As the level go up, the number of terrorists increases, and their evilness are also heightened. Obstacles will arise upon each level, making it harder for the user to complete each level.

This project aims to create an Android mobile game that will tell the user to turn the terrorists into good guys instead of just killing them. This promotes non-violence methods upon dealing with people. It emphasizes the peaceful way of dealing with things to avoid resorting to violence that leads us to nothing.

21<sup>st</sup> WCASET

29th - 30th August, 2019

## iRize: Rice Production Management Decision Support System Using Decision Tree Algorithm

**Jennyfer D. Alasaas,** College of Communication and Information Technology, University of Northern Philippines, Vigan City, Ilocos Sur

Amando P.Singun Jr, Higher College of Technology, Muscat, Oman

#### Abstract:--

Agriculture has been one of the most important economic activities of man and is considered to be one of the largest and most significant industries in the world. This is perhaps with the fact that agriculture industry provides the basic necessities of man, particularly sustainable foods.

The integration of information technology in the field of agriculture facilitates and improves the efficiency of farmers' productivity by providing them timely data inputs for decision making. The need for them to have always updated with the latest information and issues regarding farming is necessary for them to become effective.

`This study aimed to design and develop a decision support system for the rice growers of the first district of Ilocos Sur. The proposed iRize: Rice Production Management Decision Support System using Decision Tree Algorithm aims to guide the rice growers in their farming activities particularly on pest management and on making decisions concerning to rice farming.

The researcher adopted the Rapid Application Development software process as a methodology in the development of the system. The model consists of four phases, namely: Requirements Planning, User Design, Construction, and Cutover. Series of interviews were conducted to the agriculturist and rice growers to determine the problems and challenges they encounter during cropping period. Data were gathered through questionnaires.

#### Keywords:--

Decision Support System, Rice, Rapid Application Development

21<sup>st</sup> WCASET

### Android Application: PlaceDat-local place finder

**Kieyron Mae P. Vidal,** Student, De La Salle University- Dasmariñas, Cavite, Philippines **Alyssa Jane S. Irarum,** Student, De La Salle University- Dasmariñas, Cavite, Philippines

#### Abstract:--

"It's more fun in the Philippines!" as the saying goes, Philippines is such an amazing and beautiful country, from its incredible places like paradise islands, beautiful nature and mouthwatering foods, right through its lovely local spots. In addition, it is an affordable country to travel; you will get great value for your money. And since the world has become more and more mobilized, many developers create applications that would capture the attention of the users, and would be very useful. PlaceDat is an application that shows the different places in the Philippines specifically in Luzon area. It is not just the place, but it is categorized by the activity that can be done in specific place. It is a local place finder and travelling application that is on the go for Filipinos, and for tourists who want to explore the Philippines specifically the rich regions in Luzon.

With the use of Agile methodology, the researchers were able to develop an application using Android Studio platform. The Java programming language makes the application more efficient and user-friendly.

The application's software quality was evaluated with an average rating of 4.62 where 5 is the highest scale based on the ISO 9126-1.

# Synthesis, Structural, Morphological& Mechanical studies of Mg2+ and Gd3+ co-doped Ceria electrolyte system for LT-SOFC

**Koteswararao P,** Department of Physics, Institute of Aeronautical Engineering College, Dundigal, Hyderabad, Telangana, India **M Buchi Suresh,** Center for Ceramic Processing, International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Hyderabad, Andhra Pradesh, India

B N Wani, Chemistry Division, Bhabha Atomic Research Centre, Trombay, Mumbai, India

P V Bhaskara Rao, Department of Physics, Olega University, Ethiopia

L.D.Jadhav, Department of Physics, Raja ram College, Kolhapur, Maharashtra

#### Abstract:--

This paper reports the effect of  $Mg^{2+}$  addition on the structural, micro structural & mechanical properties of  $Ce_{0.8}Gd_{0.2}O_{2-\delta}(GDC)$  electrolyte for low temperature solid oxide fuel cell application. The  $Mg^{2+}$  (0, 0.5, 1 and 2 mol %) doped GDC solid electrolytes have been prepared by solid state method. The sintered densities of the samples are around 95%. XRD study reveals the cubic fluorite structure. The microstructure of the samples resulted into grain sizes in the range of 4.3 to 0.868  $\mu$ m. Raman spectra also confirms the presence of GDC single phase. Mechanical properties of Mg doped GDC samples discussed.

