3.3.2 Number of research papers per teacher in the Journals notified on UGC website for the Academic Year 2022-23

Year	2022-23
No. Research Papers	209

Principal

Principal
Vageswari College of Engineering
KARIMNAGAR-505 527.

ACS OMEGA

Open Access

http://pubs.acs.org/journal/acsodf

Article

Tanning Wastewater Sterilization in the Dark and Sunlight Using *Psidium guajava* Leaf-Derived Copper Oxide Nanoparticles and Their Characteristics

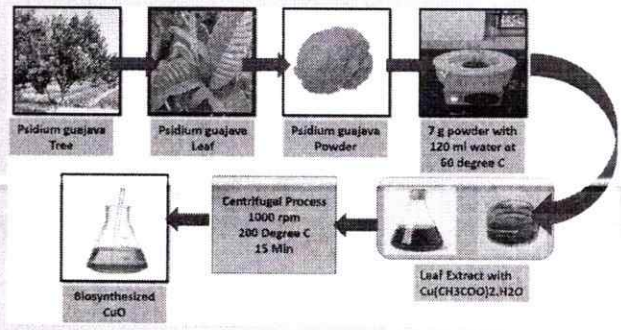
Natrayan Lakshmaiya, Raviteja Surakasi, V. Swamy Nadh, Chidurala Srinivas, Seniappan Kaliappan, Velmurugan Ganesan, Prabhu Paramasivam,* and Seshathiri Dhanasekaran

Cite This: *ACS Omega* 2023, 8, 39680−39689

Read Online

ACCESS | Metrics & More | Article Recommendations

ABSTRACT: Employing *Psidium guajava* (*P. guajava*) extract from leaves, copper oxide nanoparticles (CuO NPs), likewise referred to as cupric oxide and renowned for their sustainable and harmless biogenesis, have the possibility of being useful for the purification of pollutants as well as for medicinal purposes. The current study examined the generated CuO NPs and their physical qualities by using ultraviolet−visible (UV) spectroscopy. The distinctive peak at 265 nm of the CuO NP production was originally seen. Additionally, an X-ray diffraction (XRD) investigation was conducted to identify the crystalline arrangement of the produced CuO NPs, and a Fourier transform infrared (FTIR) spectroscopy examination was performed to validate the functional compounds of the CuO NPs. Additionally, the synthesized nanoparticles' catalytic activities (wastewater treatment) were analyzed in dark and sunlight modes. The catalytic properties of CuO NPs in total darkness resulted in 64.21% discoloration, whereas exposure to sunshine increased the nanomaterials' catalyst performance to 92.31%. By lowering Cr(VI), Ni, Pb, Co, and Cd in sewage by proportions of 91.4, 80.8, 68.26, 73.25, and 72.4% accordingly, the CuO NP demonstrated its effectiveness as a nanosorbent. Total suspended solids (TSS), total dissolved solids (TDS), chemical oxygen demand (COD), biological demand for oxygen (BOD), and conductance were all successfully reduced by nanotreatment of tanning effluents, with proportion reductions of 93.24, 88.62, 94.21, 87.5, and 98.3%, correspondingly.



1. INTRODUCTION

Water is the first naturally occurring substance abundant on Earth, making up over 80% of the crust's moisture content. It is a vital part of the ecosystem of water and is used by humans for drinking, whether for household, commercial, or other purposes. On the planet, water molecules exist in three states: fluid, vapor, and solid. Whether directly or indirectly, without any special treatment, the industrial operations throughout the production process emitted both liquid and solid wastes that contaminated the water.[1] Among such water pollutants are harmful sulfides, chromite minerals, textile-related pollutants from azo colorants, and tiny quantities of metallic elements. The release of harmful substances and industrial waste into bodies of water seriously threatens aquatic life, vegetation, and people's health. Consuming large amounts of waste from factories may lead to tumors and other illnesses, including jaundice, cardiac arrest, and digestive issues. Most of the world's population now lives in underdeveloped nations without access to clean groundwater.[2] The World Health Organization (WHO) claimed that 854 million people worldwide did not have access to basic drinking water facilities in 2019 and that 160 million individuals relied on water from the ground. According to worldwide research, by 2026, at least two billion individuals will consume fluid contaminated by excrement.[3,4] These factors make sewage treatment and discharge regulation critical to meet water needs and maintain aquatic environments. Due to their varied chemical, physical, and physiological features, many investigators have proposed employing environmentally friendly techniques to biosynthesize nanoparticles of metals and oxides for water treatment. Nanotechnology has been extensively employed in the last 10 years in countless biological uses, including medication

Received: July 31, 2023
Accepted: September 25, 2023
Published: October 9, 2023

https://doi.org/10.1021/acsomega.3c05588
ACS Omega 2023, 8, 39680−39689

Journal of Science and Technology
ISSN: 2456-5660 Volume 8, Issue 07 (July -2023)
www.jst.org.in *DOI:https://doi.org/10.46243/jst.2023.v8.i07.pp163- 168*

A Hybrid Framework For Travel Advice System Using Big Data And AI

Nusrath Zeeshan[1] | Dr.V.Bapuji[2]

[1]Department of MCA, Vaageswari College of Engineering,Karimnagar.
[2]Professor & HoD, Department of MCA, Vaageswari College of Engineering,Karimnagar.

To Cite this Article
Nusrath Zeeshan | Dr.V.Bapuji, "A Hybrid Framework For Travel Advice System Using Big Data And AI " *Journal of Science and Technology, Vol. 08, Issue 07,- July 2023, pp163-168*
Article Info
Received: 06-06-2023 Revised: 06-07-2023 Accepted: 17-07-2023 Published: 27-07-2023

ABSTRACT

In recent years, with the development of the internet and technology, the tourism industry has seen a significant increase in tourist numbers. The growing demand for personalized travel experiences has led to the development of travel advice systems for tourism. This helps travel agents find suitable travel destinations for clients, especially those unfamiliar with the location. Advisory systems are becoming more common in everyday activities like social networking and online buying. A hybrid framework for a travel advice system is proposed based on big data and artificial intelligence. The main aim of the system is to provide tourists with personalized travel planning based on user preferences and historical data. This allows the user to quickly locate what they are seeking for without wasting time or effort. It combines the strength of a content-based and collaborative filtering approach. To improve user affinity relationships and the quality of recommendations in the travel industry, a common recommendation filtering algorithm based on designations and user preferences has been proposed. Context-aware advice systems combine software computing and data mining to incorporate user profiles, social media history, and POI (points of interest) data. Suggestion system for a list of tourist attractions adapted to the preferences of tourists. Also acts as a travel planner by developing a detailed program that includes a multi-level framework for the travel advice system. Based on the traveler's experiences, the ratings (reviews) were also collected and analyzed to make better decisions for new travelers that advise tourist travel locations based on their previously rated venues. The algorithm searches the database for travel opportunities and uses text-mining techniques to find places of interest. the application of intelligent e-tourism consultation in tourism, focusing on interfaces, consultation algorithms, characteristics, and techniques of artificial intelligence. The goal aims to develop a hybrid travel advisory system that leverages intelligent e-tourism advice in the travel industry, focusing on interfaces and recommendations based on big data and artificial intelligence techniques.

KEYWORDS: Hybrid Advice system; Content-based Filtering; Collaborative Filtering; Context-aware system; e-Tourism; user preferences; trip planner.

1. INTRODUCTION

Tourism is a captivating domain. As it offers numerous destinations and attractions such as adventure, business, cultural/historical, etc. throughout the world for someone wishing to travel[1]. With such a large volume of options, travelers often need advice about where to go and what to see, Commonly, the tourist is helped by the travel agents who provide advice to tourists, but human factors like lack of memory and limited knowledge about the place can limit their ability to match their requirements against available options. However, the increasing number of choices and difficulties in locating services make it difficult for users to find what they are looking for[2], with the increasing demand for travel due to advancements in information and communication technology.

Factors such as availability of activities, affordability, popularity, and safety, influence a tourist's choice of vacation destination[3]. However, the efficiency of using the World Wide Web for finding a destination is questionable due to the lack of personalized information and can be complex and time-consuming for tourists. To address these issues, advice systems have been

Journal of Science and Technology
ISSN: 2456-5660 Volume 8, Issue 07 (July -2023)
www.jst.org.in *DOI:https://doi.org/10.46243/jst.2023.v8.i07.pp124 - 132*

Suspicious Account Detection Using Machine Learning Techniques

Afshan Anjum[1] | B.Anvesh kumar[2] |Dr.V.Bapuji[3]

[1]Department of MCA, Vaageswari College of Engineering, Karimnagar,
[2] Assistant Professor,Department of MCA,Vaageswari College of Engineering, Karimnagar,
[3] Professor & HoD,Department of MCA, Vaageswari College of Engineering, Karimnagar,

To Cite this Article
. Afshan Anjum, B.Anvesh kumar, Dr.V.Bapuji, **"Suspicious Account Detection Using Machine Learning Techniques"** *Journal of Science and Technology, Vol. 08, Issue 07,- July 2023, pp124-132*
Article Info
Received: 04-06-2023 Revised: 09-07-2023 Accepted: 17-07-2023 Published: 27-07-2023

ABSTRACT

In the current generation, social networking sites have become an integral part of life for most people. On social networking sites such as Facebook, Instagram, and Twitter, thousands of people create their profiles daily, interacting with each based on the classification for detecting Suspicious accounts on social networks. Here the traditionally way has been used for different classification methods in this paper.
The implementation of machine learning and natural language processor (NLP) techniques are done to enhance the accuracy of others regardless of location and time. Our goal is to understand who encourages threats in social networking profiles. To determine which social network profiles are genuine and which ones are Suspicious profiles, The support vector machine (SVM) and Naves bays algorithm technique can also be applied to achieve this strategy.

KEYWORDS: *Online Social network, Classification, Natural language processing (NLP), Facebook, Support vector machine (SVM).*

INTRODUCTION

Millions of participants and billions of minutes of usage make social networking a well-liked online network. However, there are many security issues and protection concerns, particularly with the threat of identity theft. The privacy regulations imposed by social networking service providers tend to be inadequate, making them vulnerable to manipulation and misuse. The advance in technology has led to an evolution of knowledge. Machine learning algorithms have emerged, emphasizing analyzing obstacles as well as data. Although handheld devices and social media outlets revolutionize communication and improve decision-making, they tend to be prone to violation of privacy. To identify users who conceal their identities. Research has focused on trained and untrained machine learning algorithms, with the vast majority accomplishing a precision of 50%- 96%. The techniques in use have become effective at ensuring personal information about users from harmful behavior.

In addition to the impact of the increasing popularity of social networking sites on the web, individuals are becoming more susceptible to increasing security dangers and weaknesses including being subjected to violations of privacy, fraud identities, unsafe programs, suspicious profiles, and harassment based on gender. To resolve those problems, security providers provide protective systems and surveillance technologies. Online interaction monitoring tools like those offered by monitoring make it easy to identify users and address security issues. as open social network (OSN) usage increases, it will become critical to address such problems by developing feasible solutions.

Journal of Science and Technology
ISSN: 2456-5660 Volume 8, Issue 07 (July -2023)
www.jst.org.in *DOI:https://doi.org/10.46243/jst.2023.v8.i07.pp133- 139*

5-6

Detection Of Cyber Attack In Network Using Machine Learning Techniques

Annam Pranitha[1] | Polu Satish[2] | Dr.V.Bapuji[3]

[1]Department Of MCA Vaageswari College Of Enginnering, Karimnagar
[2]Professor,Department Of MCA. Vaageswari College Of Engineering, Kraimnagar
[3]HoD, Department, Of MCA, Vaageswari College Of Engineering, Karimnagar

To Cite this Article
Annam Pranitha | Polu Satish| Dr.V.Bapuji, "Detection Of Cyber Attack In Network Using Machine Learning Techniques" *Journal of Science and Technology, Vol. 08, Issue 07,- July 2023, pp133-139*
Article Info
Received: 04-06-2023 Revised: 08-07-2023 Accepted: 17-07-2023 Published: 27-07-2023

ABSTRACT

Improvements in computer and communication technologies have produced significant developments that are standing put from the past. Utilising new technologies offers governments, associations, and people incredible benefits, but some people are opposed to them. For instance, the security of designated data stages, the availability of data, and the assurance of important information. Dependent on these problems, advanced anxiety-based abuse may be the current big problem. Computerised dread, which caused many problems for foundations and individuals, has manifested at a level where it might be used to undermine national and open security by a variety of social entities, such as criminal association, intelligent people, and skilled activists. In order to maintain a crucial distance from sophisticated attacks, intrusion detection systems (IDS) have been developed.

Learning to reinforce support is now taking place with accuracy rates pf 97.80% and 69.79%, respectively, vector machine (SVM) estimations were developed independently to recognise port compass attempts based on the new CICID2017 dataset. Perhaps instead of SVM, we can present some alternative calculations like CNN, ANN, and Random Forest 99.33, and ANN 99.11. To disrupt, disable, damage, or maliciously control a computing environment or infrastructure, to compromise the integrity of data, or to steal controlled information, a cyber-attack attacks an enterprise's usage of cyberspace's via cyberspace. Cyberspace's current state foretells uncertainty for the internet's future and its rising user base. With big data obtained by gadget sensors disclosing enormous amounts of information, new paradigms because they might be exploited for targeted attacks. Cyber security is currently dealing with new difficulties as a result of the expansion of cloud services, the rise in users of web applications, and changes to the network infrastructure that links devices with different operating systems. So by detecting the cyberattacks we can solve this problem.

KEYWORDS:
Intrusion detection system (IDS); CICID2017 dataset; ANN; CNN; Random Forest; Cyber space; Cybersecurity

INTRODUCTION

The world has recently witnessed a significant evolution in the numerous fields of related technologies like dazzling matrices, the internet of vehicles, long-distance improvement, and 5G communication. According to CISCO [1], it is expected that by 2022, there will be several times as many IP-connected devices as people on the planet. These devices will generate 4.8zb of IP traffic annually. This accelerated development

Journal of Science and Technology
ISSN: 2456-5660 Volume 8, Issue 07 (July -2023)
www.jst.org.in *DOI:https://doi.org/10.46243/jst.2023.v8.i07.pp140- 145*

Secure Mobile Cloud Storage

Bodasu Manisha[1] | Dr.V.Bapuji[2]

[1]Departmen of MCA, Vaageswari College of Engineering,
[2]Professor & HoD,Department of MCA, Vaageswari College of Engineering,

To Cite this Article

. **Bodasu Manisha | Dr.V.Bapuji , "Secure Mobile Cloud Storage "** *Journal of Science and Technology, Vol. 08, Issue 07,- July 2023, pp140-145*

Article Info

Received: 04-06-2023 Revised: 08-07-2023 Accepted: 18-07-2023 Published: 27-07-2023

ABSTRACT

Data may be stored on a cloud and accessible from anywhere using mobile devices thanks to mobile cloud storage (MCS). MCS services are provided for commercial use by sizable firms like Apple I Cloud, Dropbox, Microsoft One Drive, and Google Drive. Since customers may not fully trust clouds, data security may be achieved using encryption techniques. However, sensitive data, including location data, is frequently included in location-based apps. This exposed data can be used to deduce the client's behavior and encrypted data. For instance, 80% of search queries may be recognized by a searchable encryption system using a generic inference attack with access pattern leaking and little prior knowledge. The activity of the client can also be inferred via oblivious technologies, such as oblivious transfer and oblivious storage.This study presents a mobile cloud storage system that simultaneously safeguards data confidentiality and privacy while being effective, secure, and privacy-preserving. An oblivious selection and update (OSU) protocol built on onion additive homo morphic encryption with constant encryption layers serves as the underlying primitive. This dramatically lowers computation and transmission costs by enabling clients to covertly retrieve encrypted data items from the cloud and update them with new information. The suggested approach is more appropriate for MCS situations because it has beneficial characteristics such a fine-grained data structure, minimal client-side processing, and constant communication overhead. The "verification chunks" technique also confirms that the strategy is resistant to malicious cloud assaults. According to the comparison and assessment, the suggested plan is more effective than currently available oblivious storage options in terms of client .A valuable tool for distant storage, akin to cloud storage, is remote data integrity checking.

KEYWORDS: *Cloud computing, third-party verify, data, remote storage, cloud storage, CSP schema.*

INTRODUCTION

Cloud computing is gaining popularity in the business community due to its scalable,pay-on-demand,location-independent storage services. However, it also presents new security challenges, such as Data Loss & Leakage. To ensure data integrity, protocols must be developed that allow data owners to verify their data storage in the cloud. Cloud service providers (CSP) have become increasingly popular due to their ability to share data and process it efficiently at a low cost. However, the integrity of outsourced data is difficult to guarantee due to lack of transparency and the reputation of CSP. To design a secure and efficient audit mechanism for dynamic shared data in cloud storage, several challenges must be efficiently addressed. The traditional method of data integrity verification is to download all data from the data owner directly from the CSP and check the integrity of the data locally. However, this method wastes network transmission resources and local storage resources, weakening the advantages of cloud service.

The proposed scheme meets provable data possession, avoids certificate management problems, and achieves data privacy preservation without leaks of the data owner's identity information. As information

Journal of Science and Technology
ISSN: 2456-5660 Volume 8, Issue 07 (July -2023)
www.jst.org.in *DOI:https://doi.org/10.46243/jst.2023.v8.i07.pp152- 157*

8-9

An Efficient Single Instance Scheme With User Authentication To Cloud Data

Boini Vandana[1] |P.Sathish[2] | Dr.V.Bapuji[3]

[1]Department of MCA, Vaageswari College of Engineering, Karimnagar.
[2] Assistant Professor, Department of MCA, Vaageswari College of Engineering, Karimnagar.
[3] Professor & HoD, Department of MCA, Vaageswari College of Engineering, Karimnagar.

To Cite this Article

Boini Vandana |P.Sathish | Dr.V.Bapuji , **"An Efficient Single Instance Scheme With User Authentication To Cloud Data "** *Journal of Science and Technology, Vol. 08, Issue 07,- July 2023, pp152-157*

Article Info

Received: 06-06-2023 Revised: 07-07-2023 Accepted: 16-07-2023 Published: 27-07-2023

ABSTRACT

Cloud Storage is a computer data storage method where digital data is stored on servers in off-site locations, managed by a third-party provider. This enables organizations to store, access, and maintain data without owning and operating their own data centers. Cloud storage is scalable, allowing organizations to expand or reduce their data footprint depending on their needs. Users upload data to servers via internet, which is saved on a virtual machine on a physical server. Cloud providers often spread data to multiple virtual machines in global data centers to maintain availability and redundancy. Google Cloud offers various scalable options for organizations to store their data in the cloud. The widespread use of cloud computing has made data sharing and storage more accessible, but concerns about data integrity, efficiency, and privacy remain. Duplication, a popular method of data compression, is used to reduce duplicate copies of data in cloud storage.

However, data duplication also raises security and privacy concerns, as users' confidential data is vulnerable to attacks from insiders and outsiders. Traditional solutions for duplication, based on convergent encryption, provide confidentiality but do not maintain duplicate checks based on differential permissions. This paper proposes an approved data duplication plan that counts the number of users with differential privileges in the duplicate check.Users with differential privileges are added to the duplicate check, and files are encrypted with differential privilege keys to maintain stronger security. Users can only access files marked with matching privileges for copy checks.

A third-party auditor can confirm file occurrence after duplication in the cloud, ensuring timely uploads. This paper offers advantages for both storage providers and users through duplication systems and auditing methods.

KEYWORDS: *Cloud storage, Dropbox, Mozy, Perfect Hashing, Storage, Encryption, Attacks, Privacy*

1.INTRODUCTION

There will be 4 billion digital files stored in the cloud by 2020. Costs associated with management, upkeep, and handling are substantial. By keeping redundant information only once, information duplication techniques try to get rid of duplicate data. However, outsourcing sensitive data necessitates its encryption, which makes duplication attempts more difficult. Numerous solutions have been put out to deal with this problem, however they are hindered by things like brute-force attacks and the storage capacity limitations of the cloud.

