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Title of the Article: Pandemic Risk Management in Construction Projects

Abstract: Construction projects undergo critical stages resulting to circumstances with high uncertainty and risk, which has been escalated by the pandemic. As the pandemic continues to overwhelm the world, its negative effects to the construction industry are clearly manifested. Health and safety risks in previous studies and researchers are not risk factors that has great impact to construction industry. However, the COVID-19 pandemic significantly increases the risks that needs intensive risk management techniques to continue construction operations.

This study seeks to identify emerging risks and explored risk management techniques applied by construction companies in the Philippines in light of covid-19 pandemic. Findings of the study were based from a questionnaire survey on pandemic risk management in construction projects. Questionnaires were administered based on purposive sampling. Respondents were civil engineers and architects who are directly involved in management and administration of construction projects. The data obtained were analyzed and presented through frequency table and charts. As concluded, health and safety risk are the main risks factors that has effects on cost, time and quality of construction projects. Furthermore, these risks must be managed with great effort and coordination with the government to minimize its effects. In addition, the study is essential to construction industry to mitigate and control new emerging risk to ensure successful project completion.

Keywords: Construction, Pandemic, Risk, Risk Management

References:

Author(s): Bakul Vani, Devyani Chaturvedi, Preeti Yadav

Title of the Article: Grid Management through Vehicle-To-Grid Technology

Abstract: This research paper is based on a project which is a prototype on a smaller level of integrating vehicle-to-grid technology at the residential and commercial levels which can be expanded in future with the help of bi-directional AC-DC power converters and Control systems. Vehicle-to-Grid is a technology that allows energy to be supplied back to the power grid from the battery of an electric car for fulfilling the excess demand on the grid. It is depicted in the prototype with the help of TP charging module and embedded system i.e. Arduino to manage the ever-increasing energy demand from the grid. With the increasing environmental problems, modern automobile technology is innovating in the field of Electric Vehicles (EV) with lesser pollution and better efficiency. This has attracted a lot of attention, but the major hindrance faced is the availability of energy required to maintain the grid is resonance. We can overcome this by vehicle-to-grid technology in smart parking systems. When the EV is parked, energy may be drawn out or supplied to the EV through the grid depending upon the requirements of the grid and the vehicle’s battery. The implementation of this technology enables the stored energy in the electric vehicle to be transferred to the power grid and vice-versa.[13]

Keywords: Vehicle-to-Grid (V2G); Grid Management; Electric Vehicle (EV); Charging Station; Demand Side; Embedded system; Switching circuits.
Brain Tumor Detection using Enhanced Convolution Neural Network for MR Images

Abstract: Brain tumor is a mass that grows unevenly in the brain and directly affects human life. The mass occurs spontaneously because of the tissues surrounding the brain or the skull. There are two types of Brain tumor such as Benign and Malignant. Malignant brain tumors contain cancer cells and grow quickly and spread through to other brain and spine regions as well. Accurate and prompt diagnosis of brain tumors is essential for implementing an effective treatment of this disease. Brain images produced by the Magnetic Resonance Imaging (MRI) technique are a rich source of data for brain tumor diagnosis and treatment in the medical field. Due to the existence of a large number of features compared to the other imaging types. The performance of existing methods is inadequate considering the medical significance of the classification problem. Earlier methods relied on manually delineated tumor regions, prior to classification. This prevented them from being fully automated. The automatic algorithms developed using CNN and its variants could not achieve an influential improvement in performance. In order to overcome such an issue, the proposed one is automatic brain tumor detection system, which is “Enhanced Convolution Neural Network (CNN) Algorithm for MRI Images” for the detection of brain tumor is useful to detect and classify the Glioma part into low Glioma and high Glioma.

Keywords: MRI, Malignant, Brain Tumor, Classification, Convolution, Network
References:
Author(s): Yogesh J. Bhosale, Mayuresh B. Kedari, Tejas V. Tarawade, Abhishek S. Late

Title of the Article: Effect of Vegetation Cover and Shading on Thermal and Visual Comfort in Institutional Campus Outdoor Spaces in India

Abstract: This paper investigates the phenomenon of Urban Heat Island (UHI) in open spaces that when combined creates a problem at a city level. This paper will primarily focus on institutional campuses, wherein open spaces play a vital role for each and every user for interaction and other purposes. When architects and urban designers deal with the physical properties of a space, and therefore modify its material, thermal, and lighting characteristics, they influence the social environment as well. The method used in this study is the analysis of secondary data available so far. The aim of the study is to understand the UHI phenomenon in urban public spaces and suggest measures that would help mitigate the same and make it a better space in terms of comfort. It includes off-site measurement of climatic conditions on particular given day and observations of student behavior in the public spaces. The result is obtained by ENVI-met software simulation in the case study area of DCRUST university campus in Murthal, Haryana. The study area is located in the North part of India and has composite climate. This paper refers to research results showing the comparison of various cases that can be designed in an urban open space and with the help of simulation it shows the best combination to be used and how that combination changes the open space design by improving thermal comfort. It shows that in composite climate, the strategy of implementing thick and heavy foliage vegetation in combination with the water body (such as artificial ponds, swales, pits etc.) causing evaporative cooling that in return enhances the microclimatic environment and visual comfort for pedestrian walkability, usability of the open space and being acting against the anthropogenic heat.
Abstract: The effects of different concentrations of sulfate for erosion age on compressive strength, flexural strength, weight analysis, density loss and visual appearances for concrete specimens of different grades were investigated. Experimental studies were carried out on different grades of concrete (M25, M30 and M35). Concrete specimens were immersed in different concentration of sulfate solution i.e. 4.0pH, 5.0pH and 6.0pH. Reduction in compressive strength loss was noticed when the grade of concrete is increased from M25 to M35. The results of weight analysis and density analysis also confirm the compressive strength loss and flexural strength. Discoloration of concrete was noticed on the concrete blocks when left immersed in sulfate solution at 4.0pH, 5.0pH and 6.0pH for 75 days and 90 days. It appeared like flakes of concrete and resembled like mold growth.