#### Keywords:--

Conductivity, GDC electrolyte, impedance, ionic conductivity, activation energy

21<sup>st</sup> WCASET

## Measuring the quality of banking services in Sulaimanyah by using SERVQUAL (The case of Cihan Islamic Bank)

Mustafa Othman Alsaigh, Cihan University Sulaimanyah Blesa Ibrahim, Cihan University Sulaimanyah

#### Abstract:--

The objective of this study is to measure the customer satisfaction gap and to reveal the gap between the perceptions of Cihan Islamic Bank customers and their expectations for the level of services provided by the bank through a sample customer questionnaire. SERVQUAL was used to measure the quality of service after it was developed to suit Quality of service offered by Cihan. The difference between perceptions and expectations has been measured in the areas of equipment and facilities, reliability in handling, responsiveness, trust in handling and customer care.

The methodology of scientific research imposed that this study include addressing the quality of performance as an important option in this regard, which must be consistent with international standards and current systems with a bias towards the leadership and firmness.

**29<sup>th</sup> - 30<sup>th</sup> August, 2019** 

## Der Großmann: A Survival Horror Game Using A\* Algorithm

Nilsey Diaz, Student, De La Salle University – Dasmariñas, Cavite, Philippines
Grace D. Caibog, Student, De La Salle University – Dasmariñas, Cavite, Philippines
Michael Roi M. Tubid, Student, De La Salle University – Dasmariñas, Cavite, Philippines
Sherry B. Naz, Thesis Adviser, De La Salle University – Dasmariñas, Cavite, Philippines

#### Abstract:--

This game entitled, Der Großmann: A Survival Horror Game Using A\* Algorithm, was developed to bring entertainment to all gamers who are into interactive thrill and logical thinking. The development tools used for the game were Unity 3D for coding and animation, Autodesk Maya for designing the characters and settings, and other development applications necessary to make the game playable. The game was tested for quality of its performance using the ISO Model 9126-1 with the participation of high school and IT/CS students who were able to engage in the game firsthand. The outcome of the study was evaluated and assessed carefully resulting to a considerable and successful outcome.

29<sup>th</sup> - 30<sup>th</sup> August, 2019

### Security and Surveillance for human welfare

Nishant, Student, Department of Mechanical Engineering, Guru Govind Singh Indraprastha University, New Delhi

#### Abstract:--

**Problem-**Day to day problems have been arising, if we take the problems I saw in the hilly region of the Uttarakhand state of the India I was aimlessly sad, so I started doing research on their wire connectivity and network connectivity.

After watching those things continuously I came to conclusion that there are issues facing these were due to natural disaster, human and animal welfare. Either they were stolen or being damaged especially there solar plates and connectors.

**Solution-** I came up with the solution to develop a bio sensor identifying as a human being or the animal that will define the reaction of the security setup I will make for that that will be connected to a drone and the LED screen presenting the whole scenario.

**29<sup>th</sup> - 30<sup>th</sup> August, 2019** 

## Analysis of Sentiment Analysis Techniques

Nishit Hada, Department of Computer Science and Engineering, SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, India

**Shubhra Sushil Srivastava,** Department of Computer Science and Engineering, SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, India

#### Abstract:--

Sentiment analysis is an application of natural language processing. It is a very popular field of research in text mining. It is also known as emotion extraction or opinion mining. The basic idea is to find the polarity of the text and classify it into positive, negative or neutral. To perform sentiment analysis, one has to perform various tasks like data preprocessing, sentiment classification, polarity assignment, aspect term extraction, feature extraction etc. This paper presents the survey of main approaches used for sentiment classification.