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

Journal of Science and Technology
ISSN: 2456-5660 Volume 8, Issue 07 (July -2023)
www.jst.org.in *DOI:https://doi.org/10.46243/jst.2023.v8.i07.pp158- 162*

10-11

Effective And Efficient Detection Of Phishing Emails Using Machine Learning

Moola.Akshitha[1] | Dr.D.Srinivas Reddy[2] | Dr.V.Bapuji[3]

[1]Department of MCA, Vaageswari college of Engineering,Karimnagar
[2] Professor,Department of MCA, Vaageswari college of Engineering,Karimnagar
[3] HoD,Department, of MCA, Vaageswari college of Engineering,Karimnagar

To Cite this Article
Moola.Akshitha| Dr.D.Srinivas Reddy| Dr.V.Bapuji, "Effective And Efficient Detection Of Phishing Emails Using Machine Learning" *Journal of Science and Technology, Vol. 08, Issue 07,- July 2023, pp158-162*
Article Info
Received: 06-06-2023 Revised: 07-07-2023 Accepted: 16-07-2023 Published: 27-07-2023

ABSTRACT

Emails are widely used for personal and professional communication,often involving the transmission of sensitive information like banking details,credit reports,and login data.Consequently,these emails become valuable targets for cyber criminals who seek to exploit such knowledge for their own malicious purposes.Phishing, a deceptive technique employed by these individuals,involves impersonating well-known sources to deceive and extract sensitive information from unsuspecting individuals.The sender of a phishing email uses false pretenses to persuade recipients into disclosed personal information.In this work,the detection of phishing emails is learning methods to categorize emails as either genuine or phishing attempts.LMT classifiers have proven highly effective in accurately classifying emails,achieving optimal accuracy in email classification tasks.

KEYWORDS: Phishing,Emails,Efficient,Detection,Effective,Transmission.

INTRODUCTION

Phishing stands as the most prevalent form of cybercrime, involving the manipulation of victims to disclose sensitive information like account numbers, passwords,and bank details. Cyber-attacks commonly exploit email,instant messages,and phone calls[1,2].Despite ongoing efforts to update preventive measures,the outcomes have proven insufficient.Conversely,there has been a significant increase in phishing emails in recent years, underscoring need for more effective and modern countermeasures[3,4].Numerous approaches have been developed to filter phishing emails,but a comprehensive solution to the problem is still required.This study represents the first known survey focusing on the application of Machine Learning[ML] algorithms currently employed to detect the phishing emails at different stages of an attack[5].

It includes a comparative assessment and analysis of these methodologies ,offering an overview of the topic,its immediate solution space,and potential future research directions[6-8]The rapid advancement of internet technologies has transformed online interactions while introducing new security risks .Despite phishing being extensively referenced in scientific papers receiving press coverage and drawing attention from banks and law enforcement agencies the question of what phishing truly entails arises[10].

Journal of Science and Technology
ISSN: 2456-5660 Volume 8, Issue 07 (July -2023)
www.jst.org.in *DOI:https://doi.org/10.46243/jst.2023.v8.i07.pp169- 176*

12-13

A Machine Learning Framework For Data Poisoning Attacks

Priyanka Narsingoju[1] | Dr.D.Srinivas Reddy[2] |Dr.V.Bapuji[3]

[1]Department of MCA,Vaageswari College Of Engineering, Karimnagar.
[2]Associate Professor,Department of MCA,Vaageswari College Of Engineering, Karimnagar.
[3]Professor & HoD, Department of MCA,Vaageswari College Of Engineering, Karimnagar.

To Cite this Article
Priyanka Narsingoju, Dr.D.Srinivas Reddy ,Dr.V.Bapuji , "A Machine Learning Framework For Data Poisoning Attacks " *Journal of Science and Technology, Vol. 08, Issue 07,- July 2023, pp169-176*
Article Info
Received: 06-06-2023 Revised: 06-07-2023 Accepted: 17-07-2023 Published: 27-07-2023

ABSTRACT

Federated models are built by collecting model changes from participants. To maintain the secrecy of the training data, the aggregator has no visibility into how these updates are made by design.. This paper aims to explore the vulnerability of federated machine learning, focusing on attacking a federated multitasking learning framework. The framework enables resource-constrained node devices, such as mobile phones and IOT devices, to learn a shared model while keeping the training However, the communication protocol among attackers may take advantage of various nodes to conduct data poisoning assaults, which has been shown to pose a serious danger to the majority of machine learning models. The paper formulates the problem of computing optimal poisoning attacks on federated multitask learning as a bi-level program that is adaptive to arbitrary choice of target nodes and source attacking nodes.The authors propose a novel systems-aware optimization method, Attack confederated Learning(AT2FL), which is efficiency to derive the implicit gradients for poisoned data and further compute optimal attack strategies in the federated machine learning.

KEYWORDS: *Federated machine learning, Vulnerability,Arbitrary, Attack on federated machine learning(AT2FL), Gradients.*

INTRODUCTION

Machine learning has been widely applied in various applications, such as spam filtering and natural gas price prediction[1]. However, the reliability and security of these systems have been a concern, including adversaries. Researchers can rely on public crowd sourcing platforms or Private teams to collect training datasets, but both have the potential to be injected corrupted or poisoned data by attackers. It is crucial to research how well machine learning operates under poisoning it attempts in order to increase the resilience of real-world machine learning systems. Exploratory attacks and causal assaults are two categories of attack tactics. The n nodes in this federated learning system are shown by distinct colors. Corrupted or poisoned data is injected into certain nodes, whereas clean data is the sole data present in other nodes. The fundamental idea behind federated machine learning is to develop machine learning models based on data sets dispersed across numerous devices, while limiting data loss.

Journal of Science and Technology
ISSN: 2456-5660 Volume 8, Issue 07 (July -2023)
www.jst.org.in *DOI:https://doi.org/10.46243/jst.2023.v8.i07.pp184- 192*

IDENTIFYING AND PREVENTING THE DISSEMINATION OF FAKE NEWS

Syed Salman Hussain[1] | Boddupalli Anvesh[2] | Dr. V. Bapuji[3]

[1]Department of MCA, Vaageswari College of Engineering,
[2]Asst Professor, Department of MCA, Vaageswari of Engineering,
[3]Professor and Hod, Department of MCA, Vaageswari College of Engineering,

To Cite this Article
Syed Salman Hussain | Boddupalli Anvesh | Dr. V. Bapuji, **"IDENTIFYING AND PREVENTING THE DISSEMINATION OF FAKE NEWS "** *Journal of Science and Technology, Vol. 08, Issue 07,- July 2023, pp184-192*
Article Info
Received: 04-06-2023 Revised: 05-07-2023 Accepted: 15-07-2023 Published: 27-07-2023

ABSTRACT

Misinformation poses a significant threat to democratic societies, particularly in today's interconnected digital world, as it has the potential to shape public opinion. Researchers from various disciplines, including computer science, political science, information science, and linguistics, have been investigating the spread of fake news, methods for detecting it, and strategies to mitigate its impact. However, effectively identifying and preventing the dissemination of false information remains a complex endeavor. Given the increasing role of Artificial Intelligence (AI) systems, it is vital to offer clear and user – ,bfriendly explanations for the decisions made by fake news detectors, particularly on social media platforms. Therefore, this paper conducts a systematic analysis of the latest approaches employed to detect and combat the spread of fake news. By examining these approaches, we uncover key challenges and propose potential future research directions, with a particular emphasis on integrating AI explain ability into fake news credibility systems.

KEYWORDS: *AI explainability, fabricated news, synthetic media, misleading content, dishonest information, fake profiles, online platforms, biased information, block – chain powered identification.*

INTRODUCTION

Numerous solutions[1] have been suggested to tackle various security and privacy issues, whether they are related to the Internet of Things(IoT)[2], user authentication problems[3], enhancing road traffic safety or other cyber-crime threats. However, as people and organizations increasingly rely on real-time information from diverse sources such as user- generated content and social media platforms there is a new risk emerging: the abuse of these sources and dissemination methods through the spread of fake news.

Currently, research in the field of fake news is still in its preliminary stages. We define fake news as content intentionally created to deceive users, aiming to mislead[4], deceive or defame individuals, groups, organizations, and governments. Fake news can have various consequences on our society, as illustrated in figure 1.

Journal of Science and Technology
ISSN: 2456-5660 Volume 8, Issue 07 (July -2023)
www.jst.org.in *DOI:https://doi.org/10.46243/jst.2023.v8.i07.pp198- 202*

16

SECURE AND EFFICIENT BIOMETRIC BASED SAFE ACCESSMECHANISM FOR CLOUD SERVICES DEVELOPMENT

Kondapalukula, Abhishek Rao[1] | Dr. V. Bapuji[2] | Dr. V. Bapuji[3]

[1]Department of MCA, Vaageswari College of Engineering,
[2]Professor, Department of MCA, Vaageswari of Engineering,
[3]Professor and HoD, Department of MCA, Vaageswari College of Engineering,

To Cite this Article

Kondapalukula Abhishek Rao, Dr. V. Bapuji, Dr. V. Bapuji, "SECURE AND EFFICIENT BIOMETRIC BASED SAFE ACCESS MECHANISM FOR CLOUD SERVICES DEVELOPMENT" *Journal of Science and Technology, Vol. 08, Issue 07,- July 2023, pp198-202*

Article Info

Received: 04-06-2023 Revised: 04-07-2023 Accepted: 14-07-2023 Published: 27-07-2023

ABSTRACT

User authentication with unlink capability is one of the corner gravestone services for numerous security and separateness services which are needed to protect dispatches in wireless detector nets (WSNs). This document describes SESAME (guard European network for operations in a Multivendor Environment), a security framework for public assigned networks evolved by Bull, ICL and Siemens Nixdorf. The generalities behind the infrastructure, what parcels it has and what features it provides are carried. Particular emphasis has been given away to inflexibility, administration and directness. A figure of the system of the SESAME factors is also carried, displaying its effectiveness with regard to performance and authority and its defense rates. A particularized Real- Or- Random (ROR) design predicated regular protection anatomy, irregular(non-mathematical) shield assay and alike routine safeguard verification utilizing the astronomically- accepted Automated proof of Internet Security Protocols and Applications (AVISPA) device expose that the offered approach can oppose several given attempts against (unresistant/alive) adversary. hence, the suggested scheme not only specifics its shield defects but similarly improves its version. It's further capable for functional operations of WSNs device.

KEYWORDS: Authentication, biometric-based security, cloud service access, session key.

I. INTRODUCTION

The guard of resource in assigned computing surround is primarily achieved by direct logon to each end- system penetrated [1], using watchwords [2], with druggies transmitting the word in a clear and vulnerable form. This has a number of downsides first, it isn't veritably secure [3], as anyone equipped to hear to the network could learn a stoner's vulnerable word and so be suitable to impersonate that stoner; second, it isn't accessible for a stoner to have to flash back several watchwords and to have to enter a different one each time he accesses a different end system; and third, the user isn't known as a single stoner to the distributed system as a whole [4], there's no collaboration of his use of the distributed system across the different system waiters. These are some of the access control issues in a distributed computing context.protection and isolation are certifiably hypercritical for the going deployment of a WSN [5]. Due to the public and energetic nature of wireless message media in WSNs, they're subject to varied attempts, similar as bugging, revision, interception, insertion, and omission.

19

SOCIAL MEDIA ANALYSIS WITH ACTIVE ONLINE LEARNING TO SUPPORT CRISIS MANAGEMENT

MEDISHATTI RAMYASREE, H.no:20S41D5814,Mtech (CSE), Department of Computer Science, VAAGESWARI COLLEGE OF ENGINEERING Thimmapur,

Karimnagar, Telangana, INDIA, Email-id: ramya.medishatti@gmail.com.

DR.CHANDRA MOULI, HOD, Department of Computer Science, VAAGESWARI COLLEGE OF ENGINEERING Thimmapur,

Karimnagar, Telangana, INDIA, Email-id: cmnarsingoju@gmail.com.

ABSTRACT

People express and discuss various circumstances they are involved in, such as crises, via social media (SM). Therefore, it makes sense to employ SM contents to aid crisis management, particularly by disseminating important and little-known information about the crises in real-time. As a result, we suggest the AOMPC, a brand-new active online multiple-prototype classifier. It finds pertinent information about a crisis. AOMPC is a data stream-operating online learning algorithm that has active learning mechanisms to actively query the label of ambiguous unlabeled data. A fixed budget technique is employed to limit the amount of inquiries. AOMPC typically accepts data streams with partial labelling. Two types of data were used to assess AOMPC: (1) synthetic data and (2) SM data from Twitter connected to two crises, the Australia Bushfires and the Colorado Floods. An extensive analysis of the outcomes' quality was conducted using a variety of established indicators. Additionally, a sensitivity analysis was performed to demonstrate the impact of the AOMPC's parameters on the reliability of the outcomes. AOMPC was compared to various online learning algorithms that are currently available. The trials demonstrated that AOMPC behaves very well while handling changing, partially labelled data streams.

Index Terms:—Online learning, multiple-prototype classifier, active learning, social media.

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

Journal of Science and Technology
ISSN: 2456-5660 Volume 8, Issue 07 (July -2023)
www.jst.org.in *DOI:https://doi.org/10.46243/jst.2023.v8.i07.pp146- 151*

21-22

PROTECTION FOR YOUR PURCHASE PREFERENCES WITH DIFFERENTIAL PRIVACY

Dumpeti Saikumar[1] | DR. G.S. Chowhan[2] | Dr. V. Bapuji[3]

[1]Department of MCA, Vaageswari College of Engineering,
[2]Professor, Department of MCA, Vaageswari of Engineering,
[3]Professor and HoD, Department of MCA, Vaageswari College of Engineering,

To Cite this Article

Dumpeti Saikumar | DR. G.S. Chowhan | Dr. V. Bapuji, "PROTECTION FOR YOUR PURCHASE PREFERENCES WITH DIFFERENTIAL PRIVACY " *Journal of Science and Technology, Vol. 08, Issue 07,- July 2023, pp146-151*

Article Info

Received: 04-06-2023 *Revised: 08-07-2023* *Accepted: 18-07-2023* *Published: 27-07-2023*

ABSTRACT

Internet banking can be done to uncover customers' buying habits as the conclusion to various attempts. Before actually transferring it on-line, monetary institutions with contrasting statutes of darkness. Every buyer can disrupt their local business connection before transferring it to online banks, due to divergent security. However, the adoption of differential security in web-based foundations will be problematic because popular differential protection plans do not involve the issue of the concussion limit. Similarly, we manage an academic test above and below to show that our projects are able to meet the standard of differentialprotection. Finally, in order to decide on sustainability, we place our diets on trial in the mobile initiation trial. The importance of aggregate usage and online banking. Total amount decreased significantly, and the protection errors for common data are less than 0.5, which is consistent with the test findings.

KEYWORDS: *Differential Privacy, Noise Boundary, Online Bank, Shopping Preference Protection.*

INTRODUCTION

Online banks have precisely the new growth popularized for the distribution of financial services [1]. Online banks, in their separate phase, are defenseless in the face of outside and intermediary attempts. Brutal violations of the commandments are contained in violations for shipwrecked persons [2], social phishing and transferred violations. Data improperly processed by persons with authorized access shall be treated as an intermediate offence. Clients' financial data may exist collected by foreign aggressors in order to conclude individual buying preferences [3], operational designs, or credit collection. Shoppers can accept advice [4],

23

DIABETES PREDICTION USING MACHINE LEARNING ALGORITHMS

CHIPPA NARESH KUMAR, H.no: 20S41D5828,Mtech (CSE), Department of Computer Science, VAAGESWARI COLLEGE OF ENGINEERING Thimmapur,Karimnagar, Telangana, INDIA, Email-id: sunnynaresh189@gmail.com.

MD.SIRAJUDDIN,Professor, Department of Computer Science, VAAGESWARI COLLEGE OF ENGINEERING Thimmapur,Karimnagar, Telangana, INDIA, Email-id: mohdsiraj569@gmail.com.

ABSTRACT

Numerous people suffer from diabetes mellitus, one of the most serious diseases. Age, obesity, inactivity, genetic diabetes, a poor diet, high blood pressure, and other factors can all contribute to diabetes mellitus. Diabetes increases a person's chance of developing several illnesses, including heart disease, renal disease, stroke, vision problems, nerve damage, etc. A variety of tests are currently used in hospitals to get the data needed to diagnose diabetes, and depending on that diagnosis, the proper therapy is given. The healthcare sector greatly benefits from big data analytics. Databases in the healthcare sector are very vast. By analysing large datasets using big data analytics, one may learn from the data and make accurate predictions about the future by uncovering hidden patterns and information. The categorization and prediction accuracy of the current approach is not very good. In this study, we suggested a diabetes prediction model that combines a few extrinsic variables that cause diabetes in addition to more common parameters like glucose, body mass index (BMI), age, insulin, etc. Compared to the old dataset, the new dataset improves classification accuracy. Additionally, a pipeline model for diabetes prediction was imposed with the goal of enhancing classification accuracy.

Index Terms:-Diabetes mellitus ,Diabetes prediction, healthcare sector, body mass index (BMI), classification accuracy.

Principal
Vageswari College of Engineering
KARIMNAGAR-505 527.

24

ENABLING IDENTITY BASED INTEGRITY AUDITING AND DATA SHARING WITH SENSITIVE INFORMATION HIDING FOR SECURE CLOUD STORAGE

FAREEDA SULTANA, H.no: 20S41D5808,Mtech (CSE), Department of Computer Science, VAAGESWARI COLLEGE OF ENGINEERING Thimmapur,

Karimnagar, Telangana, INDIA,Email-id: fareedasultana04@gmail.com.

DR. E.SRIKANTH REDDY,Associate Professor, Department of Computer Science, VAAGESWARI COLLEGE OF ENGINEERING Thimmapur,

Karimnagar, Telangana, INDIA,Email-id: srikanth574@gmail.com.

ABSTRACT

Users can remotely store their data to the cloud and enable data sharing with others via cloud storage services. To ensure the integrity of the data saved in the cloud, remote data integrity auditing is suggested. The cloud file may include potentially sensitive data in some popular cloud storage systems, such as the Electronic Health Records (EHRs) system. When the cloud file is shared, the sensitive information shouldn't be made available to others. The sensitive information can be realised by encrypting the entire shared file, but it will prevent others from using it. It has not yet been determined how to implement data sharing with sensitive information concealed in remote data integrity audits. We provide a remote data integrity auditing approach that realises data sharing with sensitive information hidden in this study to solve this issue. A sanitizer is employed in this method to turn the data blocks' signatures into valid ones for the sanitised file while also sanitising the data blocks that correspond to the file's sensitive information. During the integrity auditing process, these signatures are used to confirm the accuracy of the sanitised file. As a consequence, our method enables the cloud-stored file to be shared and utilised by others under the condition that the sensitive data is masked, while retaining the ability to effectively carry out remote data integrity audits. While this is going on, the suggested approach uses identity-based cryptography to streamline the challenging certificate administration. The suggested method is efficient and secure, according to the performance analysis and security analysis.

Index Terms:- Data sharing, Electronic Health Records , sensitive information, data integrity, identity-based cryptography.

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

25

MOVIE RECOMMENDATION SYSTEM USING SENTIMENT ANALYSIS FROM MICROBLOGGING DATA

NANDAGIRI MANOGNYA, H.no: 20S41D5816,Mtech (CSE), Department of Computer Science, VAAGESWARI COLLEGE OF ENGINEERING Thimmapur,

Karimnagar, Telangana, INDIA, Email-id:manognyamanu4@gmail.com.

DR.DINESH KUMAR, Associate professor, Department of Computer Science, VAAGESWARI COLLEGE OF ENGINEERING Thimmapur,

Karimnagar, Telangana, INDIA.

ABSTRACT

For use in e-commerce and digital media, recommendation systems (RSs) have attracted a great deal of interest. Collaborative filtering (CF) and content-based filtering (CBF) are examples of traditional methodologies used in RSs. However, these approaches have several drawbacks, such as the requirement of past user history and habits in order to accomplish the work of suggestion. This article suggests a hybrid RS for films that incorporates the finest ideas from CF and CBF as well as sentiment analysis of tweets from microblogging sites in order to lessen the impact of such limitations. The goal of using movie tweets is to comprehend the prevailing patterns, general consensus, and audience reaction to the film. Promising findings have come from experiments performed using the public database.