Keywords: Compressive Strength Loss, Weight Analysis, Sulfates Attack, Concrete, pH Concentration.

References:

1. Xing Jiang et.al Effect of temperature on durability of cement-based material to physical sulfate attack https://doi.org/10.1016/j.conbuildmat.2020.120936
2. Fang Liu et.al External sulfate attack on concrete under combined effects of flexural fatigue loading and drying-wetting cycles https://doi.org/10.1016/j.conbuildmat.2020.118224
Title of the Article: A Proposed Load Balancing Algorithm Over Cloud Computing (Balanced Throttled)

Abstract: Cloud computing refers to the services and applications that are accessible throughout the world from data centers. All services and applications are available online. Virtual machine migration is an important part of virtualization which is considered as essential part in cloud computing environment. Virtual Machine Migration means transferring a running Virtual Machine with all its applications and the operating system state as it is to target destination machine where it continues to run as if nothing happened. It makes balancing between servers. This improves the performance by redistributing the workload among available servers. There are many algorithms of load balancing classified into two types: static load balancing algorithms and dynamic load balancing algorithms. This paper presents the algorithm (Balanced Throttled Load Balancing Algorithm- BTLB). It compares the results of the BTLB with round robin algorithm, AMLB algorithm and throttled load balancing algorithm. The results of these four algorithms would be presented in this paper. The proposed algorithm shows the improvement in response time (75 µs). Cloud analyst simulator is used to evaluate the results. BTLB was developed and tested using Java.

Keywords: (Amlb Algorithm, Balanced Throttled Load Balancing Algorithm, Cloud Analyst Simulator, Cloud Computing, Load Balancing, Round Robin Algorithm, Throttled Load Balancing Algorithm.)

References:


Author(s): Utkarsh Malik, Harpreet Kaur, Aditi Chaudhary

Title of the Article: Tweet Retrieval and Analysing the Trends

Abstract: We can’t disregard the importance of Social Media in Today’s Technology Era. Internet is almost in every hand. People uses various Social Media platforms to express themselves and their thinking about various topics such as Politics, Entertainment, Sports, etc. In the Data Science industry, trend analysis can be used for several purposes like marketing or product analysis. Twitter data has been used to analyze political polarization and the spread of protest movements.
Twitter is one of the most popular social media platform that allows the users to spread and share information. Twitter publishes the list of recent or latest topics named as “Trending Topics” which shows all the happenings in the world and what are the people’s opinions about those topics. This Trend Analyzer will work on a given set of tweets and generates a graph based on the tweets and shows the comparative popularity of the used hashtags. This Analyzer will examine a set of tweets using Python and text-processing techniques.

**Keywords:** In The Data Science Industry, Trend Analysis Can Be Used For Several Purposes Like Marketing Or Product Analysis.

**References:**

4. Soyeon Han, Hyunsuk Chung, Do Hyoung Kim, Publishing Switzerland 2014.

**Author(s):** Anjalin Joy, Caren Babu

**Title of the Article:** Design and Implementation of Multilayer Security for ATM Machines

**Abstract:** Automated teller machine (ATM) nowadays are a favourite sport for attackers as they are available everywhere and are much easier to rob. Generally, ATM attacks can be either physical ATM attacks or ATM-related fraud attacks. In this paper the idea of an ATM system with multilayer security is proposed with the help of internet of things (IoT), fingerprint identification and face recognition to improve the security of ATM. The physical ATM counter attacks can be identified by using specific sensors to detect changes in vibration and temperature in the ATM counter. To protect ATM related fraud attacks the proposed system has additional security features like fingerprint identification and face recognition along with ATM number verification. The convolutional neural network (CNN) and machine learning based face recognition is used in this work which is quite reliable. Failures in any of the above steps cancel the transactions and the proposed system provides multi layer security which makes it impossible for the attackers to break the ATM security. The proposed system will help to increase the security of the ATM and provide safe and secure ATM transactions.

**Keywords:** ATM, Card Verification, Convolutional Neural Network (CNN), Faces Recognition, Fingerprint Verification, Password Verification And Security.

**References:**

Title of the Article: New Corporate Tax: Impact of Corporate Tax Cut on Indian Economy

Abstract: On 20th December, 2019, the Central Government introduced the Taxation Laws (Amendment) Ordinance, 2019, which created a favourable taxing environment for the Companies. Through this Ordinance, section 115BAB, which covers all sorts of domestic companies, that is, any company formed and registered in India, was introduced in the Income Tax Act which offered a very low tax rate of 15% (17.5% including surcharge and cess) to the new manufacturing companies. This Ordinance also reduced the Tax rate for domestic companies to 22% (25.17% including surcharge and cess). Additionally under the new corporate assessment strategy, new organizations that set up assembling offices in India beginning in October and initiate creation before the finish of March, 2023 will be charged an at a viable pace of 17%. This move did cause a rise in the value of the stock in India, but through this paper, we plan to delve deeper into how this new introduction affected the economy of India – ranging from the stock market to the value of rupees against dollar, the idea behind introducing this Ordinance, while also touching upon what is Corporate Tax and the Corporate Tax system that was present before the introduction of section 115BAB.