Index Terms:-Collaborative filtering, content-based filtering, recommendation system (RS), sentiment analysis, Twitter

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

26

SECURE KEYWORD SEARCH AND DATA SHARING MECHANISM FOR CLOUD COMPUTING

SHAFIA SHAHREEN, H.no: 20S41D5818, Mtech (CSE), Department of Computer Science, VAAGESWARI COLLEGE OF ENGINEERING Thimmapur,

Karimnagar, Telangana, INDIA, Email-id: Shahareen16595@gmail.com.

K.SRIDHER REDDY, Associate Professor,Department of Computer Science, VAAGESWARI COLLEGE OF ENGINEERING Thimmapur,

Karimnagar, Telangana, INDIA, Email-id: sridhark529reddy@gmail.com.

ABSTRACT

The cost of hardware and software resources in computer infrastructure has drastically decreased with the rise of cloud infrastructure. Before being sent to the cloud, the data is often encrypted to protect security. It is difficult to look for and distribute data that has been encrypted, as contrast to plain data. However, it is a crucial responsibility for the cloud service provider since customers depend on the cloud to quickly search for their data and provide the results without jeopardizing the secrecy of their data. We suggest a ciphertext-policy attribute-based approach with keyword search and data sharing (CPAB-KSDS) for encrypted cloud data to address these issues. Contrary to existing systems, which only offer one of two aspects, the suggested approach not only permits attribute-based data exchange but also provides attribute-based keyword search. Furthermore, our technique allows for the updating of the keyword without interacting with the PKG during the sharing phase. In this study, the concept of CPAB-KSDS and its security model are discussed. Additionally, we provide a specific technique and demonstrate that it is safe in the random oracle model and resistant to selected ciphertext and chosen keyword attacks. Finally, the performance and property comparison shows how feasible and effective the suggested building is.

Index Terms:-Distribute data, Data sharing, searchable attribute-based encryption, attribute-based , ciphertext. security model.

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

27

TRUST-BASED PHOTO SHARING IN ONLINE SOCIAL NETWORKS WITH PRIVACY PRESERVING

TARANNUM FATHIMA, H.no: 20S41D5820,Mtech (CSE), Department of Computer Science, VAAGESWARI COLLEGE OF ENGINEERING Thimmapur,

Karimnagar, Telangana, INDIA, Email -Id:tarannumfathima789@gmail.com.

S. SATEESH REDDY, Associate Professor, Department of Computer Science, VAAGESWARI COLLEGE OF ENGINEERING Thimmapur, Karimnagar, Telangana, INDIA, Email - Id:sateesh.singireddy@gmail.com.

ABSTRACT

Sharing images in online social networks has grown in popularity as a result of the advancement of social media technology as a means of preserving social ties. However, a photo's wealth of details makes it simpler for a hostile observer to deduce private information about persons who are depicted in the picture. In recent years, there has been a great lot of discussion on how to solve the privacy disclosure issue brought on by photo sharing. The publisher of the photo should consider all linked users' privacy while publishing a photo that involves numerous users. In this research, we provide a privacy-preserving sharing method based on trust for these types of co-owned images. The main concept is to anonymize the original image in order to prevent people who would significantly lose privacy due to the sharing of the image from being recognised from the anonymized image. Depending on how much a user trusts the recipient of the photo, there will be a privacy loss. And privacy loss has an impact on the user's faith in the publication. A threshold that the publisher has set controls how an image is anonymized. To strike a balance between the privacy protected by anonymization and the information shared with others, we provide a greedy approach for the publisher to adjust the threshold. The results of the simulations show how the trust-based photo sharing mechanism helps to minimise privacy loss and how the proposed threshold tweaking approach might benefit the user.

Index Terms:- online social networks,privacy-preserving sharing, anonymized image, trust-based photo, information shared ,threshold.

28

WIRELESS INTRUSION DETECTION SYSTEM

ALLI ANILKUMAR, H.no: 20S41D5801,Mtech (CSE), Department of Computer Science, VAAGESWARI COLLEGE OF ENGINEERING Thimmapur, Karimnagar, Telangana, INDIA.

DR D.SRINIVAS REDDY,Associate Professor, Department of Computer Science, VAAGESWARI COLLEGE OF ENGINEERING Thimmapur, Karimnagar, Telangana, INDIA.

ABSTRACT

The rapid proliferation of wireless networks and mobile computing applications has changed the landscape of network security. The recent denial of service attacks on major Internet sites have shown us, no open computer network is immune from intrusions. The wireless ad-hoc network is particularly vulnerable due to its features of open medium, dynamic changing topology, cooperative algorithms, lack of centralized monitoring and management point, and lack of a clear line of defense. The traditional way of protecting networks with firewalls and encryption software is no longer sufficient and effective. The IDS engine is the control unit of the intrusion detection system. Its main purpose is to manage the system, i.e., supervise all operations of the intrusion detection system. Its duty depends on the intrusion detection method used. Wireless has opened a new and exciting world for many of us. Its technology is advancing and changing every day and its popularity is increasing. The biggest concern with wireless, however, has been security. The traditional wired IDS is a great system, but unfortunately it does little for the wireless world. Implementing WIDS systems is definitely a step in the right direction. If you have wireless and are concerned about attacks and intruders, a WIDS may be a great idea.

Index Terms:-Intrusion Detection System (IDS), wireless networks, mobile computing attacks,intruders.

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

A THREE-LAYER PRIVACY PRESERVING CLOUD STORAGE SCHEME BASED ON COMPUTATIONAL INTELLIGENCE IN FOG COMPUTING

[1]IFROZE JAHAN, [2]Dr. Gulab singh chauhan
[1]mtech, Department of Computer Science, VAAGESWARI COLLEGE OF ENGINEERING Thimmapur, Karimnagar, Telangana, INDIA, H. Tno:20S41D5811, ifrozejahan@gmail.com
[2]Department of Computer Science, VAAGESWARI COLLEGE OF ENGINEERING Thimmapur, Karimnagar, Telangana, INDIA, gulsinchu@gmail.com

ABSTRACT: Recent years witness the development of cloud computing technology. With the explosive growth of unstructured data, cloud storage technology gets more attention and better development. However, in current storage schema, user's data is totally stored in cloud servers. In other words, users lose their right of control on data and face privacy leakage risk. Traditional privacy protection schemes are usually based on encryption technology, but these kinds of methods cannot effectively resist attack from the inside of cloud server. In order to solve this problem, we propose a three-layer storage framework based on fog computing. The proposed framework can both take full advantage of cloud storage and protect the privacy of data. Besides, Hash-Solomon code algorithm is designed to divide data into different parts. Then, we can put a small part of data in local machine and fog server in order to protect the privacy. Moreover, based on computational intelligence, this algorithm can compute the distribution proportion stored in cloud, fog, and local machine, respectively. Through the theoretical safety analysis and experimental evaluation, the feasibility of our scheme has been validated, which is really a powerful supplement to existing cloud storage scheme.

Keywords *– Cloud computing, cloud storage, fog computing, privacy protection.*

1. INTRODUCTION

Since the 21st century, computer technology has developed rapidly. Cloud computing, an emerging technology, was first proposed in SES 2006 (Search Engine Strategies 2006) by San Jose and defined by NIST (National Institute of Standards and Technology) [1]. Since it was proposed, cloud computing has attracted great attention from different sectors of society. Cloud computing has gradually matured through so many people's efforts [2]. Then there are some cloud-based technologies deriving from cloud computing. Cloud storage is an important part of them. With the rapid development of network bandwidth, the volume of user's data is rising geometrically [3]. User's requirement cannot be satisfied by the capacity of local machine any more. Therefore, people try to find new methods to store their data. Pursuing more powerful storage capacity, a growing number of users select cloud storage. Storing data on a public cloud server is a trend in the future and the cloud storage technology will become widespread in a few years. Cloud storage is a cloud computing system which provides data storage and management service. With a cluster of applications, network technology and distributed file system technology, cloud storage makes a large number of different storage devices work together coordinately [4], [5]. Nowadays there are a lot of companies providing a variety of cloud storage services, such as Dropbox, Google Drive, iCloud, Baidu Cloud, etc. These companies provide large capacity of storage and various services related to other popular applications, which in turn leads to their success in attracting humorous subscribers.

Daasari Surender, Md. Ahsan Halimi, Taimoor Khan, Fazal A. Talukdar, Nasimuddin, and Sembiam R. Rengarajan

5G/Millimeter-Wave Rectenna Systems for Radio-Frequency Energy Harvesting/Wireless Power Transmission Applications

An overview.

In this article, we present an overview of the 5G rectifying antenna and its primary elements for applications in millimeter-wave (mm-wave) energy harvesting (EH) and wireless power transmission (WPT). The wide spectrum available for 5G communication bands have attracted significant attention for extensive applications. The power received by the harvesting antenna relies on the size of the antenna. Hence, the realization of antenna and rectenna systems with good efficiency at 5G mm-wave is a challenge. This review article highlights the recent advances in 5G rectenna systems for different applications at the component and structure levels. The primary objectives of the article are 1) to explore the potential advances of mm-wave rectenna systems and the feasibility of their designs to attain desired characteristics and 2) to present a comparative assessment of performance parameters of existing rectenna systems.

INTRODUCTION

Demands for extremely high data rates, large network capacity, and flawless connectivity have increased globally as wireless technologies, such as 5G cellular systems, the Internet of things (IoT), and machine-to-machine, machine-to-human, and human-to-machine communications, have advanced. 5G communication has been considered an appealing approach for meeting energy demands. The prime objective of 5G communication systems is to supply cellular consumers with higher data rates, lower power consumption, and better quality of services consistently. The frequency spectrum of 5G communication has been divided into several bands, including lower-band 5G

Digital Object Identifier 10.1109/MAP.2022.3208794
Date of current version: 10 November 2022

3/

Designing of Delay Approximation Model for Prime Speed Interconnects in Current Mode

Dr. Udutha Rajender
Assistant Professor
Electronics & Communication Engineering
Vaageswari College of Engineering
Karimnagar, Telangana-505 527

Abstract:

There is enormous demand for high speed VLSI networks in present days. The coupling capacitance and interconnect delay play a major role in judging the behavior of onchip interconnects. There is an on chip inductance effect as we switch to low technology that leads to delay in interconnecting. In this paper we are attempting to apply second order transfer function designed with finite difference equation and transform Laplace at the ends of the source and load termination. Analysis shows that the current signaling mode in VLSI interconnects provide better time delay than the voltage mode.

IndexTerms*: VLSI ,Interconnect, Current mode, feedbackscheme.*

I. INTRODUCTION

As the number of transistors on a chip keeps increasing, on-chip communications will become a more crucial aspect of architectural design. Conventional electrical wires, normally driven by digital components using simplistic virtual signals have problems to address inside the scaling chip multiprocessor marketplace, in particular latency and strength. Worldwide cord latency remains highly constant, translating to a bigger relative latency for even reasonably-sized structures. In an effort to make sure sign pleasant, virtual repeaters and packet-switching routers need to be added to facilitate the transmission of lengthy distance communications, contributing further to the latency and power problems. As delivered in the references, signal is transmitting to a modern change signaling to 3 times more than the voltage mode signaling.

Change display close to speed of light electric signaling the use of the reality that the signaling pace may expanded using punishing to energy spectrum destiny to indicators of high level frequency uses at modulations methods. However at strength intake turns into acceptable high of at which cases to max schemes desires to huge wiring on the top Meta metallic layers. The on-chip interconnect network's speed

Principal
Vageswari College of Engineering
KARIMNAGAR-505 527.

Designing of Delay Approximation Model for Prime Speed Interconnects in Current Mode

Article · June 2023

1 author:

Uddutha Rajender
Vaageswari Colleges
14 PUBLICATIONS **23** CITATIONS

SEE PROFILE

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

Dogo Rangsang Research Journal
ISSN : 2347-7180

UGC Care Group I Journal
Vol-13, Issue-1, No. 1, January 2023

SPECTRUM SENSING USING SEQUENTIAL CHANGE DETECTION IN COGNITIVE RADIOS

Dr.Venkata Reddy Adama Professor and Head, Dept of ECE, Vaageswari College of Engineering, Karimnagar, Telangana, India
Dr. D. Surender, Associate Professor, Dept of ECE, Vaageswari College of Engineering, Karimnagar, Telangana, India
Dr. V. Sharmila, Professor, Dept of ECE, Vignana Bharathi Institute of Technology, Hyderabad Telangana, India

Abstract — In this research work, we suggest a solution to the issue of spectrum sensing in cognitive radio networks. An adaptive CUSUM-based Test for signal Change Detection algorithm was selected to offer the best answer for this issue. This algorithm is based on sequential change detection techniques, which are particularly useful when the parameter setup is incorrect or when the parameters are not known a priori, and the PDF of the signal being tested. In this study, the CUSUM algorithm is expanded to include configuration-friendly test parameters. Better accuracy, change detection readiness, and less computational complexity are all benefits of the proposed Adaptive CUSUM.

Keywords—*Cognitive Radio, change detection, spectrum sensing, Adaptive CUSUM.*

I. INTRODUCTION

Cognitive Radio uses the radio spectrum of the other users. They perform radio environment analysis, identify the spectral holes and then operate in those holes. In cognitive radio terminology Primary user refers to a user who is allocated the rights to use the spectrum. Secondary user refers to the users who try to use the spectrum bands allocated to the primary user when the primary user is not using it [1-9].

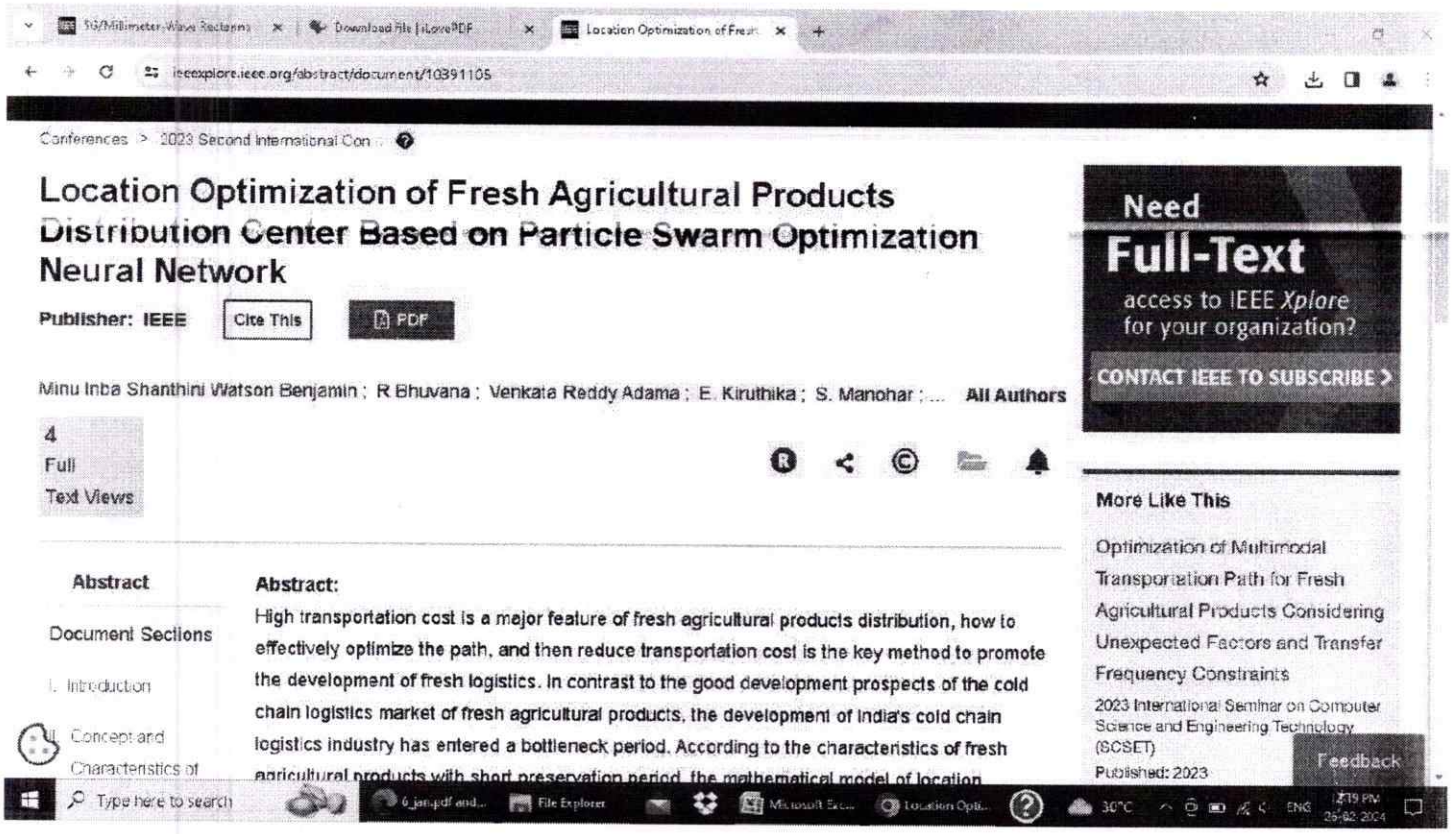
Spectrum sensing is an essential component of the Cognitive Radio technology which involves, identifying spectrum holes, and when an identified spectrum hole is being used by the secondary users, to quickly detect the onset of primary transmission. This needs to be done such that the guaranteed interference levels to the primary are maintained and there is efficient use of spectrum by the secondary. This involves detecting reliably, quickly and robustly, possibly weak, primary user signals [1], [2], [8-9].

In practice Spectrum Sensing becomes a challenging task because the channel from the primary transmitter to the secondary user can be bad because of shadowing and time varying multipath Fading. As a result, detecting the primary user based on the observation of a single secondary user may not be enough, especially under low SNR conditions. Hence, Cooperative Spectrum Sensing is required, whereby the spatial diversity inherent in radio environment is leveraged by allowing multiple secondary users to cooperate. This reduces the average time to detect the primary user. This in turn lowers the interference to the primary user, while increasing the spectrum usage of the secondary user [2-9]. Depending on the amount of information about a primary user's parameters available at a cognitive user, various detection schemes have been developed for this application. In addition to the detection probability, the detection delay is also an important performance metric in cognitive radio detection. If a primary user stops transmission, then a secondary user should detect this event quickly, in order to be able to start is own transmission quickly. A small detection delay will allow the design of a spectrum reuse scheme that has minimal impact on the licensed users [5-9].

II. MODEL AND ALGORITHM

A. model

Consider a Cognitive Radio System with L secondary users who sense a channel via Energy Detectors. The observations made on the channel by these users are processed and sent to a fusion



5G/Millimeter-Wave Rectenna | Download File | iLovePDF | Location Optimization of Fresh

ieeexplore.ieee.org/abstract/document/10391105

Conferences > 2023 Second International Con...

Location Optimization of Fresh Agricultural Products Distribution Center Based on Particle Swarm Optimization Neural Network

Publisher: IEEE Cite This PDF

Minu Inba Shanthini Watson Benjamin ; R Bhuvana ; Venkata Reddy Adama ; E. Kiruthika ; S. Manohar ; ... **All Authors**

4 Full Text Views

Need Full-Text access to IEEE *Xplore* for your organization?

CONTACT IEEE TO SUBSCRIBE >

More Like This

Optimization of Multimodal Transportation Path for Fresh Agricultural Products Considering Unexpected Factors and Transfer Frequency Constraints

2023 International Seminar on Computer Science and Engineering Technology (SCSET)

Published: 2023

Abstract

Document Sections

I. Introduction

II. Concept and Characteristics of

Abstract:

High transportation cost is a major feature of fresh agricultural products distribution, how to effectively optimize the path, and then reduce transportation cost is the key method to promote the development of fresh logistics. In contrast to the good development prospects of the cold chain logistics market of fresh agricultural products, the development of India's cold chain logistics industry has entered a bottleneck period. According to the characteristics of fresh agricultural products with short preservation period, the mathematical model of location

Feedback

Type here to search

30°C ENG 26-02-2024

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527

I. Introduction

In recent years, with the maturity of Internet application technology and the promotion of "Internet + agriculture" policy, the offline consumption of fresh agricultural products began to be closely combined with e-commerce. Transportation cost control has been one of the hot issues of logistics industry, because of the fresh agricultural products distribution to the timeliness, accuracy, high demand high transport costs of fresh agricultural products become the difficulty of fresh agricultural products logistics system development, optimize the distribution route is the important method to improve distribution efficiency, reduce the transportation cost of [1]. In order to quickly and efficiently distribute agricultural products, and meet a series of constraints, such as the maximum load of vehicles, the freshness of agricultural products, design a set of relatively optimized distribution routes. Because fresh agricultural products have strong perishable and vulnerable, in the circulation process, it is necessary to provide suitable low-temperature transportation and storage environment to ensure the high quality of fresh agricultural products [illegible] site selection can not [illegible] time, but also provide

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527

International Journal of Scientific Research in Engineering and Management (IJSREM)
Volume: 07 Issue: 01 | January - 2023 Impact Factor: 7.185 ISSN: 2582-3930

35

Designing of Synthetic Aperture Radar Based Control Algorithms for the Autonomous Vehicles

Dr.Udutha Rajender
Department of ECE
Vaageswari College of Engineering, Karimnagar, India

***Abstract*— The rise in popularity of self-driving cars can be attributed to advancements in modern technology. The surge in interest in self-driving cars has led to an increase in their development, but this has also brought some challenges. A large part of the solution to these problems is satellite remote sensing and GIS technology. Optical data remote sensing technologies alone have limited potential for long-term forest management sustainability. Active Synthetic Aperture Radar (SAR) remote sensing technology has grown in importance in forestry because of its uniqueness and rapid advancement. For example, SAR has an all-weather capability that is sun light independent, cloud and rain-resistant, and highly penetrating. SAR and optical, SAR and LiDAR, optical and LiDAR remote sensing have all been shown to be useful for accurate forest AGB estimation when compared to single sensor data. These types of sensor data integrations are becoming increasingly common. This is made possible by the fact that the scattering process heavily influences the polarimetric signatures that can be observed. The inclusion of SAR polarimetry improves classification and segmentation quality compared to conventional SAR with a single channel. Decomposition products' outputs have been classified.**

Keywords*— *Synthetic Aperture Radar, LiDAR, Autonomous Vehicles,

I. INTRODUCTION

Because it makes use of microwaves, imaging RADAR technology known as Synthetic Aperture Radar (SAR) creates images with a high resolution and is able to capture RADAR images regardless of the weather. The speckle effect, which is induced by the coherent processing of backscattered signals, is to blame for the noisy appearance of SAR images. Speckles are a type of background noise that are present in every single SAR image. Before utilising the photographs, remove the background noise. The elimination of noise is one method for improving the appearance of digital photographs. The objective of the method is to lessen the amount of noise while maintaining the integrity of small details like edges. Soft computing methods are being more and more frequently used for the purpose of reducing noise in SAR images [1]. We have conducted research into a variety of methods for filtering speckle noise in SAR images, and we have presented speckle noise filters that are based on soft computing. A device that can detect and find things is known as a RADAR, which stands for radio detection and ranging. Vision in humans can be improved so that it works better in low light, rain, and other adverse conditions. The foundation of a RADAR system is comprised of the antennas for both the transmitter and the receiver. The transmitter is responsible for emitting electromagnetic waves into space so that they can be used to pinpoint the target. The energy that was diverted by the target is brought into the receiving antenna so that it can be processed. The quantity of energy that an item reflects can be affected by a number of factors, including its physical properties, its structural properties, and its chemical properties [2]. There is a correlation between the radiation's strength, wavelength, and angle of incidence. [3] The receiver is responsible for processing the reflected energy, also known as echoes, in order to retrieve target identifying parameters such as range, velocity, and angular location. It wasn't until the early 1920s that RADAR was first put to use to spot ships and aero planes in the sky.

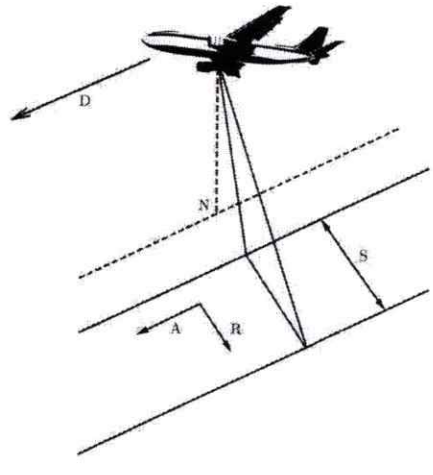


Fig. 1. Geometry of SAR viewing

In the 1970s, search and rescue (SAR) technology was made accessible to the general population. The majority of the time, a SAR system will be mounted on either a spaceship or an aero plane [4]. It illuminates the surface being scanned in a direction perpendicular to its plane by means of a beam of coherent electromagnetic pulses. When the illuminated surface sends back an echo, the SAR receiver is able to pick it up, file it away in its memory, and then use it as input for image processing to produce an image of the target surface. Because it is impractical for a spaceship to carry a very large

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

Forensic Accounting – A Tool for Encountering Bank Frauds (An Opinion Survey)

Dr. E. Hari Prasad S. Sridhar Reddy 1021-1028 Mar 18, 2023 Accounting & Finance (https://www.rsisinternational.org/journals/ijriss/search-articles/?categories%5B0%5D=accounting-finance)

Forensic Accounting – A Tool for Encountering Bank Frauds (An Opinion Survey)

Dr. E. Hari Prasad[1], S. Sridhar Reddy[2]
[1]Vaageswari College of Engineering, Karimnagar, Telangana, India
[2]Assistant Professor, Dept. of Business Management, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT

A country's development directly depends on the economic health of that country. It is not exaggerated to say that the economic progression of a nation is vital to keep the nation rolling on its wheels. An efficient and strong banking system is the backbone of the country's economy. But, in recent years Indian economy experienced various bank frauds and scams that pulled the economic system into the stake. But the failures in the Indian banking system pushed the economy at stake and adversely affected investors' investment behavior. This led to financial distress and funds were divorced and improperly drain off many banks collapsed. As per the recent records, a total of 9,103 fraud cases in banks were recorded during the financial year 2021-22. Therefore, the present study aims to study the appropriateness of forensic accounting in mitigating financial fraud in banks.

Key Words: Economic progression, Banking system, Forensic Accounting, Financial frauds, Financial crimes, white-collar crimes, detection and prevention of frauds.

INTRODUCTION

Forensic accounting is an emerging tool for detecting and preventing financial fraud and provides justice by providing crucial information related to financial crime. Most organizations like banks, insurance companies, and police have well recognized the importance of this forensic accounting and started taking help for their investigations. The increasing rate of white-collar crimes and difficulties faced by investigation agencies in detecting frauds has also been the reason for the emerging and increasing importance of forensic accounting.

BioGecko

Vol 12 Issue 03 2023

ISSN NO: 2230-5807

ROLE OF STAKEHOLDERS IN DELIVERING QUALITYMANAGEMENT EDUCATION FOR SUSTAINABLE DEVELOPMENT

Dr. E. Hari Prasad Sharma
Associate Professor, Departmentof Business Management
Vaageswari College of Engineering – Karimnagar

Abstract:
Dynamism of business environment is throwing different challenges to higher educational institutions to meet the industry requirements and the same to prepare the students by enhancing their competencies required to instrument decision making strategies. It is very difficult to the management of management institutions to offer quality management education. Innovative activities are to be introduced in a rapid way to meet the requirements. At present, institutions are facing a lot of problems to achieve the desired level of effectiveness of quality management education. The present paper attempts to find out the role of stakeholders who are involve in delivering quality management education and characteristics those are required to a management students and fundamentals that are essential to impart the qualitative management education at emerging scenario.

Key Words: *Quality management education, Higher educational institutions, Stake holders, Faculty, Educational system, Students, Sustainable development.*

Introduction

The expansion of education in management area can be found back to 18th century. Since 18th century, there are tremendous changes are found in management education. In India, though, management education was derived from the western management thought and practice, Indian management scholars and practitioners are drawing some extrapolations from epics like, Maha Bharatha, Ramayana, Bhagavad Geetha and other Puranas and Shastras. Management education was evaluated with emerging trends in industrial engineering and closely related with the disciplines like psychology, philosophy, sociology, economics, accounting, statistics and mathematics.In India, management education is seen as special and superior discipline. Students select management education, not because for sake but for personal exposure and experience, to create something innovative which useful to the society and inspired by the magnitudes associated with management education.

The government of India (GoI) announced its New Industrial Policy in 1991 and had introduced the process of Liberalization, Privatization and Globalization (LPG). These reforms in economy led to replace the traditional approach of education to more efficient professional education and introduced advance courses in education to bond with the industry requirement which have greater economic value in the present competition world. Management education got a special recognition with the changing of time. Along with the traditional courses like financial management, marketing management and human resource management, new functional areas like OperationsManagement, Supply Chain Management, Rural Management, International Business Management, Digital Marketing, Data Analytics, Financial Analytics and HR Analytics are also covered in management education to meet the industry demand for highly efficient management people. As a result of this, management education became one of the most trending courses which provide a good career to the youth. With this, in India, private eduprenuers are entering in management education and investing an enormous amount of funds by establishing business schools.

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 52, Issue 9, September : 2023

38-39

PEER-TO-PEER CLOUD: ANONYMOUS AUTHENTICATION AND KEY AGREEMENT

#1BONGONI MADHURI,
#2P.SATHISH, *Assistant Professor,*
#3Dr.V.BAPUJI, *Associate Professor& HOD,*
Department of Master of Computer Applications,
VAAGESWARI COLLEGE OF ENGINEERING, KARIMNAGAR, TELANGANA

Abstract: Cross-cloud data migration is a typical issue for mobile consumers, and it is a required step when customers transfer mobile phone providers. Customers frequently find it difficult to backup all data from the original cloud servers to their mobile phones before migrating the downloaded data to the new cloud provider due to smart phones' limited local storage and computing capabilities. To solve this issue, we present an efficient data transit model among cloud providers, as well as an elliptic curve certificate-free mutual authentication and key agreement technique for peer-to-peer cloud. The proposed technique builds trust among cloud providers and lays the groundwork for cross-cloud data transfer deployment. The mathematical veracity and security correctness of our technique are compared to important current data migration strategies, demonstrating that our proposed scheme surpasses other state-of-the-art schemes in terms of both computational and communication cost reduction.

Index Terms—Cloud computing, data migration, elliptic curve, authentication, key agreement.

1. INTRODUCTION

Data must be transferred from the cloud server of the current smart device provider to the cloud server of the new smart device provider if a customer decides to switch to a different smart device made by a different firm. It is normal practice to access the primary cloud server, transfer the data to intelligent terminal devices, access the secondary cloud server, and then transfer the data to the secondary cloud server.

In order to accomplish this, it is necessary to devise a safer and more streamlined method of transferring data between different cloud services. The most efficient method for transferring user data from one cloud server to another. The term for this process is "data migration." Implementing this ideal data migration strategy is complicated by the wide variety of cloud service providers available. This is due to issues with compatibility, lack of trust, and potential security breaches during data transfer.

Data migration research has been demonstrated to have significant practical ramifications. It can be challenging to move data from one cloud to another for a variety of reasons. There are currently a number of issues that make data migration to the cloud less efficient. To make it simpler and quicker for consumers to transfer their data between cloud servers when they switch phones, additional research is needed on the context of cloud data mobility. Multicloud setups make it challenging to establish trust, which is especially problematic for apps that transfer sensitive data and must adhere to stringent security protocols. Mutual authentication, secure communication keys, and uncompromised data transfer are all crucial considerations. These

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 52, Issue 9, September : 2023

40-41

MACHINE LEARNING-BASED ANALYSIS AND FINANCIAL RISK MANAGEMENT IN CRYPTOCURRENCY MARKET

#1GUNDA SAI NIKHIL,
#2B.ANVESH KUMAR, *Assistant Professor,*
#3Dr.V.BAPUJI, *Associate Professor& HOD,*
Department of Master of Computer Applications,
VAAGESWARI COLLEGE OF ENGINEERING, KARIMNAGAR,TELANGANA

ABSTRACT: For daily bitcoin market forecasting and trading, we deploy and analyze a range of machine learning algorithms. The algorithms have been trained to forecast the binary relative daily price movements of the top 100 cryptocurrencies. All of the models we tested produced statistically plausible estimates, with average accuracy values ranging from 52.9% to 54.1% across all cryptocurrencies. Based on the subset of predictions with the 10% greatest model confidences per class and day, these accuracy results range from 57.5% to 59.5%. We find that after transaction costs, a long-short portfolio strategy based on the forecasts of the deployed LSTM and GRU ensemble models yields annualized out-of-sample Sharpe ratios of 3.23 and 3.12, respectively. In comparison, the benchmark buy-and-hold market portfolio strategy has a Sharpe ratio of only 1.33. These findings point to a threat to the efficiency of the bitcoin market, albeit the impact of certain arbitrage constraints cannot be completely ruled out.

Keywords: Financial market prediction; Market efficiency; Statistical arbitrage; Machine learning; GRU; LSTM; Neural network; Random forest; Gradient boosting; Temporal convolutional neural network

1. INTRODUCTION

In 2008, Nakamoto1 officially introduced the Bitcoin peer-to-peer currency system. Since then, numerous other cryptocurrencies have been developed, each with its own set of technological characteristics and possible uses, all of which can trace their origins back to Bitcoin. As the cryptocurrency market has grown exponentially during the past decade, individual digital currencies' prices have fluctuated widely.There isn't enough space in the user's text to rewrite it scholarly. Different market participants have different opinions on whether or not Bitcoin and similar cryptocurrencies are effective.The user entered a three-four-five number sequence. Auto-regressive statistical approaches, which explicitly represent any non-linear interactions, are frequently used in such investigations. Due to their ability to understand the malleable functional relationship between features and targets, machine learning algorithms have been successfully used in the past to forecast the cryptocurrency market, including Bitcoin.Seven, eight, and nine are mentioned. Thus, these methods can detect and capitalize on intricate linkages among several variables in high-dimensional areas, including but not limited to those not specifically discussed in studies of market performance. The purpose of this research was to compare and contrast the performance of various machine learning models for use in financial market prediction. Accordingly, the primary inquiry driving this work is as follows: Can statistical arbitrage be

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 52, Issue 9, September : 2023

42-43

MACHINE LEARNING ALGORITHMS FOR PREDICTING CRIMINAL ACTIVITY NATURE AND FREQUENCY

#1PEDDI RAMYA,
#2Y.SUSHEELA, *Assistant Professor,*
#3Dr.V.BAPUJI, *Associate Professor& HOD,*
Department of Master of Computer Applications,
VAAGESWARI COLLEGE OF ENGINEERING, KARIMNAGAR, TELANGANA

Abstract: The problem of crime is one of the most pressing issues facing modern society. It is the single most pervasive and powerful force in today's society. And it's a widespread social problem. As a result, crime prevention must be given top importance. Analysis of criminal cases needs to be done methodically. The analysis is essential in spotting and stopping illicit acts. The investigational patterns and crime trends are easier to spot after conducting this research. The primary purpose of this study is to analyze the efficiency of police work in solving crimes. The software was developed with the express purpose of discovering patterns in criminal activity. A criminal's prognosis is presented in the study based on the inferences drawn from the crime scene. In this work, we describe the approach taken to make predictions about the age and gender of perpetrators. Two major components of crime forecasting are presented in this study. The perpetrator's age and gender should be taken into account. In unsolved cases, the parameters used include study of multiple elements such year, month, and weapon used. The objective of the study's quantitative section is to count the number of open criminal cases. The task of prediction requires the generation of a detailed description of the offender's and victim's ages, sexes, and relationship dynamics. Kaggle provided the dataset used for this study. Predictions are made using a combination of multi-linear regression, KNeighbor's classifier, and neural networks. Machine learning techniques were used in the building and evaluation of the model.

Keywords: Crime Prediction, KNN, Decision Tree. Multilinear Regression; K-Neighbors Classifier, Artificia l Neural Networks.

1. INTRODUCTION

It is the act itself that defines a crime. There has been a breach of trust. The behavior in question is illegal. Law enforcement faces formidable obstacles when tasked with uncovering and evaluating underground criminal activity. Furthermore, a wealth of data pertaining to the occurrence is accessible. Therefore, specific methods ought to be able to aid the probe. Therefore, the recommended methodology should help bring about a positive outcome to the criminal incidence.

The application of machine learning methods can improve crime analysis and forecasting. Regression strategies are available via the machine learning methodology. The use of classification strategies aids in accomplishing the study's primary goal. Regression methods, particularly multilinear regression, are a type of statistical instrument frequently used in data analysis. Using this method, you can easily evaluate the connection between any two numbers. The dependent variable values are predicted from the independent variable values using this method. Classifiers can be developed using a wide variety of approaches, such as the K-Nearest Neighbor classifier. Multiclass target variables are classified using classifiers. When

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 52, Issue 9, September : 2023

MACHINE LEARNING ALGORITHM FOR PREDICTING AIR POLLUTION

#1SANGEM AJAY,
#2Dr.V.BAPUJI, *Associate Professor& HOD,*
Department of Master of Computer Applications,
VAAGESWARI COLLEGE OF ENGINEERING, KARIMNAGAR, TELANGANA

Abstract: The air quality monitoring system collects information on contaminants from multiple sites to maintain optimal air quality. It is currently the most pressing issue. The release of hazardous chemicals from industrial sources, as well as car emissions, damage the atmosphere. Today's main cities have dangerously high levels of air pollution that exceed the government-mandated air quality index standard. It has a tremendous impact on a person's health. Air pollution predictions can be made using Machine Learning (ML) techniques. Machine learning (ML) combines statistics and computer science to improve prediction accuracy. Machine learning (ML) is used to calculate the Air Quality Index. A variety of sensors and a microcontroller known as an Arduino Uno are used to collect the data. The K-Nearest Neighbor (KNN) approach is then used to anticipate air quality.

Keywords: Machine Learning, KNN, AQI, Arduino, sensors.

1. INTRODUCTION

One of the most pressing problems humanity faces today is air pollution. Industry activity is picking up speed as a result of the brisk economic expansion. Because of this, levels of air pollution are rapidly increasing. contamination from industry is a major contributor to environmental contamination, which is bad for humans and all other forms of life. Solids and gases, such as dust, pollen, and bacteria, contribute to air pollution. Burning natural gas, coal, or wood creates carbon monoxide, carbon dioxide, nitrogen dioxide, sulfur oxide, chlorofluorocarbons, particulate matter, and other air pollutants. Major health issues, including lung and breathing disorders, have been linked to prolonged exposure to dirty air. About 3.8 million people each year are killed by exposure to gasoline fumes in their houses. Air pollution is responsible for the premature deaths of 4,2 million people worldwide every year. The air quality in which 90% of the world's population resides is below the standards set by the World Health Organization. According to the Southeast Asia Analysis of IQAir conducted by Greenpeace, approximately 120,000 people in India will be killed by air pollution and related ailments in 2020.The study found that air pollution cost India's GDP 2 trillion rupees.

This highlights the significance of maintaining a vigilant vigilance on air quality. Primary pollutants and secondary pollutants are the two most common forms of air pollution. Primary pollutants are those that enter the environment unfiltered. When two main pollutants combine or react with one another or with other components of their environment, a secondary pollutant is produced. Air pollution is just one effect that pollutants have on their environments. Other issues that have worsened in recent years include acid rain, global warming, aerosol generation, and photochemical smog.

Predicting the weather is a crucial step in reducing air pollution. Machine Learning (ML) models can be used for this purpose. In order to educate a computer to create models, machine learning is used. It is a subfield of AI that trains computers to anticipate future events with increasing accuracy. In order to identify patterns and tendencies, ML may examine a wide variety of data. Statistics and advanced mathematics are employed for this purpose.