Keywords: Corporate Tax, Taxation Laws (Amendment) Ordinance, Economy, Stock, Section 115BAB

References:


Author(s): Aarchi, Amartya Saha, Ankita Kumari, Anuradha Padhy, Anuradha Panda
Author(s): Darshit Mehta, Jagath Kumari Dungi

Title of the Article: PPP for Metro Project: A Case Study of Hyderabad Metro

Abstract: The new metro rail policy was enacted by the government of India in the year 2017. Under this policy, under section xiv, the Government of India (GOI) made it compulsory to seek Public-Private Partnership (PPP) for metro projects which are intending to seek financial assistance from the central government. Hyderabad Metro is by far the largest metro project to be executed under PPP, but is it successful? This paper investigates various factors that affected the timeline of the Hyderabad metro. It evaluates various aspects in the pre-construction, construction, and post-construction phase of the Hyderabad metro. Finally, suggestions are made in the form of conclusions that would increase the likelihood of a successful PPP in the metro.

Keywords: Public Private Partnership, Hyderabad Metro, Metro Project, New Metro Rail Policy

References:

Nowadays we have seen so many road accident cases occurring and also increasing day by day. According to the statics of World Health Organization (WHO) 20-50 billion people were losing their life due to these accidents. To avoid such problems we came up with a proposed system called connected vehicles. Vehicle to Vehicle communication is a wireless broadcast that transmits the data between the connected vehicles. The main motive of this connected vehicles is safe travelling without any obstacles between the vehicles. Road accidents are the serious issues for human life for both individuals as well as the economic aspects. So our proposed system “Connected Vehicles” will reduce the accident cases by communicating with the nearer vehicles and shares the necessary information regarding the accidents cases to nearer vehicles.

**Keywords:** Connected Vehicles, Road accidents (key words)

**References:**
3. Alfred Daniell, Anand Paulil, Awais Ahmad, Seungmin Rho " Cooperative Intelligence of Vehicles for Intelligent Transportation Systems (ITS)" School of Computer Science and Engineering, Kyungpook National University, Daegu, Korea.
Title of the Article: Wireless Speed Control of Vehicles with Detection of Person & Zebra Crossing

Abstract: Pedestrians crossing zebra lines are one of the major concerns for road accidents. Nowadays, the number of road accidents increases due to careless driving and pedestrian motions at crosswalks. It is necessary to detect both person and zebra crossings properly and control vehicle speed accordingly. Here in this paper, a suitable solution that improves both detections can be introducing. Here used the TensorFlow Single Shot Detection (SSD) model is the best and most convenient trained model for Zebra line and person detection. A database is taking for the analysis. The input image could process as a crosswalk detection, which has more used for zebra crossing identification via the SSD model. Suppose detected the person and zebra crossings were at the same time. In that case, it will perform commands such as run, slow down, stop, horn, etc., with the help of wireless serial communication Universal Asynchronous Receiver-Transmitter. A Bluetooth command signal matches UART, which provides the vehicle with the necessary control inputs to execute the prescribed topology properly. Simultaneous detection of pedestrians at zebra crossings is a critical factor. It results most efficiently and to identify the person detection.

Keywords: Crosswalk, Pedestrian, TensorFlow, Single Shot Detection (SSD), Universal Asynchronous Receiver-Transmitter.

References:

Author(s): Ann Zenna Sajan, G R Ganaa King

Title of the Article: Generic Fabrication Technique of Graphene Based RF Sensor towards Biological Application

Abstract: Herein presented, we demonstrate that a sensitive sensing/detection element was obtained from the laser treatment of a non-conducting flexible material exploiting laser machine, which can then potentially deploy as sensing element of a biosensor for possible usage in to sense and obtain the presence and quantity of the interested sample. The goal is to study and advance innovative means of fabricating a low-cost graphene sensor, employed as a Radio Frequency (RF) filter for disposable biomedical purposes. A material like Graphene can be fashioned by laser irradiation (Laser scribe) of Kapton tape implemented as a filter. The manufacture of the filter geometry was accomplished by means of a laser machine irradiating a Kapton tape on a chosen substrate (for this work a Flame Retardant 4 (FR-4)), by the application of the previous gotten parameters for the production. Various laser power values were employed for their manufacture and their corresponding conductivity was observed to range from 171 x10-6 S/mm to 279 x10-6 S/mm. The Raman spectrum results of the produced material has a D band peak at 1349.76 cm-1, a G band of 1587.73 cm-1 and a 2D band peak of 2693.34 cm-1. The ANSYS high-frequency structure simulator (HFSS) (for the Analysis of the System) simulation results signifies good outcomes, and opportunities to improve the material.
Fuel Spill Monitoring for Fishing Smack using Raspberry Pi

Abstract: Fuel spill monitoring for fishing smacks is a live fuel leak detector that can alert the vessel's crew and captain about the leakage by using a web camera connected to a Raspberry Pi. The fuel spill was resolved using the Convolution Neural Network (CNN). Also, the Coast Guard and the Environmental Protection Agency were informed about the location of the oil discharge through telegrams. Here, a picture of the spill, as well as its latitude and longitude, a live Google map location, and a no spill picture with a GPS location whenever the spillage stops, will be shared. As a result, the team could take immediate action without delay. This spill detection system is linked to an accident detection system. Hence, we can safeguard fishing vessels and marine activities without any harm to human kind, as well as to the living beings in the sea.

Keywords: Convolution Neural Network, Machine Learning, Oil Spill, Raspberry Pi
Abstract: In the present time, there are lot of web and software developer who provides different types of databased and online system to ease the burden of the different supply officer’s/inventory officers of different companies and government sectors but Cagayan State University is one of the big universities that remained inventory management in a manual way. This study together with the development of SEIMTMS was conducted to innovate the current system used and to abolish the difficulties and challenges encountered by the Supply Office staffs in inventory management, record keeping, monitoring and tracking, and report generation. Classification and clustering techniques were utilized to produce information and comprehensive decision support reports that aids the Supply Officer and University administration on decision-making and budget allocation. Furthermore, the system used Clustering technique together with MFP algorithm to forecast the frequently purchased supplies and frequently repaired equipment. These decision support reports are essential for Office Heads in identifying items to be purchased for a particular quarter. With the use of ISO/IEC 25010:2011 Software Quality Standards, the system was evaluated by IT Experts with a mean 4.67, qualitatively described as “very great extent”.