Air quality has been difficult to monitor due to its steady decline. The frequency with which air quality is measured can be used to estimate the level of pollution present. According to the data gathered by the sensors, we can see exactly where and how much pollution is there. The ML model and this information can be used to develop strategies for reducing pollution. A MQ-135 air quality sensor, a MQ-5 sensor, and an optical dust sensor make up the hardware device. These three sensors, which are linked to an Arduino uno

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 52, Issue 9, September : 2023

US-46

SECURE AND PRIVATE DATA STORAGE IN IOT USING BLOCKCHAIN TECHNOLOGY

#1PEDDI GANGAIAH,
#2B.ANVESH KUMAR, *Assistant Professor,*
#3Dr.V.BAPUJI, *Associate Professor& HOD,*
Department of Master of Computer Applications,
VAAGESWARI COLLEGE OF ENGINEERING, KARIMNAGAR, TELANGANA.

ABSTRACT

The Internet of Things (IoTs) is a network of sensing devices with diverse capabilities that can be used for a number of tasks. Due to limited data management abilities, limited storage, and security issues, it is extremely difficult to protect networks from unauthorized information access and effectively utilize storage in such settings. Few of the data storage and security options investigated by researchers are suitable for WSN-enabled IoTs. For secure communication in Internet of Things (IoT) devices employing wireless sensor networks (WSN), a blockchain-based decentralized architecture with authentication and privacy-preserving mechanisms is being developed. A cloud computing system communicates with sensor nodes and base stations via protocols for registration, certification, and revocation. The cluster heads use this method to deliver the accumulated data to the BS. As a result, BS keeps all vital data on a decentralized blockchain and sends large amounts of data to the cloud. BS removes all certificates revoked by rogue nodes from the blockchain. The effectiveness of the proposed method is evaluated using detection precision, certification latency, computational and communicational overheads. Simulation, comparison analysis, and security validation results reveal that the proposed technique outperforms existing solutions.

1. INTRODUCTION

One of the most well-known, useful, and preeminent technologies of the present day, the Internet of Things (IoTs) has revolutionized wireless communication and information processing [1]. Internet-enabled "things" (or "IoTs") are those that can be recognized, analyzed, controlled, and localized online. Since the internet is capable of both communication and processing, it can be used to link nearly all IoT devices already in use, enabling the development of new and better uses for these devices [2]. The Internet of Things relies on a vast network of sensor nodes for its monitoring, sensing, and automation capabilities. Together, these nodes form Wireless Sensor Networks (WSNs), which are essential to the IoT [3] due to their ability to detect and track any objects in their immediate vicinity.

Sensor nodes, sometimes known as "motes," are inexpensive, easy to deploy, can communicate with one another, and may cover large regions [4]. By combining sensing, processing, and communication capabilities in a wireless medium, sensor nodes in WSNs allow for real-time tracking and identification of physical events. WSNs are used for a variety of purposes, including but not limited to monitoring, sensing, broadcasting, and data processing [5] [6]. The information volume, however, is enormous and expanding at an unprecedented rate, thus this challenge must be met.

Now, in the information era. WSNs are used in many fields and industries, from the military and business to smart homes and healthcare to surveillance and environmental monitoring and agriculture. [7] [8]. The sensor nodes that make up a WSN have finite resources, including time, memory, processing speed, and communication speed. Thus, as the Internet of Things raises demand for WSNs, new difficulties in effectively implementing them arise. Additionally, security is

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 52, Issue 9, September : 2023

43-48

SECURE GROUP MANAGEMENT FOR CLOUD-BASED SHARED DATA ENABLES PUBLIC AUDITING AND PROTECTS USER PRIVACY

#1PADIGELA SUSMITHA,
#2Dr.D.SRINIVAS REDDY, *Associate Professor,*
#3Dr.V.BAPUJI, *Associate Professor& HOD,*
Department of Master of Computer Applications,
VAAGESWARI COLLEGE OF ENGINEERING, KARIMNAGAR, TELANGANA.

ABSTRACT: Cloud storage enables users to store their data remotely and access high-quality apps and services on demand from a shared pool of reconfigurable computing resources, eliminating the need to manage and retain their data locally. However, because users no longer physically control the outsourced data, ensuring its integrity in cloud computing is difficult, especially for users with low computational capacity. Furthermore, users should not have to worry about cloud storage integrity; rather, they should be able to access it as if it were local. As a result, providing public auditability for cloud storage is critical so that users may rely on a third party auditor (TPA) to check the accuracy of outsourced data while feeling secure. The auditing technique should not generate any additional online constraints for users or vulnerabilities affecting user data privacy in order to appropriately and successfully construct a TPA. We present a private public auditing mechanism for a secure cloud storage system in this research. We broaden our investigation so that the TPA can audit multiple consumers effectively and concurrently. The recommended solutions are both provably secure and exceptionally effective, according to a rigorous security and performance assessment.

Index Terms—Data storage, privacy-preserving, public auditability, cryptographic protocols, cloud computing.

1. INTRODUCTION

Cloud computing has been conceptualized as the forthcoming enterprise information technology (IT) framework, owing to its extensive array of unparalleled benefits in the history of IT. These advantages include on-demand self-service, ubiquitous network access, location-independent resource pooling, rapid resource elasticity, usage-based pricing, and risk transference. The advent of cloud computing has brought about significant disruptions, leading to a comprehensive revolution in the manner in which enterprises employ information technology. The process of centralizing data or outsourcing it to the cloud is a fundamental element of this paradigm shift. From the standpoint of users, encompassing both individuals and IT companies, the practice of remotely storing data in a flexible and on-demand manner through cloud technology presents appealing benefits.

These advantages include alleviating the burden of storage management, enabling universal data access across different geographical locations, and eliminating the need for capital expenditures associated with hardware, software, and personnel maintenance, among various other advantages. The advent of cloud computing has rendered these advantages increasingly enticing, yet it has also unveiled novel and formidable security risks to users' outsourced data. As cloud service providers (CSPs) are separate administrative organizations, the act of data outsourcing involves relinquishing full authority over the fate of the user's data. The accuracy of cloud-based data is degraded as a result of the considerations outlined below.

Cloud infrastructures are subject to a diverse range of internal and external data integrity concerns, however they are notably more robust and reliable compared to personal PCs. Allegations have been made regarding instances of service disruptions and security breaches that have impacted prominent cloud providers. Furthermore, cloud service providers (CSPs) have the potential to deceive cloud customers in regards to the actual whereabouts of their outsourced data due to many factors. For example, a Cloud Service Provider (CSP) may opt to remove data that has remained inactive for an extended period in order to reduce costs. Alternatively, the CSP can choose to conceal occurrences of data loss as

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 52, Issue 9, September : 2023

A HYBRID DEEP LEARNING APPROACH FOR DETECTING CYBER BULLYING IN THE TWITTER SOCIAL MEDIA PLATFORM

#1SANNAPURI GAYATHRIRANI,
#2Dr.V.BAPUJI, *Associate Professor& HOD,*
Department of Master of Computer Applications,
VAAGESWARI COLLEGE OF ENGINEERING, KARIMNAGAR, TELANGANA

ABSTRACT: Cyberbullying (CB) is becoming more common in online entertainment situations. Given the popularity of social media and its widespread use by people of all ages, it is critical to keep the platforms safe from cyberbullying. DEA-RNN, a hybrid deep learning model for CB identification on Twitter, is introduced in this study. The proposed DEA-RNN model combines an improved Dolphin Echolocation Algorithm (DEA) with Elman-type recurrent neural networks (RNNs) to reduce training time and fine-tune the Elman RNNs' parameters. Using a dataset of 10,000 tweets, we fully evaluated DEA-RNN and compared its performance to that of cutting-edge algorithms such as Bi-LSTM, RNN, SVM, Multinomial Naive Bayes (MNB), and Random Forests (RF). The results of the experiments demonstrate that DEA-RNN was superior in every situation. In terms of detecting CB on the Twitter site, it outperformed previously considered strategies. In scenario 3, DEA-RNN fared better, with an average accuracy of 90.45%, precision of 89.52, recall of 88.98, F1-score of 89.25, and specificity of 90.94%.

Index terms: cyber bullying, social media, Recurrent Neural Network, Deep Learning.

1. INTRODUCTION

The most common locations for people of all ages to interact online are social media platforms like Facebook, Twitter, Flickr, and Instagram. In addition to facilitating hitherto impossible types of communication and connection, these platforms have facilitated negative phenomena like stalking. Cyberbullying is a sort of psychological abuse with far-reaching implications for our culture. Young individuals who spend a lot of time switching between different social media sites are particularly vulnerable to cyberbullying. Because of the widespread usage of social media sites like Twitter and Facebook and the anonymity they provide, these platforms are particularly susceptible to CB. Facebook and Twitter account for 14% of all abuse in India, with 37% of that coming from teenagers [1]. When it comes to your mental health, cyberbullying may be harmful and could lead to more severe issues. Anxiety, sadness, stress, and social and emotional problems associated with cyberbullying are major contributors to suicide. Therefore, it is important to have a system in place for identifying instances of cyberbullying in online content such as posts, tweets, and comments.

How Twitter identifies abusive content is the primary topic of this piece. Finding instances of cyberbullying in tweets and taking preventative measures are crucial given the growing prevalence of the issue on Twitter [5]. As a result, there's an increasing demand for research on cyberbullying on social networks to better understand the issue and provide solutions [6]. Handling trolling on Twitter is a full-time job in and of itself [7]. Furthermore, it is laborious to go through social media posts in search of cyberbullying. For instance, tweets tend to be succinct, rife with slang, and peppered with emojis and gifs. Therefore, it is not possible to infer someone's motivations or values from their social media activity alone. Covert forms of bullying, such as passive aggression or sarcasm, can sometimes be difficult to identify. Despite the fact that cyberbullying can be difficult to detect

Juni Khyat
(UGC Care Group I Listed Journal)
ISSN: 2278-4632
Vol-13, Issue-08, August 2023

AN EFFICIENT PRICING SCHEME FOR DATA MARKETS IN REAL TIME ENVIRONMENT

#1 **RIMSHA TAHREEM,** *M.Tech Student,*
#2 ***Dr. E.SRIKANTH REDDY****, Associate Professor,*
#3 ***Dr. N.CHANDRAMOULI****, Associate Professor &HOD,*
Department of Computer Science and Engineering
VAAGESWARI COLLEGE OF ENGINEERING, KARIMANGAR, TELANAGANA.

ABSTRACT: *The society's insatiable appetites for personal data are driving the emergence of data markets, allowing data consumers to launch customized queries over the datasets collected by a data broker from data owners. In this paper, we study how the data broker can maximize its cumulative revenue by posting reasonable prices for sequential queries. We thus propose a contextual dynamic pricing mechanism with the reserve price constraint, which features the properties of ellipsoid for efficient online optimization and can support linear and non-linear market value models with uncertainty. In particular, under low uncertainty, the proposed pricing mechanism attains a worst-case cumulative regret logarithmic in the number of queries. We further extend our approach to support other similar application scenarios, including hospitality service and online advertising, and extensively evaluate all three use casesover MovieLens 20M dataset, Airbnb listings in U.S. major cities, and Avazu mobile ad click dataset, respectively. The analysis and evaluation results reveal that: (1) our pricing mechanism incurs low practical regret, while the latency and memory overhead incurred is low enough for online applications; and (2) the existence of reserve price can mitigate the cold-start problem in a posted price mechanism, thereby reducing the cumulative regret.*

1. INTRODUCTION

Nowadays, tremendous volumes of diverse data are collected to seamlessly monitor human behaviors, such as product ratings, electrical usages, social media data, web cookies, health records, and driving trajectories.

However, for the sake of security, privacy, or business competition, most of data owners are reluctant to share their data, resulting in a large number of data islands. Because of data isolation, potential data consumers (e.g., commercial companies, financial institutions, medical practitioners, and researchers) cannot benefit from private data. To facilitate personal data circulation, more and more data brokers have emerged to build bridges between the data owners and the data consumers. Typical data brokers in industry include Factual [2], DataSift [3],

Datacoup [4], CitizenMe [5], and CoverUS [6]. On the one hand, a data broker needs to adequately compensate the data owners for the breach of their privacy caused by using their data to answer any data consumer's query, thereby incentivizing active data sharing. On the

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 52, Issue 9, September : 2023

52-53

IDENTIFYING PHISHING WEBSITES AND URLS A REAL-WORLD EXAMPLE UTILIZING DIFFERENT LOGIN URLS

#1MADUPU RAHUL,
#2P.SATHISH, *Assistant Professor,*
#3Dr.V.BAPUJI, *Associate Professor& HOD,*
Department of Master of Computer Applications,
VAAGESWARI COLLEGE OF ENGINEERING, KARIMNAGAR, TELANGANA

ABSTRACT: A web service is required for Internet communication software to function. The use of deceptive ways to steal personal information is on the rise. While convenient, it introduces numerous security flaws into the Internet's private infrastructure. One of several security concerns to web services is web phishing. Experienced users can detect phishing attacks, however novice users frequently prioritize security. Phishing is the practice of impersonating respectable website operators in order to steal sensitive user data. Phishing poses a significant risk to web security. Violent websites encourage internet crime and stifle the expansion of web services. As a result, there has been a significant effort to develop a comprehensive solution to ban the websites. Our idea is a literacy-focused strategy to categorizing webpages as benign, spam, or harmful. Our system only looks at URLs, not web page content. As a result, program stalling and drug users' web surfing dangers are reduced. Due to learning methodologies, our solution beats blacklisting services in generality and substance.

Keywords: Security; Web Services; URL; Vulnerabilities

1. INTRODUCTION

During the day, our primary concentration is on online work. Using a system and an internet connection in many ways simplifies both professional and personal life. This platform improves sales and operations in the commercial, medical, academic, information, financial, aeronautics, exploration, infrastructure, entertainment, and welfare sectors. Because of the advancement of mobile and wireless technology, drug users can now connect to a network and surf the internet 24 hours a day, seven days a week. Despite its ease, this system has revealed information security problems. As a result, online drug users must secure their computers. Data theft and other crimes can be committed by cybercriminals, hackers, and fair-limited users. The purpose is to access the system or its data in multiple methods, or to get specific data. Bushwhackers communicate with a variety of drug traffickers in order to gather knowledge and profit. According to Kaspersky, an attacker will cost between $108,000 and $1.4 billion by 2019, depending on the intensity of the attack. The billionaire spent $124 billion on global security products and services. Phishing is the most prevalent cybersecurity attack, and its perpetrators are cyber threats. Most victims are vulnerable to phishing attempts due to their lack of expertise about web operations, computer networks, and associated technology. It is easier to target drug addicts with fake websites and incentives to click on them than it is to breach the information security system. A malicious website imitates the original site's visual aesthetics and user experience by using copyrighted content such as the association's logos and other visual elements. Individuals and businesses have suffered considerable financial and reputational harm as a result of drug users unintentionally browsing phishing website URLs. The most dangerous cyberattack in this category was phishing. For this attack, cybercriminals use dispatch or other social media networks. Bushwhackers entice drug users

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 52, Issue 9, September : 2023

54

USING MACHINE LEARNING TO DETERMINE BLOCKED URLS

#1ANDRI BHAVANI,

#2Dr.V.BAPUJI, ***Associate Professor& HOD,***

Department of Master of Computer Applications,

VAAGESWARI COLLEGE OF ENGINEERING, KARIMNAGAR, TELANGANA.

ABSTRACT: A malicious URL, often known as a malicious website, is a common mechanism for storing unwelcome content such as spam, malicious ads, phishing, and drive-by vulnerabilities, to mention a few. It is critical to identify harmful URLs as soon as possible. Techniques such as blacklisting, regular expression, and signature matching have already been employed in research. These methods are useless for detecting versions of existing malicious URLs or wholly new URLs. To address this issue, a machine learning-based solution might be proposed. This type of solution necessitates extensive research in the fields of feature engineering and feature representation of security objects such as URLs. Furthermore, feature engineering and feature representation resources must be regularly updated to handle both versions of current URLs and whole new URLs. Deep learning has enabled AI systems to achieve human-level performance in a range of disciplines, even outperforming human vision in a number of computer vision applications. They can automatically extract the best feature representation from raw inputs. Deep URL Detect (DUD) encrypts raw URLs using character level embedding for use and translation in the cyber security arena. Character level embedding is a cutting-edge method for encoding characters in numeric form in natural language processing (NLP). Hidden layers in deep learning architectures take properties from character level embedding and then apply a non-linear activation function to determine whether the URL is potentially dangerous. We compare and contrast different cutting-edge deep learning-based character level embedding approaches for detecting counterfeit URLs in this paper. Several trials are carried out in order to determine the most effective deep learning-based character level em- bedding model. All experiments employing various deep learning-based character level embedding models are carried out for 500 epochs at a learning rate of 0.001. In all test instances, DUD beats all comparable deep learning-based character level embedding algorithms in terms of performance and computing cost. Furthermore, character level embedding models-based deep learning architectures outperformed n-gram representation. This is because the embedding records the sequence and interrelationship of all the characters in the URL.

Keywords: Cyber security, Cybercrime, Malicious URL, Machine learning, Deep learning, Character embedding

1. INTRODUCTION

Malicious Uniform Resource Locators (URLs) are frequently used by threat actors to host and transmit malicious content. They are crucial to the success of many cyberattacks. Harmful URLs are commonly spread through email and social media, and are often shared using Facebook, Twitter, WhatsApp, Orkut, and other social media apps. Users understand that the information found here has not been vetted or approved. Hackers can gain access to the hosting platform if an unsuspecting user accesses the website via the URL. The user is then vulnerable to frauds that attempt to steal

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 52, Issue 8, August : 2023

55-56

SAFELY STORING AND DELIVERING INFORMATION FROM INTERNET OF THINGS DEVICES

#1SAMEENA KOUSAR, *MCA Student,*
#2B.ANVESH KUMAR, *Assistant Professor,*
#3Dr.V.BAPUJI, *Associate Professor& HOD,*
Department of Master of Computer Applications,
VAAGESWARI COLLEGE OF ENGINEERING, KARIMNAGAR, TELANGANA

Abstract: Data sharing among intelligence communities is critical for expediting data analysis and supporting decision-making in order to guarantee the security of the nation. If an internet-safe data exchange channel is available, data sharing inside an intelligence community may become more possible. However, transporting data between many parties is problematic due to the issue of confidentiality and the possibility of being exposed to unauthorized users and attackers. As a result, this study offers a blockchain-based secure data-sharing architecture for intelligence agencies. This document goes into great detail on the procedure, rules, and policies involved. To assess the intention to implement the proposed paradigm, the technology readiness and acceptance model (TRAM) was applied. The optimism, innovativeness, discomfort, and insecurity characteristics were investigated in this study to determine their link with the technical Acceptance Model (TAM). According to the study, personality traits and feelings can influence the adoption process and intention to use a blockchain-based data-sharing model for system integration inside the intelligence community. This study discovered that blockchain technology might be used in a data-sharing architecture created expressly for the intelligence community based on the established dimensions.

Index Terms: *Blockchain, secure data sharing, Technology Acceptance Model, Technology Readiness Index.*

I. INTRODUCTION

Innovations in digital technology are essential for sharing information throughout a society. The intelligence community had abandoned its reliance on HUMINT in favor of Signal Intelligence (SIGINT) and open source information (OSINT) for its investigations. In order to make choices and formulate plans for the nation's security, the intelligence agency must collect precise and accurate data.

Researchers have proposed integrating blockchain as an extra technology to increase data security after various investigations demonstrated blockchain's remarkable performance. [1], [2]. To make sure that the technology, methods, procedures, and policies associated with blockchain adoption within the intelligence community are thoroughly evaluated before implementation, a comprehensive research on the topic is required.

In this research, we investigate how blockchain technology might be applied to the formulation of secure information exchange protocols. For the intelligence community, this article proposed a conceptual secure blockchain-based data-sharing paradigm based on the requirements, norms, and rules. The technology readiness and acceptance model (TRAM) was developed with the proposed model as its basis. The proposed dimension is a direct result of the selected variables. This study is the first to our knowledge to examine the adoption of a blockchain-based data-sharing paradigm within the intelligence community, and it is also the first to do so using TRAM theory.

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 52, Issue 8, August : 2023

57-58

ONLINE REVIEW FRAUD DETECTION: SUPERVISED AND SEMI-SUPERVISED LEARNING

#1NEHA YASMEEN, *MCA Student,*
#2B.SHARAN, *Assistant Professor,*
#3Dr.V.BAPUJI, *Associate Professor& HOD,*
Department of Master of Computer Application,
VAAGESWARI COLLEGE OF ENGINEERING, KARIMNAGAR, TELANGANA

ABSTRACT: With more and more people keeping an eye on social media, it's important to look at social data to figure out how people act. So, sentiment analysis is used to look at social data, especially Twitter Tweets, to see if the user's opinion about movie reviews is accurate. This study uses relevant keywords taken from social media and web reviews to build a full vocabulary and find hidden patterns of relationships. In recent years, there has been a big rise in the number of people who shop online. Online reviews have a big effect on how people decide what to buy when they shop online. Many people look at product or store reviews before deciding where to shop or what to buy. Because there are a lot of benefits to making fake reviews and doing other kinds of fraud, there has been a noticeable rise in the number of fake spam reviews on digital platforms that are used to review goods and services. Reviews that aren't true include those that are made up, reviews that aren't asked for, and reviews that aren't very good. Positive reviews of the product under consideration have the potential to attract more customers and boost sales, while negative reviews have the potential to lower demand and hurt sales. The above review is dishonest or fraudulent because it was written with the aim of tricking people or hurting the company's reputation by giving potential customers false information. The goal of our study is to find out how true the review is. In our work, we used three different classification algorithms: the Naive Bayes Classifier, the Logistic Regression, and the Support Vector Machines.'

Keywords: e-commerce, product recommender, product demographic, microblogs, recurrent neural

1. INTRODUCTION

Every day, there are new technological developments and advancements. Newer technology are always replacing older ones. People are able to do their jobs better with the help of this cutting-edge technology. One prominent manifestation of this technical development is the emergence of online markets. The internet marketplace allows us to make bookings and purchases at our convenience. Almost everyone reads product reviews before deciding whether or not to buy a given product or item. Because of this, it's possible that these reviews will have a major effect on the brands' reputations. The advertising and promotion of goods and services are also profoundly affected by these assessments. Therefore, there are more and more examples of fraudulent reviews on the web. People can post phony reviews to boost the reputation of their own items, which is harmful to the interests of legitimate businesses and consumers. Competitors' firms might also suffer damage to their reputations from fake bad reviews. Researchers looked explored several methods for identifying fabricated reviews on the web. Some depend on the nature of the review itself, while others are set by the author's choices and input during the review's creation. The text-based approach places more weight on the review's actual text or language than does the User behavior-based approach, which looks at factors like the reviewer's number of posts, location, and

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 52, Issue 8, August : 2023

59

DEPENDABLE AND ACCURATE SPAM DETECTION THROUGH SUPERVISED LEARNING

#1BONGONI SANDHYA, *Department of MCA,*
#2B.ANVESH KUMAR, *Assistant Professor,*
#3Dr.V.BAPUJI, *Associate Professor& HOD,*
Department of Master of Computer Applications,
VAAGESWARI COLLEGE OF ENGINEERING, KARIMNAGAR, TELANGANA.

ABSTRACT: A collection of millions of devices with sensors and actuators that are linked via wired or wireless channels for data transmission. Over the last decade, it has grown rapidly, with more than 25 billion devices expected to be connected by 2020. The amount of data released by these devices will multiply many times over in the coming years. In addition to increased volume, the device generates a large amount of data in a variety of modalities A network of millions of sensors and actuators linked for data transfer via wired or wireless channels. It has expanded substantially in the last decade, with over 25 billion devices expected to be connected by 2020. The volume of data released by these devices will increase in the coming years. The gadget creates a large amount of data in a variety of modalities, with data quality varying based on its speed in terms of time and location. In such a setting, machine learning algorithms can play a critical role in ensuring biotechnology-based security and authorisation, as well as anomaly detection to improve usability and security. Attackers, on the other hand, frequently employ learning algorithms to exploit system weaknesses. As a result of these factors, we propose that machine learning be used to detect spam on devices to improve device security. The Spam Detection Using Machine Learning Framework is proposed to accomplish this goal. Using a number of metrics and input feature sets, this system analyzes four machine learning models. Based on the modified input attributes, each model computes a spam score. This score reflects the device's dependability based on a number of factors. According to the data, the proposed technique is more effective than other current options.

Keywords: *Collection of data, Authorization, Anomalous detection, Support Vector Machine, K-nearest neighbour, Spam.*

1. INTRODUCTION

As a result of advancements in communication and computing technologies, it is now much simpler and faster to transfer data from one location to another. Users from all over the world can exchange data on a variety of platforms. Many people consider email to be the most convenient, inexpensive, and rapid method of international communication. However, there are other methods that can be used to assault an email, the most frequent and potentially harmful of which is spam. Getting pointless emails is annoying because it costs time and energy. Keep in mind that these emails could contain malicious material that is disguised as an attachment or a URL. Because of this, system security may be jeopardized. Spam occurs when bad actors use electronic communication channels to transmit numerous irrelevant messages to a large number of recipients. As a result, ensuring the safety of email systems is crucial. Malicious software including viruses, worms, and Trojan horses can

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 52, Issue 8, August : 2023

60-61

ANALYZING EMOTIONAL SIMILARITY IN ONLINE STORE REVIEWS TO BUILD USER TRUST IN MINING

#1JELLA ANUHYA, *Department of MCA,*
#2B.ANVESH KUMAR, *Assistant Professor,*
#3Dr.V.BAPUJI, *Associate Professor& HOD,*
Department of Master of Computer Applications,
VAAGESWARI COLLEGE OF ENGINEERING, KARIMNAGAR, TELANGANA.

Abstract- - Electronic commerce is the activity of exchanging goods and services over a computer network. Aside from purchasing and selling, many people utilize the internet for research purposes, such as seeing what's new in the market or comparing prices before making a purchase. E-commerce platforms are generally seen as valuable resources that provide users with an experience, feelings, and desire in purchasing things based on consumer evaluations. This form of data includes consumer opinions on products that can show interest, attitudes, and expressions. Several research theories suggest that people who have similar sentiments toward similar topics are more likely to trust one another. We suggest in this paper that asking and accepting recommendations and feelings in e-commerce networks is a form of reciprocal trust. A scientific observer studied consumers while they were shopping. To explore user trust and similarity, a sentiment similarity analysis approach oriented toward E-commerce system reviews is provided. In essence, trust may be separated into two types: direct trust and trust propagation, which results in a trust connection between two people. We present an entity-sentiment word pair mining approach for extracting similarity features. Sentiment similarity is used to calculate the direct trust degree. The transitivity feature is utilized to compute the trust spread. The proposed trust model is used to calculate the shortest path and to present an improved shortest path algorithm to determine the propagation trust relationship between users. A large dataset of E-commerce reviews is gathered to evaluate the efficacy of the algorithms and the viability of the models. Sentiment similarity analysis, according to the experimental data, can be a beneficial tool for generating user confidence in E-commerce systems.

I. INTRODUCTION

The same behavior might also be referred to as "business." However, the phrase is more commonly used to describe how the Internet is influencing fields like marketing, logistics, and communication within enterprises. E-commerce is defined here as the action of transacting business online. Business-to-Business (or B2B) The proliferation of information and communication technologies (ICTs), notably the Internet, has led to the widespread adoption of electronic commerce (e-Commerce) in the commercial sector. Consumers who have access to the global market via the Internet have a distinct advantage because of their ability to shop around, learn about items, and see if order fragmentation influences prices. Customers have easy access to comparing the offerings of various e-commerce businesses due to the transparency of the industry. For instance, when making an online purchase, the purchaser's rivals are literally a mouse click away. Customers have much greater leeway to cancel an online purchase than they would in a physical store if they are dissatisfied with the website's items, prices, or services. As far as the Vendors are concerned, a

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 52, Issue 8, August : 2023

62

EFFICIENT MESSAGE AUTHENTICATION FOR PRIVACY PRESERVING INTERNET OF THINGS

#1MUPPU SANDHYARANI, Department of *MCA*,
#2Dr.V.BAPUJI, *Associate Professor& HOD*,
Department of Master of Computer Applications,
VAAGESWARI COLLEGE OF ENGINEERING, KARIMNAGAR, TELANGANA.

ABSTRACT: In recent years, the Internet of Things (IoT) has evolved fast as a key component of the next generation Internet. IoT devices generate/collect massive amounts of data that machine learning and big data analytics can use for a variety of purposes, including improving people's lives. Because IoT relies on machine-to-machine (M2M) communication, data security and privacy are critical challenges that must be addressed in order to prevent various cyber assaults (such as impersonation and data pollution/poisoning). Nonetheless, building lightweight and diverse IoT security solutions is a difficult challenge due to limited processing power and the diversity of IoT devices. We present an efficient, safe, and privacy-preserving message authentication mechanism for IoT in this work. Our technique is more versatile and efficient than prior systems since it supports IoT devices with varied cryptography settings and enables for offline/online computing.

Index Terms—Internet of Things, hop-by-hop authentication, integrity, source privacy.

1. INTRODUCTION

The Internet of Things (IoT) makes it possible to build a system out of many disparate parts, each of which contributes to the whole in some way. With machine learning, data may be easily shared and retrieved among programs with little to no human intervention required. After the development of computers and the Internet, this innovation is the third most important in the field of information technology. Interactions between the IoT and various sectors of society and the economy pave the way for the development of a pervasive online existence. That way, people can talk to things and, more crucially, to other people and things that are connected to them. Several new fields of study have emerged thanks to the Internet of Things (IoT), such as smart home systems (SHSs), intelligent transportation systems (ITSs), machine learning, big data, and others.

Machine-to-machine (M2M) communication, specifically between a massive number of IoT devices, will be the main form of network traffic in the future. Machine learning and big data analytics, to name just two examples, rely heavily on the authenticity and reliability of the massive amounts of data collected and transmitted by IoT devices. Data that has been intentionally introduced or manipulated can result in incorrect forecasts and choices. Therefore, it is crucial to maintain the validity and integrity of the gathered data to ensure the veracity and precision of machine learning and big data analysis.

Both a public-key based strategy and a symmetric-key approach have emerged to guarantee safe message delivery in the IoT domain. Since symmetric-key operations are more efficient than public-key operations, the computational cost of the symmetric-key methodology is lower than that of the public-key method. However, in the context of symmetric-key based techniques inside a heterogeneous and extensive IoT network, the management of cryptographic keys presents a considerable difficulty. Furthermore, the intermediate

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 52, Issue 8, August : 2023

63-64

ENHANCED SECURITY PROVISION FOR EFFICIENT AND SECURE DYNAMIC ID-BASED AUTHENTICATION KEY AGREEMENT SYSTEM

#1NAKATI SUSMITHA, *Department of MCA,*

#2P.SATHISH, *Assistant Professor,*

#3Dr.V.BAPUJI, *Associate Professor& HOD,*

Department of Master of Computer Applications,

VAAGESWARI COLLEGE OF ENGINEERING, KARIMNAGAR, TELANGANA.

Abstract: A realistic two factor (2f) authentication is used for smart card password verification. As a result, the two variables are "dynamic ID-based" or "anonymous". To preserve user privacy, smart cards have a tamper-resistant security feature. Reverse engineering and power analysis approaches were used to obtain certain private data from the smart card memory. Rather than relying on a vulnerable database, smart card verification is securely implemented in memory. Daily applications such as e-banking, e-health, and e-governance store password tables on a server. Throughout the login process, the user's identity is sent in clear across public networks. Many non-tamper-resistant OTP solutions have been developed, all with ambitious design processes. A 2f system can ensure that a user with a valid OTP and password will be approved by the server.

IndexTerms:*2fauthentication,EMV,AKE,DA2localsecure*

1. INTRODUCTION

Using cloud computing, files and data may be stored on a scalable network that can be made public or private on the fly. As this technology advanced, the cost of several services, including app hosting, data storage, computation, and content distribution, decreased significantly. Forrester [1] defines cloud computing as an clastic computing model that provides on-demand or subscription-based service to end users. The design of a computer should prioritize bandwidth, data processing, and storage.

2. RELATED WORKS

The security of cloud storage can be managed with an optional two-factor login method. The data is encrypted before being sent from the sender to the recipient via a server in the cloud. The sender must know the recipient's name; all other details are irrelevant. Both the sender and the recipient need to know two things for the message to be deciphered. The first is the lock and key to the storage chest.

A connected gadget that serves to safeguard the machine. You can't find out what's concealed unless you have all the pieces. If you lose your device or it gets stolen, the first thing you should do is disable the security features. Data stored in the cloud is encrypted using the procedures in the security device. The buddy is briefed on the process. Cloud servers are not able to decipher encrypted data. It appears that this strategy will be effective and can be implemented. Accessing data stored in the cloud requires a security device, a secret key, and knowledge of the encrypted data. When the device is turned off, the cloud server immediately and secretly replaces the matching cipher text, making the data even more secure.

The EMV protocol and its implementation were found to have serious flaws by the author. The fundamental issue is that nonces for EMV cards were generated using counters, secret algorithms, and time stamps, which is not secure. There is now public knowledge of a scam "pre-play" attack involving counterfeit cards. Proof-of-concept assaults on automated teller machine and terminal equipment, along with their breadth and potential weak points, are mapped as part of a vulnerability discovery methodology. Issues were discovered in widely deployed ATMs utilized by major corporations. Banks refused to compensate the customer since EMV cards cannot be duplicated and the customer committed a mistake. The card's

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 52, Issue 8, August : 2023

65-66

CLOUD-BASED UPLOADING AND DELETION OF COUNTING BLOOM FILTER DATA

#1RAGI SARITHA, *Department of MCA,*
#2P.SATHISH, *Assistant Professor,*
#3Dr.V.BAPUJI, *Associate Professor& HOD,*
Department of Master of Computer Applications,
VAAGESWARI COLLEGE OF ENGINEERING, KARIMNAGAR,TELANGANA

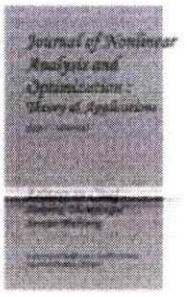
ABSTRACT: Because of the rapid expansion of cloud storage, which may substantially reduce local storage overhead, an increasing number of data owners are preferring to outsource their data to a cloud server. Data owners who want to move cloud service providers must now use cloud data transfer since different cloud service providers provide varying levels of data storage service, including security, reliability, access speed, and pricing. As a result, the key problem that data owners confront is figuring out how to safely migrate data from one cloud to another while also removing the data from the original cloud. To address this issue, we present a novel counting Bloom filter-based technique in this paper. In addition to safe data transport, the proposed approach can provide permanent data deletion. Furthermore, the proposed system may be able to meet the requirements for public verifiability without the involvement of a trustworthy third party. Finally, we provide a simulated implementation to demonstrate the viability and effectiveness of our proposal.

Key words *— Cloud storage, Data deletion, Data transfer, Counting Bloom filter, Public verifiability.*

1. INTRODUCTION

The cloud computing model includes the ever-evolving concepts of parallel computing, distributed computing, and grid computing. Cloud storage has become one of the most widely used applications of cloud computing. A vast number of storage devices can be linked together in a network, simplifying data storage and access for both individuals and organizations. Customers can save significantly on on-premises hardware, software, and man-hours by storing their data in the cloud. The convenience and versatility of cloud storage have led to its widespread adoption in both private and professional contexts. This is why a growing number of individuals and organizations with restricted means are opting for cloud storage solutions. Data privacy, data integrity, data availability, and data erasure are just some of the additional security challenges that cloud storage must address because of the division of data custody and management that occurs when data is outsourced. The widespread adoption of cloud storage could be slowed if these concerns, especially those related to data deletion, are not adequately addressed. Deleting data at the end of its useful life affects how successfully the entire data life cycle may conclude. This is crucial for protecting confidentiality and anonymity in stored information. There has been a lot of focus on data encryption and protection, but far less on data deletion. There are a few challenges and bottlenecks that need to be fixed immediately, despite the fact that there have been a number of established ways to remove outsourced data in the

62-69



Journal of **N**onlinear **A**nalysis and **O**ptimization
Vol. 14, Issue. 1 : 2023
ISSN : **1906-9685**

AN INCREMENTAL METHOD BY USING INCREMENTAL CONDUCTIVITY TO TRACKE THE MAXIMUM POWER THROUGH PV SYSTEMS

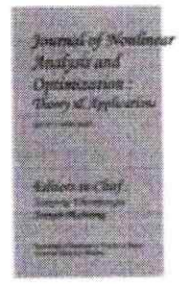
[1]Dr.K.Chandramouli, [2]S.Mounika, [3]N.Kiran Kumar, [4]Chiluveri Anupama
[1]Professor & HOD, [2]Assistant Professor, [3]Associate Professor, [4]UG Student, [1,2,3,4]Department of Electrical and Electronic Engineering, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
Solar energy is very important today since it is a resource that can be easily used for the production of electricity. Nonetheless, the solar system's efficiency is the sole issue. And a variety of MPPT strategies are employed to boost its effectiveness. Due to the abrupt changes in sun irradiation and other environmental circumstances, it is challenging to monitor the electricity from solar panels. Hence, power is extracted using the MPPT method. In PV systems, Maximum Power Point Tracking (MPPT) algorithms are crucial because they lower the cost of the PV array by lowering the quantity of PV panels needed to provide the specified output power. One of the key strategies in this system is incremental conductance, which is frequently used in tracked control due to its improved steady-state accuracy and environmental flexibility. This paper presents details of Incremental Conductance algorithm with simulation results obtained using MATLAB and SIMULINK.
Keywords: MATLAB, MPPT, PV, P&O, Incremental Conductance.