Keywords: Classification Techniques, Clustering Techniques, Data Mining, Inventory Management,

Author(s): Abhishek Kumar, Jayant Singh

Title of the Article: “Design and Development of Tractor Drawn Subsurface Manure and Seed Applicator”

Abstract: Organic farming is now recognized as the best known alternative to the conventional agriculture, where cultivation and raising of crops and best quality of food is grown without any harm to the soil health, environmental and to the human being and microorganism present in the soil. Efficient organic nutrient supply to plant in adequate quantities to sustain most plant growth and yield while minimizing the environmental affected by the use of large quantities of inorganic fertilizers and pesticides which reduces the soil characteristics and productivity. Vermicom post is the major alternatives for organic farming with higher plant nutrients. Therefore, a tractor drawn subsurface manure and seed applicator was designed and developed in Farm Machinery and Power Engineering Department, G.B.P.U.A&T Pantnagar, Uttara khand for placement of vermicom post (organic manure) at a depth of 50 to 200 mm below the soil surface. Firstly the frame for vermicom post and seed hopper was fabricated according to the desired capacity of vermicom post manure hopper. Six rectangular orifices were provided for delivery of manure at the middle of the bottom surface of the manure hopper. A counter shaft was fixed on the frame which was driven by the ground wheel and rotated the horizontal screw conveyor shaft of the manure hopper as well as seed hopper shaft by means of chain-sprocket arrangement. The velocity ratios between the ground wheel and the manure and fluted roller shaft were 2:1. The manure hopper shaft and fluted roller shaft were rotated at 14, 35 and 41 rpm when tractor forward speed 2, 4 and 6 km/h, respectively. Two depth control side wheels were provided below the frame to adjust the depth of cut of machine in field operation. A furrow opener was designed to penetrate into the soil at the desired depth and placed the vermicom post and seed below the soil surface.

Keywords: Vermicom Post, Placement Of Manure, Wheat, Screw Conveyor, Fluted Roller, Furrow Opener

References:
Title of the Article: Web Browsing with Edge Computing

Abstract: Webpages have become increasingly complex in recent years, with longer loading times to match. This paper uses tailored edge computing to address this issue. As is customary, a grip server interacts with cloud web servers in edge computing. In a footing server, on the other hand, is a personalized edge computing system. referred to as a foothold. The Server in the Middle (ESM) collaborates with other servers. users’ cell phonesThis research focuses on two strategies based on personalized edge computing: edge aided caching and edge aided reprioritization. Edge-assisted caching decreases the time it takes for a page to load. Because an ESM saves the cached data on mobile devices, So far, we've got components. Edge helps in the reprioritization of forces on the internet. browser to show visual components earlier and lowers the amount of white space. Time spent in front of a screen. In addition, the ESM uses HTTP/2 rather than HTTP/1.1. This decreases the number of interactions between a mobile device and, as a result, the ESM, allowing advanced functionalities to be used, such as priority and server push. Edge-assisted caching has been implemented. built in a high-end PC for Google’s web browser Chrome for Android is a mobile web browser. Edge aided in an experiment, according to the results. The time it took for a popular website to load was cut in half because to caching. 59 percent in a network that is extremely congested. Another experiment found that edge-assisted reprioritization cut the white screen time of a webpage with a lot of photo photos by 21%. edge computing, reprioritization, mobile device, index terms browsing the web, caching.

Keywords: This decreases the number of interactions between a mobile device and, as a result, the ESM, allowing advanced functionalities to be used.

References:


11. HTTP/2 has a significant Percentage of global Internet traffic. [Online]. https://w3techs.com/technologies/details/ce-http2/all/all/all/all/all/all/all/all/all/all/all/all/all/all/all/all/all/all/all/all/all all/all/all/all/all/all/all/all/all/all/all/all [Accessed: 14 June 2019]


Author(s): R. Ramakrishna, R. Gautham Goud, Alemayehu Sbhat

Title of the Article: Time Series Analysis of Trend and Variability of Monthly Total Rainfall.

Abstract: The long-term variation in rainfall, one of the most important conditions for the climate in a particular region. The purpose of this study was to analyze the total monthly rainfall in the Maychew region. The Maychew meteorological station has been calculated for the period 2007-2018. The data were analyzed with the help of Minitab-14, R-3.3.1 an Overview of the descriptive statistics and unvaried. Box-Jenkins method, The seasonal ARIMA model was built to analyze the observed data and forecast the total rainfall, after the detection of non-stationarity using the Augmented Dickey-Fuller Test is a Test, and time plot. Some of the main findings of the study indicated that the monthly total rainfall tends to increase. In addition, it was found that, on the basis of the data contained in the history of the last twelve years of age. In addition, the descriptive statistics show that the average amount of rainfall in the Maychew is 58.82. After non-seasonal the first-order differentiation and once seasonal series, differentiation, they will be moved. A time series model for the Maychew Station and was adapted to be processed, diagnostically tested, and ultimately, to be obtained by SARIMA (3, 2, 2)*(0, 2, 2)12 a model has been created, and this model was used to Forecast the two years monthly values of the total rainfall. The forecasted accumulated rainfall values showed a similar pattern to the previous reports.

Keywords: Box-Jenkins methodology, variability of rainfall, non-stationary, SARIMA

References:

Author(s): Binita Verma

Title of the Article: Social Media Analysis during Covid-19: A Systematic Review

Abstract: In 2020 and 2021, during this epidemic period, communication has never been so easy in human history. Social media plays an important role in disseminating information. Yet, there are many pros and cons challenges, and false information to consider. The use of these resources can help to quickly disseminate valuable information, findings in specific new research, exchange guidelines for analysis, treatment, and compliance, and also comparisons of various methods around the world. It is recommended that we follow certain guidelines when sharing information on social networks during COVID-19, to use these resources effectively and efficiently. This study highlighted the review o-19 and encouraged further efforts to clarify this field of research.

Keywords: Covid-19, social media, Pandemic, Coronavirus

References:


Author(s): Aminibibi Saidalvi, Maisarah Noorezam, Nursyuhada Zakaria, Nadzrah Sa’adan, Wan Farah Wani Wan Fakhiruddin, Nurul Nadijah Rasdi, Sharifah Amani Syed Abdul Rahman

Title of the Article: Diploma Engineering Students’ Perceptions of Online Distance Learning

Abstract: The Covid-19 pandemic and the subsequent Movement Control Order (MCO) has resulted all formal classroom learning for 4.9 million students at all levels of education in Malaysia was suspended since March 2020 till to-date. Educators were advised to shift from traditional face-to-face classroom meetings to distance learning mode; online or offline platforms. However, the reality is, the majority of the students are still grappling with e-learning, inadequate equipment, and an un conducive environment making the adoption of home-based e-learning even harder. There is no evidence on how Diploma engineering students are experiencing this new normal. Having realised the importance of getting first-hand information regarding online distance learning (ODL) experiences, this study investigated Diploma engineering students’ ODL experiences amidst COVID-19. An online survey using Google Forms was utilised to collect data for three weeks from 486 Diploma level students in a university from the southern region of Peninsular Malaysia. Using descriptive quantitative and qualitative analysis, the distribution of study participants, learning experiences, and expectations on educational decisions of ODL was investigated.
The findings highlight the need to transform education for more tech-based lessons for the millennials and there is a need to a properly planned ODL implementation with full support from all involved in ODL mode. As classes move online in the foreseeable future, the findings of this project will benefit UiTM and the government in restructuring digital education post-Covid-19 to develop employability and the productivity of the future generation.

**Keywords:** Online Distance Learning (ODL); Students’ Perceptions; Covid-19 Pandemic, E-Learning

**References:**
Abstract

Title of the Article: Covid-19’s Impact on Attitude & Intention to Use Mobile Banking Applications

Recent research has investigated the determinant factors of customers’ adoption of digital banking. But, after the spread of Corona 19 virus and world-wide pandemic, the customer behavior, traditional and digital market dynamics have changed. This study focuses on understanding the attitude and intention of customers to use mobile banking applications, digital banking marketing strategies and consumer behavior, especially during Covid-19 lock-down, in a developing country, Turkey. It is argued that service-wise attributes (e.g. usability) of mobile banking applications and personal traits (e.g. innovativeness) of bank customers have a positive impact on attitude towards and intention to use mobile banking applications. Besides, it is claimed that Covid-19 pandemic has accelerated customers’ intention to use mobile technologies including mobile banking apps.
The study aims to put forward the generational differences in terms of mobile banking usage, as well. The comprehensive model derived from Technology Acceptance Model (TAM) [18] with some extensions from Unified Theory of Acceptance and Use of Technology model [76], were tested using IBM SPSS and AMOS, through the survey delivered to 702 customers, which were chosen through convenience sampling. An e-mail survey has been shared with Turkish customers, after the first wave of Covid-19 pandemic, in June 2020. The results revealed that, usability, security, enjoyment and performance of mobile banking applications have positive and financial risk has a negative impact on attitude towards mobile banking and attitude has a positive impact on intention to use mobile banking applications (Five of hypothesis of the model are found to be highly significant (0,001). The CFI of the model is 0.898, where R2 is 0.490). Generation Y customers have a more positive attitude and intention to use mobile banking, compared to Generation X, as well as Baby Boomers. Besides, despite the economic recession and shrink in usage of traditional banking channels, Covid-19 pandemic has improved digital customers’ intention to use mobile banking applications. The research contributed to establish an enriched TAM, covering both functional, social and risk aspects of mobile banking. For the practitioners, the research has created value-added findings and recommendations for digital marketing strategies of organizations including investment proposals on functionality and security of their mobile banking services, as well as further penetration in Generation Y customers, during the pandemic.

Keywords: Technology Adoption, Mobile Banking, Pandemic, Digitalization

References:
61. M. Sally, W. Heidi, E. Christine, “Applying the technology acceptance model to the online retailing of financial services” International Journal of Retail & Distribution Management, 2006, ISSN: (9595-0552
64. F. Ö. Sayan, 2020, “Government IT Summit - How much the Internet usage has been increased due to Covid-19, in Turkey?” Available:https://www.donanimhaber.com/turkiye-de-koronavirus-nedeniyle-internet-kullanimini-ne-kadar-artti--121964
Title of the Article: A Smart Device for the Prediction of Epileptic Seizures using Machine Learning Algorithms

Abstract: More than 65 million people live with epilepsy. The unpredictable nature of epileptic seizures drastically increases the risk of injury, especially in daily activities such as walking or driving. The purpose of this project is to develop an accurate prediction device that utilizes raw EEG data for the prediction of epileptic seizures to alert patients of an oncoming seizure beforehand to escape dangerous situations.

Using the raw EEG data, features were extracted by computing the average power spectral density of different brain waves after applying the Fast Fourier Transform. These features were used as the input dataset to the machine learning algorithms. Each model is tested with new unseen data using various metrics such as accuracy, precision, recall, and F1 score. The highest performing algorithm, Random Forest (RF) produced a prediction accuracy of 99.0% and a precision of 99.3%. Channel importance is calculated for the RF algorithm. This analysis helped to reduce the number of channels from 22 before feature importance to only 7 channels with significant hits to performance metrics.