INTRODUCTION
The globe has been more interested in solar energy as a new kind of green energy due to environmental degradation and the depletion of traditional energy sources. The most popular method of harnessing solar energy is photovoltaic (PV) power generating. The fundamental unit of PV power generation, the PV cell, has a relatively low output power. To create a PV array in practical applications, several PV modules must be connected in series and parallel in order to meet the requisite voltage and power requirements. The output current and voltage of a PV array are modified by weather factors (irradiance, temperature, etc.), giving them a nonlinear appearance. Continuous modifications are also made to its output power. How can the load characteristics be changed in order for the system can output the maximum power in real time, namely, to achieve the maximum power point tracking (MPPT), is particularly important in PV systems. MPPT methods mainly include traditional methods and intelligent control algorithms.Traditional MPPT methods include hill climbing, perturbation and observation, and incremental conductance methods. While intelligent control algorithms include fuzzy-logic, artificial neural networks, flower pollination algorithm, and particle swarm optimization. Although the effectiveness of intelligent control algorithms has beenverified by experiments in many cases, the algorithms still have the disadvantages of high complexity and slow convergence speed, so have beenless applied in real projects. Theincremental conductance method is currently the most widely used direct control method. Moreover, the solar cell V-I characteristic is nonlinear andvaries with irradiation and temperature. In general, there is a unique point on the V-I or V-P curve, called the Maximum Power Point (MPP), at which the entire PV system (array, converter, etc...) operates withmaximum efficiency and produces its maximum output power. The

http://doi.org/10.36893/JNAO.2023.V14I1.483-489

70-72



Journal of Nonlinear Analysis and Optimization
Vol. 14, Issue. 1 : 2023
ISSN : **1906-9685**

SUBSEQUENT PLANNING AND PROFESSIONAL ADVANCEMENT: AN APPROACH TO THE EXPANSION OF PROFESSIONAL TALENTS IN ORGANIZATIONS

[1]S. Vamshi Krishna, [2]S. Prasanth, [3]B. Manohar, [4]K. Santhoshini
[1,2] Assistant Professor, [3]Associate Professor, [4]PG Student, [1,2,3,4]Department of MBA, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
Professional growth and succession planning should guarantee that employees are passionate about the company and provide them the chance to enhance their professional skills, gain work experience, and become more interested in working there. Corporate succession planning is to ensure that the organization has enough human resources to achieve its long-term objectives for a select number of positions. Being flexible in one's career is becoming more and more important. Due to organizational changes, the company's survival, the organisation and its employees, insolvency, and other factors, professionals' workspaces are under danger; as a result, they must assume responsibility for their own professional development.
Keywords: Professional development; career progression; strategic planning; human resources development

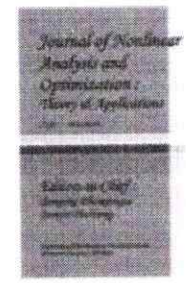
INTRODUCTION

Why should we consider professional development?
Planning might be characterised as people's particular capacity to manage the future. Career planning is crucial for finding the suitable position in the sector and for answering important life issues like "What or who do I want to be in life?" Even if we are happy in our present position, career planning is a good idea since it will make us more prepared if we ever need to resign, and we won't give in to fear or confusion because we will know better. While attempting to locate a work, it is important to consider their leisure interests. Showcase our strengths, talents, and so on. The first step to gaining more work contentment is developing a perfect professional image. Changes brought on by life's dynamism and variety resulted in a shift in power toward the individual, who now bears primary responsibility for career planning and evaluation. In the end, "the career plan is onlya product of the self- assessment process, the setting of professional objectives and the conditions for their realization by the person" ("Kachanakova, 2003").
It is in the employer's best interest to help their workers grow and develop as individuals (company). Several strategic goals may be achieved via career planning on the partof the firm. “Individual career development programmes and general arrangements for management development, consulting, and mentoring of career" are created using all of the information gathered from the company's requirements, work performance and potential evaluation, and succession plans for managerial positions”. ("Armstrong, 2007").“Career advancement is simply the result of interactions between individuals who choose what best fits their ideas and the company that offers options that meet their goals. Career development, career planning, and career management all have a dual purpose in mind” "("Chvostaova, 2015").
It is important to note that both the individual and the organization define what constitutes a successful career. Professional planning is defining and implementing the activities and processes needed to attain

http://doi.org/10.36893/JNAO.2023.V14I1.490-493

73-75

Journal of Nonlinear Analysis and Optimization
Vol. 14, Issue. 1 : 2023
ISSN : **1906-9685**



CURRENT PAYMENT TECHNIQUES AND PROJECT GUIDES FOR UPCOMING DEVELOPMENTS THROUGH ELECTRONIC PAYMENT SYSTEM

[1]S. Prasanth, [2]S. Vamshi Krishna, [3]R. Swetha Reddy, [4]SK Kareem
[1,2,3]Assistant Professor, [4]PG Student, [1,2,3,4]Department of MBA, Vaageswari College of Engineering, Karimnagar, Telangana, India

Abstract
Important security concerns are emerging as company shifts from in-person transactions, postal orders, and phone orders to electronic commerce over open networks like the internet. Securing payments using open networks connecting commercial servers and consumer workstations presents additional issues beyond the relatively safe electronic cash transmission across banking networks. The state of payment technology is reviewed in this article, along with some new advances.

INTRODUCTION

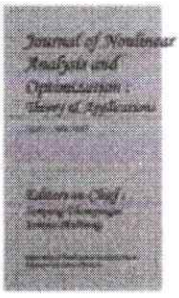
Internet usage has dramatically expanded in the current digital era. Every second, massive amounts of data are produced and consumed by all age counts. Several businesses are studying and making changes in response to the data they were able to gather from customer studies. The convenience of smartphones and the virtual accessibility of goods, services, and payments online have improved how consumers do their online business. To give customers a taste of the brand-new online economy and to earn their trust, the e-commerce sector first operated on a cash-on-delivery basis. The corporation began providing several channels for online payments after the clients were familiar with the business. E-Payment has given access to various financial platforms like debit card, credit card, net banking, digital wallets,etc. Cash has become a less common mode of transaction as the appearance of e-payments has allowed consumers and buyers with greater convenience, but at the same time it has raised a doubt or a threat as there has always been increasing issues regarding the fraud and privacy concern that has been the top fear in the minds of internet users.

We all have witnessed that the traditional payment modes have been replaced by various types of e-payments that are quick and efficient. In e-payment process both buyer and seller uses digital modes to send or receive money, it is an automatic process where seller and the buyer can avoid visiting their bank. It eliminates the physical cash that is risky to handle at times. Today consumers can make payment through electronic modes by using cards and other platforms that are made available through all types of smart devices. The acceptance of particular payments by sellers and businesses has an important influence on the purchases made by their clients, as the availability of the various modes help the consumer to choose that is suitable or available to them as well.

Past few years' smartphones are having a tremendous growth due to accessibility and availability of the internet. The mobile wallet providers like Paytm, PayPal, Mobikwik, etc. with the payback schemes also attracting many consumers to use e-payment modes aiding the organisations with significant growth. The digital wallets are further enabling economies to a cashless society. Electronic wallets and mobile wallets are moreover digital version of the hard cash in physical walletwith more features and functions. E-payments wallets reduce cost of cash holding and handling for the retailers. Retailers on online platform have introduced lucrative discounts and cashback offers to get payment orders for all the cashless payments. The online platform retailers have encouraged morecustomers to choose a payment mode other than Cash on Delivery, it also helps a business to retain their customer.

http://doi.org/10.36893/JNAO.2023.V14I1.494-499

Journal of Nonlinear Analysis and Optimization
Vol. 14, Issue. 1 : 2023
ISSN : **1906-9685**



AN ESSENTIAL PROPERTY COMPARISON TO EXAMINE FATIGUE STRENGTH AND FRACTURE AS WELL AS FRP COMPOSITE PROPERTIES

[1]N.Srinivas, [2]J.Vijaykumar, [3]N.Raj Kumar, [4]D.Nivas Rao
[1,2,3]Assistant Professor, [4]UG Student, [1,2,3,4]Department of Mechanical Engineering, Vaageswari College Of Engineering - Karimnagar

ABSTRACT
Because of their superior corrosion resistance and high specific strength, fibre reinforced polymer composite materials are progressively taking the place of conventional metallic components. The cost of composites is still more than that of conventional materials, though. Composites made of polymer matrix materials employ a variety of fibres. In this research, one of the potential reinforcements in polymer matrix composites includes carbon fibre, glass, and kevlar. Polymer composites frequently utilize glass, carbon, and Kevlar fibres because to their enhanced characteristics and less weight. the impact of stacking configuration on the mechanical characteristics of a glass, carbon, and Aramid fibre hybrid composite. Three symmetrical hybrid composites, [GCGC], [CACA], and [GAGA], were made.].A composite plate is created using software CATIA and it is imported to ANSYS and properties of Aramid composites are added to it and constraints are applied after meshing it now on same material properties of normal composites are added and same process is repeated and comparison of results is done.

INTRODUCTION
Combining two or more different materials results in a composite material the resultant composite material or composite has enhanced qualities that are not possible with a single constituent material since they have been blended in a specific way. Technically speaking, we may describe a composite as a multiphase substance made from a mixture of components that differ in composition or shape, but which continue to be bound together while maintaining their individual identities and qualities. The parts do not combine entirely or disintegrate. They keep in touch with one another and work together properly to give enhanced, targeted, or synergistic qualities that none of the original components functioning independently could provide.

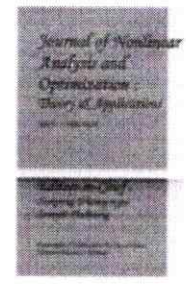
Glass: By blending quarry products (sand, kaolin,limestone and colemanite) at 1,6000C, liquid glass is formed. The liquid is passed through micro-fine bushings and simultaneously cooled to produce glass fiber filaments from 5-24gm in diameter. The filaments are drawn together into a strand (closely associated) or roving (loosely associated), and coated with a "size" to provide filament cohesion and protectthe glass from abrasion.

Carbon: Carbon fiber is produced by the controlled oxidation, carbonization and graphitization of carbon- rich organic precursors which are already in fiber form. The most common precursor is polyacrylonitrile (PAN), because it gives the best carbon fiber properties, but fibers can also be made from pitch or cellulose. Variation of the graphitization process produces either high strength fibers (@~2,6000C) or high modulus fibers (@
~3,0000c) with other types in between. Once formed,the carbon fiber has a surface treatment applied to improve matrix bonding and chemical sizing which serves to protect it during handling. Carbon fibers are

http://doi.org/10.36893/JNAO.2023.V14I1.500-513

Journal of **N**onlinear **A**nalysis and **O**ptimization
Vol. 14, Issue. 1 : 2023
ISSN : **1906-9685**

79-81



ASSESSMENT OF THE ONLINE ADMM-BASED EXTREME LEARNING MACHINE'S UTILIZATION FOR PARTIAL SUPERVISED LEARNING

[1]Dr.D.Srinivas Reddy, [2]Dr.N.Chandramouli, [3]Dr.Gulab Singh, [4]Ajjala Sowjanya
[1,2,3]Associate Professor, [4]UG Student, [1,2,3,4]Department of CSE, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
Sparse learning is a practical method for choosing features and avoiding over fitting in the field of machine learning. For real-world scenarios with online learning requirements in neural networks, an approach called OAL1-ELM that uses online sparse supervised learning of extreme learning machine (ELM) and alternate direction method of multipliers (ADMM) has been created. The loss function in OAL1-ELM is given a 1-regularization penalty to provide a sparse solution and enhance generalization capability. Using ADMM, the convex combinatorial loss function is distributed solved. An updated ADMM is also used to accomplish online learning and minimize processing complexity. The suggested approach may learn data in batches or one at a time. The suggested method's efficiency and optimality are demonstrated through a convergence analysis for the fixed pointof the solution. The suggested method can find a sparse solution and has high generalization performance in a wide range of regression tasks, multiclass classification tasks, and a real- world industrial project, according to the experimental results.

INTRODUCTION
The majority of computer leaning techniques rely heavily on acquiring a batch of data. While mass coaching offers a thorough evaluation of performance, a clear disadvantage is that when fresh pattern data is added, the technique will start learning about all records and reduce wasteful processing costs. Digital information gathering and training activities are quite well known for real-world uses. Since complex structures produce serial data, batch training cannot be controlled to change these data at any moment. Yet, the raw online findings frequently consist of heavy-dimensional functionality. When there is a huge amount of data, training methods are prone to over fitting. Because of this, regularization techniques that effectively lower the risk of over fitting are more prevalent necessary for on line getting to know than batch learning. Finding an equation with robust test-efficiency, due to matrix multiplication and regularizing for digital regression and identification duties is a giant public issue. Neural community (including deep network) is amongst the most frequent statistics regression and classificationfeature approximation fashions for each the fee function. Neural community has a effective dynamical estimationfunctionality and consequently can probably task any precise dynamical interaction. Standard synthetic neuraltechniques although enlarge hugecomputing expenses and bear from-sensitivity to ultraparameter modulation. Meanwhile, the treatment can be effortlessly caught of loss structure storageat saddle items, as nicely as the coaching output is unpredictable. Batch studying strategies in interactive getting to know can forestall these studying issues, and additionally have a smaller regional processing throughout all results. However, when any information comes into on line courses, batch educationmethods can't maintain a appropriate generalization capacity under the furnishedcomputing cost [1-14].

http://doi.org/10.36893/JNAO.2023.V14I1.514-518

82-84

Journal of Nonlinear Analysis and Optimization
Vol. 14, Issue. 1 : 2023
ISSN : **1906-9685**

E-COMMERCE ASSESSMENT PREDICTION BASED ON SENTIMENT ANALYSIS OF USERS AND USER TRUST

[1]N.Chandramouli, [2]D.Srinivas Reddy, [3]Srikanth Reddy E, [4]Arigela Shrenika
[1,2,3]Associate Professor, [4]UG Student, [1,2,3,4]Department of CSE, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
Electronic commerce is the practice of buying and selling products and services through the Internet. In addition to buying and selling, a lot of people use the internet as a source of information to look at the hottest items available or to compare prices before making a purchase. The E-commerce platforms are often regarded as the notable sources that provide users' experiences, sensations, and activities to purchase things by using Consumers' viewpoints. This type of data includes customer opinions on products that might reveal interest, attitudes, and expressions. The precise search ideas have demonstrated that people are more likely to trust one another when they have the same mentality about the same kinds of things. In this paper, we think about each looking for and accepting sentiments and recommendations in E-commerce structures represents a shape of have confidence between buyers at some stage in shopping. Based on this point, an E-commerce gadget critiques mining oriented sentiment similarity evaluation method is put ahead to discover users' similarity and their trust. Basically we can divide the believe into two categories, particularly direct trust, and propagation of trust, which offers a have faith relationship between two individuals. The direct have confidence diploma is bought from sentiment similarity, and we existing an entity-sentiment phrase pair mining approach for similarity function extraction. The propagation of have faith is calculated in accordance to the transitivity feature. The shortest direction to describe the tightness of have faith and put ahead an elevated shortest route algorithm to parent out the propagation have faith relationship between customers the usage of the proposed have confidence model. A large-scale E-commerce critiques dataset is accumulated to study the accuracy of the algorithms and feasibility of the models. The experimental consequences point out that the sentiment similarity evaluation can be an environment friendly technique to discover has faith between customers in E-commerce systems.

INTRODUCTION
Consumer feedback is a crucial piece of information for e-commerce platforms. For people to publish their evaluations, several online stores have established review systems. On social networking programmers or online commerce platforms, more and more individuals are sharing their thoughts, feelings, and recommendations about the things they've bought with their friends or even complete strangers due to the rapid growth of person-to-person communication media. In a variety of situations, including user preference mining and tailored suggestion [1], [2], these evaluations may be highly helpful to people's decision-making. Nowadays, more and more apps based on review mining are being used to simplify our decision-making process. The use of these programmers has significantly altered people's behavior patterns, particularly with regard to online shopping. Forexample, when people need to purchase an item, book a hotel orrestaurant, they normally request advice from their friends as well as refer to reviews availableonline. To adjust to this change, many acclaimed E-commercecompanies, for example,Amazon, eBay and Taobao (China), have developed well- function consumer review

http://doi.org/10.36893/JNAO.2023.V14I1.519-524

Journal of Nonlinear Analysis and Optimization
Vol. 14, Issue. 1 : 2023
ISSN : **1906-9685**

85-87

THE FORMULATION OF THE EXPERIMENTAL EVALUATION ON STIR-WELDED JOINTS USING DISSIMILAR FRICTION AA7075 AND AA6061

[1]N.Raj Kumar, [2]B.Laxminarayana, [3]R.Sainath, [4]M.Prasanth
[1, 2,3Assistant] Professor, [4]UG Student, [1,2,3,4]Department of Mechanical Engineering, Vaageswari College Of Engineering - Karimnagar

ABSTRACT
Since its creation, friction stir welding (FSW) has swiftly gained popularity and found use in a variety of industries, including shipbuilding, railroads, aircraft, and notably the manufacturing of aluminium alloys. A spinning, non-consumable tool is used in the operation to create frictional heat in the work piece. Because to the simultaneous impacts of extreme plastic deformation and frictional heating during welding, FSW had an impact on both the aluminium matrix and the reinforcing particles. Moreover, the development, dissolution, and re-precipitation of hardening precipitates are all impacted by frictional heating. The quality of the weld is determined by FSW process variables such tool revolution, transverse speed, and tilt angle. Aircraft engines, automobile parts, and energy saving strategies in general have promoted the interest and research in the field of lightweight materials, typically on alloys based on aluminum. Aluminum AL6061-T6 isa common alloy which is used for many purposes since it has the superior mechanical properties such as hardness and weld ability. It is commonly usedin aircraft, automotive and packaging food industries. In the present investigation work, friction stir welding of 6061 aluminum alloy and 7075 aluminum alloy and effect of process parameters rotational speed, transverse speed , and tilt angle were investigated. The main objectives of the present investigation are to study; i) the friction stir welding of 6061 and 7075 aluminium alloys. ii) Mechanical properties were evaluated by the tensile test on UTM, Hardness test on Brinell hardness tester (Rockwell).
Key words: Friction stir welding (FSW), Aluminum AL6061-T6, 7075 aluminumalloy, UTM, Brinell hardness tester (Rockwell),

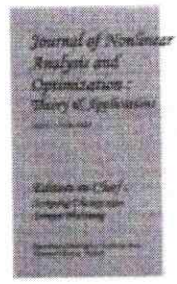
INTRODUCTION:

The development of surface and bulk reinforcement MMCs using FRICTION STIR WELDING (FSW), a relatively new technique, is possible with aluminium alloys from the 7000 range, particularly 7075. For academics and technicians, refining aluminium and its alloys has long been a significant difficulty. Because of its low density and excellent strength to weight ratio, aluminium and its alloys are primarily employed in the automotive and aerospace sectors. When traditional metals and alloys reach their limitations of growth, metal-matrix composites (MMCs) are a new class of structural materials that, with correct processing, may produce MMC with dramatically better features including reduced density, greater specific modulus, and higher specific strength. The addition of ceramics reinforcements (SiC) raise performance limits of the aluminum alloy 7075 and however the presence of reinforcements in matrix makes it brittle. Instead of bulk reinforcements, if the ceramic particle would be added it could improve the wear resistance and hardness. **R.S.Mishra et al.** demonstrated that the FSW is a versatile technique with a compressivefunction for the fabrication, processing and synthesis of materials. The microstructure and mechanical properties of processed zone can be controlled by optimizing the tool design and FSW parameters. The depth of the processed zone can be adjusted by changing the length of the tool pin, and large volume of materials can be produced by multiple passages. The effect of particle refining, mixing and consolidation of powder mixtures

http://doi.org/10.36893/JNAO.2023.V14I1.525-534

Journal of Nonlinear Analysis and Optimization
Vol. 14, Issue. 1 : 2023
ISSN : **1906-9685**

88 - 90



AN EXAMINATION-BASED DATA SHARING TECHNIQUE AND ENCRYPTION-BASED SECURED KEYWORD SEARCH FOR CLOUD COMPUTING USING CPAB-KSDS

[1]Srikanth Reddy E, [2]N.Chandramouli, [3]D.Srinivas Reddy, [4]B.Madhumitha
[1,2,3]Associate Professor, [4]UG Student, [1,2,3,4]Department of CSE, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
The cost of hardware and software resources in computer infrastructure has significantly lowered with the rise of cloud infrastructure. Before being sent to the cloud, the data is often encrypted to ensure security. It is challenging to search for and exchange the facts after encryption, in contrast to seeking for and exchanging easy data. Yet, it is a significant problem for the provider of cloud services since consumers want the cloud to do a quick search and provide the results without disclosing sensitive information. We suggest a ciphertext-policy attribute-based approach with key-word search and information sharing (CPAB-KSDS) for encrypted cloud data to address these issues. The proposed answer now not solely helps attribute-based key-word search however additionally permits attribute-based information sharing at the identical time, which is in distinction to the present options that solely guide both one of two features. Additionally, the key-word in our scheme can be up to date all through the sharing segment besides interacting with the PKG. In this article, we describe the idea of CPAB-KSDS as nicely as its protection model. Besides, we advise a concrete scheme and show that it is in opposition to chosen ciphertext assault and chosen key-word assault invulnerable in the random oracle model. Finally, the proposed development is confirmed sensible and environment friendly in the overall performance and property comparison.