Using the RF algorithm, an embedded program is developed to run on a portable, low-power hardware device to predict the onset of a seizure. The hardware includes BeagleBone Black microcontroller running open-source software and a Bluetooth transmitter-receiver to transmit the prediction to smartphone devices. By reducing the number of EEG channels to 7 channels, the system is more convenient for a future wearable device. Hardware with the ability to predict epileptic seizures can save many patients from potentially dangerous situations such as driving or swimming. It can help many patients in their daily lives by removing the uncertainty and improving their quality of life.

Keywords: Channel importance, Feature extraction, Machine learning algorithms, Seizures, Spectral density

References:
10. What are Brainwaves 1? Types of Brain waves | EEG sensor and brain wave – UK. https://brainworksnurotherapy.com/what-are-brainwaves

Author(s): M Nalini Devi, R Srinu Naik
Title of the Article: Generalized Approach for DCPWM Based Dual Inverter Fed OEWIM-DTC Drive.

Abstract: A generalized procedure of decoupled pulse width modulation (DCPWM) based on Method called Direct Torque Control (DTC) for Open Ended Winding Induction motor drive (OEWIM) is anticipated in this paper. This drive topology uses two isolated dc sources with equal magnitudes, feeding two standard two level three-phase inverters. To overcome the complexity in classical space vector pulse width modulation (SVPWM) algorithm, a simple generalized approach is presented in this research by using the phase voltages. With this procedure, various PWM algorithms can be generated by varying a constant value. The dual inverters are operating independently with half of the switching frequency. To show the usefulness of proposed PWM fed DTC drive, simulation results analysis has been carried out by using MATLAB and results obtained.

Keywords: DTC, Generalized PWM, SVPWM, OEWIM.

References:

Author(s): Kartik Madkaikar, Manthan Nagvekar, Preity Parab, Riya Raikar, Supriya Patil
Title of the Article: Credit Card Fraud Detection System

Abstract: Credit card fraud is a serious criminal offense. It costs individuals and financial institutions billions of dollars annually. According to the reports of the Federal Trade Commission (FTC), a consumer protection agency, the number of theft reports doubled in the last two years. It makes the detection and prevention of fraudulent activities critically important to financial institutions. Machine learning algorithms provide a proactive mechanism to prevent credit card fraud with acceptable accuracy. In this paper Machine Learning algorithms such as Logistic Regression, Naïve Bayes, Random Forest, K-Nearest Neighbor, Gradient Boosting, Support Vector Machine, and Neural Network algorithms are implemented for detection of fraudulent transactions. A comparative analysis of these algorithms is performed to identify an optimal solution.

Keywords: Error Back Propagation Algorithm (EBPA), K-Nearest Neighbor (KNN), Support Vector Machine (SVM).

References:
1. An Experimental Study with Imbalanced Classification Approaches for Credit Card Fraud Detection SARA MAKKI 1,2, ZAINAB ASSAGHIR2, YEHIA TAHER3, RAFIQUIL HAQUE4, MOHAND-SAID HACID1, AND HASSAN ZEINEDDINE2.
2. Credit Card Fraud Detection by using ANN and Decision Tree Jasmine A Hudali*, Kamalakshi, K P Mahalaxmi, Namita S Magadum, Prof. Sudhir Belagali.
4. ICRTAC 2019Credit Card fraud detection using ML algorithms by Vaishnavi Nith Dornadula, Geetha Sa.
5. Credit Card Fraud Detection using Various Methods and Techniques by Vasta et al.
6. Credit Card Fraud Detection: A Realistic Modeling and a Novel Learning Strategy Andrea Dal Pozzolo, Giacomo Boracchi, Olivier Caelean, Cesare Alippi, Fellow, IEEE, and Gianluca Bontempi, Senior Member, IEEE.
7. An Intelligent Approach to Credit Card Fraud Detection Using an Optimized Light Gradient Boosting Machine ALTYEB ALTAHER TAHAN SHARAF JAMEEL MALEBAR.

Published By: Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP)
Abstract: Generally, it is quite difficult for Japanese language learners to acquire Japanese special morae, namely, geminate, syllabic nasals and long vowels compared to independent morae. Among these three special morae, geminate is particularly difficult, and it takes much longer to fully acquire both production and perception of it. Especially for learners of Chinese native speakers, previous studies has shown that both production and perception of geminate are difficult in terms of the fact that not only no geminate is found in Chinese language, but also the phonological interaction between Japanese accent and Chinese tones. However, in the field of Japanese speech acquisition, research has not making progress because of a major problem, that is, researchers themselves manually create the acoustic experiment stimuli. Therefore, in this study, as a method to solve this problem, we propose an algorithm that automatically inserts geminate into the audio data used in Japanese speech acquisition research. This algorithm automates the insertion of geminate by performing three processes in order: mora extraction by noise removal, matching of original audio data and extracted mora, and insertion of soundless duration and geminate. The algorithm makes it possible to remove the noise, which is -50 dBFS and continues for 10ms or more, and replace it with soundless duration instead, allowing Japanese native speakers to percept it as geminate. The accuracy was equivalent as a result of comparing the data that was manually modified by a phonology researcher with the data that was generated by the algorithm. The result shows that the algorithm can be a practical solution for the automation of geminate insertion.

Keywords: Acoustic processing, Japanese language learning, geminate, noise reduction, algorithm

References:
Author(s): K. Venkateswararao, G. Joga Rao
Title of the Article: THD Minimization in Cascaded H-Bridge Inverter using Optimal Selective Harmonic Elimination.

Abstract: Cascaded structured multilevel inverters are gaining lot of importance due to their simple structure and easiness in implementation. In this paper, the optimum selective harmonic elimination method is employed for a nine level inverter to suppress the selected lower order harmonic, which reduces the total harmonic distortion of the inverter considerably. The Newton rapson algorithm is employed in finding the switching angles that minimizes certain lower order harmonics. The order of the harmonics that are eliminated are third, fifth, and seventh harmonics. All the simulation results included for a nine level inverter using SIMULINK. Index Terms: Nine level MLI, Control of inverter, Modular Inverter.

Keywords: THD, optimum angles, Iterative methods.

References:

Author(s): Guntramukkala Vamsi, P Kiran Kumar, G Joga Rao
Title of the Article: A Novel Method for Starting of VSC-HVDC System
A Reduced Switch Count Seven Level Symmetrical Inverter with Low Distortion

Abstract: Various types of new structures in multilevel inverters are evolving day by day. One among those is the reduced switch count type multilevel inverters. This inverter consists of low number of switches, gate driver components, and other switches like auxiliary switches. Depending on the value of the voltage sources we have symmetrical and asymmetrical multilevel inverters. In this paper, the seven level symmetrical inverter design is shown for seven levels in its output. The output voltage waveform is plotted and its FFT is performed and the THD values are shown. The inverter is simulated in SIMULINK software. Index Terms: Seven level MLI, inverter, and Modular Inverter.

Keywords: THD, FFT, Distortion factor.

References:
A Study on Federated Cloud Computing Environment

Federated cloud computing is the advancement in the area of the general cloud computing paradigm. In a federated cloud environment, multiple cloud service providers share their computing assets, servers, and various facilities to fulfill customer demands. Federated cloud computing terminology consists of the aggregation of services considered by interoperability characteristics and creates the integration of several cloud service providers regardless of any geographical location. It improves the performance, utilization of facilities, minimizes response time and pricing model by partial subcontracting various computing resources and facilities from the nearby cost-efficiency province. Customers also get profited from service level agreements signed between the cloud service providers through intermediator cloud brokers. This work aims to survey the federated cloud environment, its various architectural types, advantages associated with the federation, challenges associated with a federated cloud environment, and future research directions in the federated cloud computing research area.

Keywords: Cloud Architecture, Cloud Broker, Cloud Federation, Cloud Service Providers, Federated Cloud, Multi-cloud Deployment, SLA.

References:


Author(s): Pooja Tyagi, Anurag Sharma

Title of the Article: Implementation of Fraudulent Sellers Detection System of Online Marketplaces using Machine Learning Techniques

Abstract: The E-commerce proportion in global retail expenditure has been steadily increasing over the years showing an obvious shift from brick and mortar to retail clicks. To analyze the exact problem of building an interactive models for the identification of auction fraud in the entry of data into e-commerce. This is why the most popular site's business develops with retailers and other auction customers. Where viral customers purchase products from online trading, customers may worry about fraudulent actions to get unlawful benefits from honest parties. Proactive modesty systems for detecting fraud are thus a necessary practice to prevent such illegal activities. The shopping product is built according to the customer's requirements and is safer online and resting, and the rules and regulations that are necessary to follow no longer seem to be the best of workable selection, coefficient limits that facilitate the shopping product and make it easier for the user model to compete on each platform so that it can experiment.

Keywords: Online Marketplace, Fraud Detection, Machine Learning, Support Vector Machines.
References:

Author(s): Krishna Mohan Koyya

Title of the Article: Scalable Architectural Pattern for Integrating Syslog Servers with Splunk

Abstract: An enterprise infrastructure consists of several devices. The devices emit event notifications representing their current state. The devices without storage such as printers and routers are configured to send the event notifications in the form of syslogs to one or more remote syslog servers over the network. Depending on the size and usage of the enterprise infrastructure, millions of syslogs may be emitted per second. These syslogs are used by the system administrators to detect and address the anomalies in the infrastructure. The system administrators often integrate the syslog servers with Log Analysis tools that offer aggregation, analytics, and visualisation capabilities. Splunk is one such popular tool that can be integrated with syslog servers. This paper proposes an architectural pattern for syslog servers that are to be integrated with Splunk for better performance, scalability and resilience.

Keywords: Syslog, Syslog-ng, Splunk, Integration Patterns

References:
5. Ashish Kumar, Tulsiram Yadav, “Advanced Splunk”, Packt Publishers

Author(s): Sohag Sarker, Laila Arzuman Ara, Tahsin Alam, Tarun Debnath

Title of the Article: Design and Analysis of MIMO F-OFDM Systems for 5G and Beyond Wireless Communications

Abstract: F-OFDM (Filtered-OFDM) is a flexible waveform that has been considered suitable for 5G and beyond systems for its improved spectrum utilization, moderates PAPR, low OOB emission, multiple asynchronous sub-band...
transmission, and high robustness to frequency selectivity. It can attain a desirable balance between frequency and time localizations for narrow bandwidths. It is also MIMO friendly. In this paper, a comprehensive design and analysis have been made to evaluate the performance of MIMO (4x4) CP-OFDM and F-OFDM systems for message bits transmission using several digital modulation techniques (16-QAM, 16-PSK, 16-DPSK, 64-QAM, 64-PSK, and 64DPSK), RA channel coding, different windowed (Hanning, Hamming, Blackman, Blackman-Harris, RRC) sinc FIR filters for length N = 513, and MMSE signal detection technique. From MATLAB based simulation results, it is observed that F-OFDM reduces spectrum leakage thus enhances spectrum efficiency than conventional CP-OFDM. F-OFDM based system offers lower BER (Bit Error Rate) performance than CP-OFDM based system.

Keywords: OFDM, F-OFDM, MIMO, FIR Filter, RA coding, OOB, PAPR, BER, MMSE

References:


Author(s): Kamini Sharma, Anurag Sharma

Title of the Article: Connecting Through Zoom in COVID-19 Pandemic.
Abstract: In the Covid-19 pandemic where every working person is working from home to stay safe and to maintain social distancing. In mild of the corona virus crisis, the videoconferencing app has emerged as the usual for connecting with others face-to-face actually in each commercial enterprise and private settings.

In Covid19 pandemic the main trouble got here out turned into a way to live related with every other. Connectivity turned into the main trouble for anyone like in schools, colleges, universities, private sector, Government sector, spiritual sector, not unusual place human beings and plenty of more. Every task that become occurring physically among human beings went on-line via video conferencing apps Because within side the pandemic of COVID-19 no individual favored to have impact on their jobs or employment, studies, business, personal relationship, and lots of various relationships. In mild of the corona virus crisis, the videoconferencing app has emerged as the usual for connecting with others face-to-face actually in each commercial enterprise and private settings. There are many videos conferencing gear to be had like Google meet, skype, slack, join.me, GoToMeeting, Cisco WebEx, etc. Even in case, you do not work from home, you have heard of Zoom. Zoom has emerged as incredibly famous amongst all on this COVID-19 pandemic. Let us have a few mild at the Zoom video conferencing app.

Keywords: Zoom, Corona virus, COVID-19, Video Conferencing application, Google meet, skype, slack, join.me, GoToMeeting, Cisco WebEx.

References:
7. Ajayya Published on October 21, 2020: Zoom Limit: Maximum Participants, Call Duration, and More.
8. Zoom Meeting Timeouts, Limitations, Restrictions (informationtechnology.seinahieghts.edu).
10. Covid Impact on Meeting Apps like Google Meet, Zoom, Microsoft Teams Never Had It Better (By CNBCTV18.com May 31, 2021, 08:15 PM IST (Published)).

Author(s): Sahar Elshafei, Ehab Hassanein, Hanan Elazhary

Title of the Article: Paas EUD Tool for Developing Expert Context-Aware Mobile Applications

Abstract: Context-awareness enables systems to be tailored to the needs of users and their real circumstances at certain times. A noteworthy trend in software development is that an increasing number of software systems are being developed by individuals with expert knowledge in other sectors. Because most of the current context-aware development toolkits are intended for software developers, these types of systems cannot be easily developed by non-technical consumers. The development of tools for designing context-aware frameworks by consumers who are not programming experts but are specialists in the area of implementation would result in faster adoption of such services by businesses. This paper provides a cloud-based framework for people without programming experience to create context-aware mobile applications. The platform can provide a lightweight distribution of packaged applications that allows experts to send specified information to mobile users based on their context data without overlapping between the rules of the application. An energy-efficient mobile application was developed to acquire contextual information from the user device and to create quality data accordingly. The framework adopts Platform as a Service (PaaS) and containerization to facilitate development of context-aware mobile applications by experts in various domains rather than developing a tool for each domain in isolation, while considering multitenancy.

Keywords: End-user development; domain expert; context-awareness; containerization

References:
Author(s): Shweta Policepatil, Sanjeeva Kumar M. Hatture

Title of the Article: Masquerade Attack Analysis for Secured Face Biometric System

Abstract: Biometrics systems are mostly used to establish an automated way for validating or recognising a living or non-living person's identity based on physiological and behavioural features. Now a day’s biometric system has become trend in personal identification for security purpose in various fields like online banking, e-payment, organizations, institutions and so on. Face biometric is the second largest biometric trait used for unique identification while fingerprint is being the first. But face recognition systems are susceptible to spoof attacks made by non-real faces mainly known as masquerade attack. The masquerade attack is performed using authorized users’ artifact biometric data that may be artifact facial masks, photo or iris photo or any latex finger. This type of attack in Liveness detection has become counter problem in the today's world. To prevent such spoofing attack, we proposed Liveness detection of face by considering the countermeasures and texture analysis of face and also a hybrid approach which combine both passive and active liveness detection is used. Our proposed approach achieves accuracy of 99.33 percentage for face anti-spoofing detection. Also we performed active face spoofing by providing several task (turn face left, turn face right, blink eye, etc) that performed by user on live camera for liveness detection.

Keywords: Face Recognition; Pattern Recognition; Feature Extraction; Anti-Spoofing, Masquerade Attack;

References:
A Dynamic System To Adapt The Changes. In this work, we propose a LS batch based streaming processing approach. We experimented with streaming data that containing different kinds of anomalies as well as concept drifts, the results suggest that our model can sufficiently detect anomaly from data stream and update model timely to fit the latest data property. Index Terms: About four key words or phrases in alphabetical order, separated by commas.

Keywords: An Anomaly Could Become Normal During The Data Evolution, Therefore It Is Necessary To Maintain A Dynamic System To Adapt The Changes.

References:

Author(s): Raghav Agarwal, Tanishq Nagpal, Dibyajyoti Roy, Aju D.
15. Xiaohong Tang and Chen Li. The stream detection based on local outlier factor. 2015.

Author(s): Kajal Gupta, RK Sharma.

Title of the Article: Techniques of Indoor-Outdoor Scene Classification using the VGG-16 CNN Model.

Abstract: In the world of today, computers have begun to rule the people as the machines carry out practically every work that people can accomplish. Scene classification is one such concept that becomes increasingly important when robots replicate the actions of a human being Scene categorization may be done on interior or exterior scenes using various extraction techniques, as well as categorization of indoor and outdoor scenes in these two categories is more difficult. The methodology for the indoor/outdoor classification scene has the drawback of inadequate accuracy. This research aims to enhance the accuracy by using the Convolution Neural Network Model in VGG-16. This paper proposes a new approach to VGG-16 to classify images into their classes. The algorithm results are tested using SUN397- indoor-outdoor dataset & the tentative data reveal that the methodology proposed is superior to the existing technology for the scene classification of indoor-outdoor (I/U).

Keywords: Scene Classification, Indoor-Outdoor Classification, Deep Learning, Neural Network Model VGG 16, CCN, Data Augmentation, Imagedatagenerator, Optimizers.

References:
12. Zhehang Tong*, Dianxi Shi, Bingzheng Yan and Jing Wei,” A Review of Indoor-Outdoor Scene Classification”, 2nd International Conference on Control, Automation, and Artificial Intelligence (CAAI 2017),