Index Terms—Cloud Data Sharing, Searchable Attribute-based 25 Encryption, Attribute-based Proxy Re-encryption, Keyword Up26 date

INTRODUCTION
Due to the rise of personal electronic devices, distributed computing has become the answer to the problem of individual information management and upkeep. It is based on the idea that customers may easily and cheaply transfer their data to the cloud. Information Technology ventures have also been impacted and overtaken by the growth of distributed computing. Distributed computing will inevitably run into problems with security and protection. Trait-based encryption is a prominent delegate because to its expressiveness in client's character and information, and encryption is the main technique for enabling information categorization [1]–[4]. After the property based encoded information is transferred in the cloud, approved clients face two essential activities: information looking and information sharing. Shockingly, conventional quality based encryption simply guarantees the classification of data. Hence, it doesn'tuphold looking and sharing. Assume in a Person Health Record (PHR) framework[5]–[7], a gathering of patients store their encoded individual wellbeing reportsEnc (D1; P1;KW1); ;Enc(Dn; Pn;KWn) in the cloud, where Enc(Di; Pi;KWi) is a characteristic based encryption of the wellbeing report Di under an entrance strategy Pi and a catchphrase KWi. Specialists fulfilling the approach Pi can recuperate the record Di. Be that as it may,they couldn't recover the particular record by basically composing the catchphrase.All things being equal, a specialist Alice needs to initially download and unscramble the encoded records. After unscrambling, she can

http://doi.org/10.36893/JNAO.2023.V14I1.535-540

Journal of Nonlinear Analysis and Optimization
Vol. 14, Issue. 1 : 2023
ISSN : **1906-9685**

91 - 93

A NOVEL TECHNIQUE FOR EDA TANNER HIGH-SPEED, LOW-POWER OPERATION ANALYSIS ON PROJECTED AND EXECUTED COMPARATOR

[1]Dr. Venkata Reddy Adama, [2]Dr. D. Surender, [3]Dr. U. Rajender, [4]Aitham Bhavani
[1]Professor & HOD , [2,3]Associate Professor, [4]UG Student, [1,2,3,4]Department of Electronics and Communication Engineering, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
Unique flip-flop with a sensing amplifier that is appropriate for high-speed, low-power operation. The power and latency of the flip flop are significantly decreased by the use of new sense-amplifier and single-ended latch stages. Via the use of MTCMOS optimization, the suggested SAFF may offer low voltage operation. The master-slave flip-flop now in use has a shorter delay and less power than the planned SAFF (MSFF). The power-delay-product of the suggested SAFF is better than that of the traditional SAFF and MSFF, and the proposed flip-size flop's is smaller. As a result, the proposed SAFF may operate reliably at low power supply voltages. Yet in this design, we're using 25nm technology, which allows us to provide 1LVT and still obtain the output we need (low threshold voltage).
Keywords: Light fidelity, wireless fidelity, data transmission.

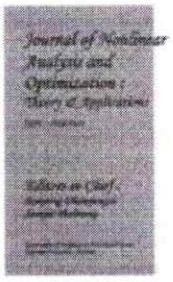
INTRODUCTION
Digital circuits focus on high speed and minimal power. The performance and power of digital systems are directly influenced by the delay and power of the flip-flops, which are the fundamental components of storage. Flip-flops account for a sizeable amount of the digital system's power consumption, as mentioned in [1]. Also, the setup time and CK-to-Q delay of the flip-flop have a direct impact on the system's maximum clock frequency. The performance and power consumption of digital systems may be directly improved and decreased by managing the delay and power of flip-flops. The master-slave flip-flop is the flip-flop that is most frequently employed in digital systems (MSFF). Figure 1 depicts the design for the C2MOS [2] master-slave flip-flop in the foundry's SMIC 55 nm standard cell library. As shown in Figure 1, the data should pass through the first latch before the rising edge of CK, which ensures that the flip-flop can capture the correct data at the rising edge of CK. Therefore, the setup time in the MSFF is relatively long. At the same time, the CK-to-Q delay involves several logics and is also relatively large.Since the embedded system is dedicated to specific tasks, design engineers can optimize it, reducing the size and cost of the product, or increasing the reliability and performance. Some embedded systems are mass-produced, benefiting from economies of scale. Physically embeddedsystems range from portable devices such as digital watches and MP3 players, to large stationaryinstallations like traffic lights, factory controllers, or the systems controlling nuclear power plants. Complexity varies from low, with a single microcontroller chip, to very high with multiple units, peripherals and networks mounted inside a large chassis or enclose.

LITERATURE SURVEY
[1]Jeong, H.; Oh, T.W.; Song, S.C.; Jung, S.-O. Sense-amplifier-based flip-flop with transition completion

http://doi.org/10.36893/JNAO.2023.V14I1.541-545

Journal of **N**onlinear **A**nalysis and **O**ptimization
Vol. 14, Issue. 1 : 2023
ISSN : **1906-9685**

94-96



A CLOUD COMPUTING SYSTEM BASED SECURITYBASED BETTER CIPHERTEXT-POLICY ATTRIBUTE DEPENDING ON DATA SHARING

[1]Gulab Singh, [2]Srikanth Reddy E, [3]S.Sateesh Reddy, [4]A.Sameera
[1,2,3]Associate Professor, [4]UG Student, [1,2,3,4]Department of CSE, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
Data sharing is a practical and affordable service offered by cloud computing. When you take into account that the information is outsourced to some cloud servers, it also results in the privacy of the data contents. More than one technique are utilized to secure access to and control over the shared data in order to protect the sensitive and priceless information. Ciphertext-policy attribute-based encryption (CP-ABE) can improve the convenience and security of these methods. Conventional CP-ABE focuses solely on information confidentiality, however today; user privacy security is a major concern. CP-ABE with disguised access coverage guarantees record confidentiality and prevents user privacy from being disclosed as well. Nevertheless, most current systems are inefficient in terms of calculation cost and verbal interchange overhead. Moreover, most of these works take no consideration on authority verification or the hassle of privateness leakage in authority verification phase. To handle the troubles stated above, a privateness maintaining CP-ABE scheme with environment friendly authority verification is delivered in this paper. Additionally, the secret keys of it acquire consistent size. Meanwhile, the proposed scheme achieves the selective safety underneath the decisional n-BDHE trouble and decisional linear assumption. The computational effects affirm the deserves of the introduced scheme.

Index Terms—Attribute-based encryption (ABE), authority verification, hidden access policy, privacy preserving.

INTRODUCTION
Using statistics and scientific sources in the commercial company area is possible thanks to cloud technologies. The cloud offers a variety of scalable services that may be used instantly, including online databases, software interfaces, storage, and computer resources, among others. Offerings are available to users via PCs, laptops, and smartphones. Cloud storage offers services for managing and storing remote data. It is also helpful in computing and records analysis, which is simple since it can provide a number of services at once. In terms of information storage, the cloud offers several advantages, including reduced communication and preservation costs, resource savings, enabling remote access, and so on. However, humans may now not be inclined to keep their information in the cloud, even though it offers so many advantages due to the fact of the records confidentiality and privateness problems. The cloud server (cs) may also be entrusted, in different words, if records are uploaded to cloud, the cloud provider issuer might also acquire and expose users' non-public privacy, and even get entry to and share the records illegally [1]. To make certain the confidentialityof the facts in cloud, human beings are inclined to encrypt them earlier than they are uploaded to cloud. But the prevalent encryption algorithms make the statistics technique emerge as difficult. Abe is a precise candidate to overcome this limitation. Abe was once first proposed in 2005 with the aid of sahai and waters [2], which assured the information confidentiality and furnished the fine- grained get right of entry to manage coverage to the customers. It has beenextensively regularly occurring as an wonderful

http://doi.org/10.36893/JNAO.2023.V14I1.546-551

Journal of **N**onlinear **A**nalysis and **O**ptimization
Vol. 14, Issue. 1 : 2023
ISSN : **1906-9685**

97-99

A HIGH SECURED AND COMPARATIVE ANALYSIS ON MN-HOMOMORPHIC ENCRYPTION SYSTEM BASED ON VLSI

[1]D. **Surender,** [2] **Dr. Venkata Reddy Adama,** [3]**U. Rajender,** [4]**ALLA ASRITHA**
[1,3]Associate Professor, [2]Professor & HOD , [4]UG Student, [1,2,3,4]Department of Electronics and Communication Engineering, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
The traditional encryption solutions are not entirely secure from an intermediate service like cloud servers because of the privacy leakage of sensitive data. A unique type of encryption method that can address security and privacy concerns is homomorphic encryption. This contains three security steps, namely key creation, encryption, and decryption, as opposed to public key encryption. The design and implementation of highly secure MN-homomorphic encryption on a VLSI platform are done in this research. In comparison to current norms, this system will offer superior security and resource efficiency. Private information and data integrity are both guaranteed by fully homomorphic encryption and decoding. The major goal is to make operations go more quickly. S-Box is first provided with input bits and a key. Then, bits are replaced using S-Box. After shifting operation is performed to thesubstituted bits. Now these bits are encrypted using MM homomorphic encryption. Hence MM homomorphic encryption better security compared to exist one.

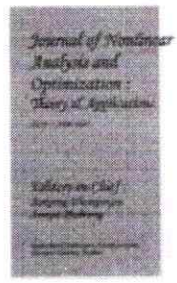
Key Words: Homomorphic encryption, Large Integer Multiplication, Operand Reduction, VLSI Architecture, S-Box.

INTRODUCTION
The majority of board systems' databases use fully homomorphic encryption (DMBS). The test of confirming and securely storing the legitimate treatment of classified information in the remote database is one of the current problems associated with the use of databases. Cryptography allows for the protection of the privacy of sensitive data. It's possible that using clever encryption techniques to store data in distant databases will significantly lessen how the framework is presented without interpretation. To solve the problem, MIT evaluates the cryptographic system that is on display. The server can perform SUM, AVG, and Count queries on encoded data thanks to the use of additively homomorphic cryptography; the other SQL queries make use of unique encryption calculations with crucial practicality. Theadjustment of completely homomorphic cryptosystem will keep the capacity toperform run of the mill database tasks on encoded information without decoding theinformation in a confided condition. In any case, such a cryptosystem must fulfill certainprerequisites for practical qualities and computational unpredictability, which is significant. Fully Homomorphic Encryption (FHE) is a huge achievement in cryptographic research in recent years. A FHE plan can be utilized to elective perform calculations on figure content without trading off the substance of relating the plain text [1]. Therefore, a practical FHE plan will open the way to various new security advances andprotection related to the applications, for example, security safeguarding pursuit and cloud-based processing. For the most part, FHE can be ordered into three classifications: cross section based, number based, and learning with mistakes. One of the fundamental difficulties in theimprovement of FHE applications is to moderate the amazingly high-computational

http://doi.org/10.36893/JNAO.2023.V14I1.552-557

Journal of Nonlinear Analysis and Optimization
Vol. 14, Issue. 1 : 2023
ISSN : **1906-9685**

100-102



ANALYSIS ON LOW POWER AND LOW AREA XOR HYBRID ADDER DESIGN USING EDA TOOLS

[1]U. Rajender, [2]D. Surender, [3]Dr. Venkata Reddy Adama, [4]KOGILA VISHNU PRIYA
[1,2]Associate Professor, [3]Professor & HOD [4]UG Student, [1,2,3,4]Department of Electronics and Communication Engineering, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
To execute computer arithmetic, Adder has applications in graphics processing units, micro controllers, and digital calculators. The downside with the ripple carry adder is that there will be a greater delay but a smaller area since only after the preceding carry is known can the sum and carry be computed. We now need to decrease both the Area and the power. We designed the circuit at the transistor level, and both the sum and carry outputs underwent thorough delay analyses. The Tanner EDA tool has been utilized in this study to develop the suggested adder employing hybrid logic 0.25um technology. There were fewer transistors (6N-2). As compared to the existing design, the proposed concept reduced power usage by around 28.6%. Power delay product for about 16%was saved for the proposed design when compared to the existing design.
Keywords—Hybrid logic, power, Area, adder

INTRODUCTION

A total of 26 transistors were used in the design of the adder, of which 12 were required for execution and 14 for the sum output [1]. It has been claimed that the adder circuit, which consists of 26 transistors without gates at the sum and carry outputs, performs the best of all the proposed circuits [2]. The adder was designed using a hybrid logic style where a combination of logic types may be employed to produce minimal power and great performance [3]. Due to the necessity for complete swing in CMOS to obtain large noise margins for logic 0 and logic 1, adders with just 14 transistors were proposed [4]. Energy delay product is a significant issue in VLSI [5], which is why adder was introduced for applications requiring energy-efficient arithmetic. Adder was proposed with low power making sure fewer transistors will turn on while the circuit has a 0-1 transition [6]. Adder was proposed for tree structures with 0.180 um implementation technology and their performances were compared [7]. Adder was proposed with low voltage high performance, as if the supply voltage is less then performance degrades but using hybrid structure low delay was possible with low voltage [8].New design methodologies were proposed for high-speed with low-voltage for 1 bit CMOS Full Adder circuits [9]. A high speed 8 transistor full adder design was proposed using unique 3 transistor XOR gates [10].Hybrid adder hasbeen designed with full noise margins at every internal and external nodes of design as in [11].Adder was designed using CMOS logic with 26 number of devices as in [12].Full adder logic based comparator is designed as in [13].Now we need to design a adder by implementing our own. technique such that functional behavior of the circuit should be correct but off course by keeping in mind the design constraints like area as well as delay as these are our concern. We have designed adder by using hybrid logic style.

HFA17T Adder[2]

Initially , Xor logic is designed and then used not gate to design Xnor logic which is the prime requirement to design carry and sum parts of logic. For this nine transistors are required and eight more

http://doi.org/10.36893/JNAO.2023.V14I1.558-566

Journal of Nonlinear Analysis and Optimization
Vol. 14, Issue. 1 : 2023
ISSN : **1906-9685**

WEB-BASED STRUCTURAL ANALYSIS INCLUDING CLIENT SATISFACTION RELATING TO PAYMENT MODE IN ZOMATO QUESTIONNAIRE

[1]B. Sravanthi Reddy, [2]B. Ashok, [3]A. Madhukar, [4]P. Akanksha
[1,2,3]Assistant Professor, [4]PG Student, [1,2,3,4]Department of MBA, Vaageswari College of Engineering, Karimnagar, Telangana, India

Abstract
We hope to learn about the consumers' opinions and experiences with the Zomato application via this study report. The main focus of this essay is on how customers use Zomato to find nearby restaurants, as well as the promotions and deals the app offers to keep users there longer. It also discusses the delivery service provided by valets after customers place orders, as well as how satisfied these customers are with Zomato's delivery schedule and payment options. The data were analyzed using basic percentage analysis and the Chi square test by interpreting the data, and the results of this study demonstrate. The study was conducted utilizing a web-structured questionnaire with a sample of 107 respondents that delivery time and mode of payment influencing the customers to place an order in zomato.
Key words: satisfaction, delivery time, mode of payment, taste and quality, offers.

Introduction

The way that meal delivery is provided has changed significantly as a result of technology. Customers' affinity for technology and dependence on it has driven them to conduct all of their business online. The majority of customers now have new technology for things like meal delivery and shopping, etc. Customers often use their mobile devices, such as smart phones, tablets, or computers, to order prepared meals, which are then delivered to their doorstep in a short amount of time. The primary sustaining force for an online meal ordering company is consumer desire. Nonetheless, if customers have no preparations for where they will eat or what they will eat.

The apps like swiggy, Zomato plays a key role in delivering the food with in time. These food apps helps the user to discover restaurants based on consumers requirements and taste. These apps are growing rapidly and providing services and facilities to meet up the customers' demands and expectations. Without respect to the time these apps help to get the food with ease and parallely easy access to the internet are reasons for using these services. The convenience associated with these services is also responsible for growth of these apps. It is also believed that these apps helps to improve the growth of restaurant's business as well.

Review of literature:

Jyotishman Das (2017-2019) Made a research on consumer perception towards 'online food ordering and delivery services': an empirical study. Through his research paper, we can understand that the following nowadays the technology is ruling the world and playing an important role in shaping the online food services. The main objective of this study is to find the view towards the services and secondary objective is the factors that are influenced by the customers to use these online food services.

Merry Borgohain(2017-2019) Made a research on Consumer Perception towards Food Delivery Applications with Special Reference to Dibrugarh Town from this paper we can understand and Say that Consumers perception plays a major role in growth of any business or products or services. The main objective is to study the food delivery applications are perceived by the customers. Researcher ha sent

http://doi.org/10.36893/JNAO.2023.V14I1.567-576

Journal of Nonlinear Analysis and Optimization
Vol. 14, Issue. 1 : 2023
ISSN : **1906-9685**

106-108

A SECURE AND SAFE MOBILE CLOUD-BASED EHR BLOCK CHAIN FOR SHARING ELECTRONIC HEALTH RECORDS

[1]Dr.V.Bapuji, [2]P.Sathish, [3]B.Anvesh Kumar, [4]M.Naya
[1]Professor, [2,3]Assistant Professor, [4]PG Student, [1,2,3,4]Department of MCA, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
Electronic health records (EHRs) are increasingly being stored in mobile cloud environments, which merge mobile technology with cloud computing to make it easier for patients and healthcare professionals to share medical data. With the help of this cutting-edge paradigm, healthcare services may be provided at minimal operational costs with a great degree of flexibility. This new paradigm does, however, bring up issues with network security and data privacy for e-health systems. It is a difficult problem to properly exchange EHRs across mobile users while ensuring high security levels in the mobile cloud. Using a mobile cloud platform and the decentralized interplanetary file system (IPFS), we provide a unique EHRs sharing structure in this study. In particular, we provide a reliable access control system utilizing smart contracts to accomplish secure EHRs sharing among different patients and medical providers. Wepresent a prototype implementation using Ethereum block chain in a real data sharing scenario on a mobile app with Amazon cloud computing. The empirical results show that our proposal provides an effective solution for reliable data exchanges onmobile clouds while preserving sensitive health information against potential threats. The system evaluation and security analysis also demonstrate the performance improvements in lightweight access control design, minimum network latencywith high security and data privacy levels, comparedto the existing data sharing models.

EXISTING SYSTEM
Blockchain is a paradigm-shifting technology that has emerged over the past decade, which is based on peer-to-peercommunication technology, network theory, and crypto graphy .However, there are still some limitations in the existing blockchain framework that prevents its widespread adoptionin the commercial world. One important limitation is the storage requirement, whereineach blockchain node has to store a copy of the distributed ledger. •us, as the number of transactions increases, this storage requirement grows quadratically, eventually limiting thescalability of a blockchain system.

Disadvantages of Existing System:
1. More security issues.

PROPOSED SYSTEM
In this paper, instead of saving entiretransaction of blocks we are saving only oneblock. To provide security to block author converting that block in to SHAMIR share and then all SHAMIR share will be distributed between all available nodes.While reconstruction application will obtain all shares from nodes and then apply SHAMIR SECRET to recover original blockdata. If any share missed or return incorrect value then reconstruction will be failed.SHAMIR secret will work based on random polynomial and prime

http://doi.org/10.36893/JNAO.2023.V14I1.577-581

Journal of Nonlinear Analysis and Optimization
Vol. 14, Issue. 1 : 2023
ISSN : **1906-9685**

109 - 111

A SIGNIFICANT ASSESSMENT ON USING TILE WASTE TO STABILIZE AN EXTROVERTED SOIL

[1]Rambade ganesh, [2]Rupa gaddam, [3] Erram rakesh reddy, [4]Ralfa naaz
[1,3]Associate Professor [2]Assistant Professor, [4]UG Student, [1,2,3,4]Department of Civil Engineering, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
One of India's main soil deposits is expansive soil. When subjected to variations in moisture, they show significant swelling and shrinkage, making them the most problematic from an engineering perspective. Geotechnical engineers have a difficult job understanding expanding soil behavior and implementing suitable control methods. Several corrective procedures, including soil replacement, pre-wetting, moisture control, and lime stabilization, have been used with varying degrees of effectiveness to address the issues caused by expansive soils. Construction of structures over weak or soft soils possesses difficulties like differential settlements, poor strength and high compressibility. Expansive soils are poor in strength and they will result in poor pavement support, ultimately affects the pavement performance and its life period. Expansive soil also affects the design and construction of the pavements, resulting in higher cost of construction and early failure of pavement. Soil stabilization is one of the modification technique used to improve the geotechnical properties of soil and has become the major practice in constructionengineering which enables the effective utilization of industrial waste as a stabilizer. This technique becomes more popular because of its easy availability andadaptability. Stabilization is a method of using the available waste materials for the production of roads construction. The present work describes a study carried out to check the improvements in the properties of expansive soil by using Tile Waste and Recron-3S Fiber. This thesis includes the evaluation of soil properties like compaction, California Bearing Ratio (CBR), Unconfined Compressive Strength (UCS) and plate load test. Detailed experimental study has been undertaken to investigate the characteristics and behavior of expansive soil mixed with Tile Waste and Recron-3S Fibers with different percentage. From the experimental results, it has been observed that various properties of soil added with these stabilizers at certain percentage show remarkable positive changes as compared to the natural soil. The value of compaction parameters has increased enabling increase California Bearing Ratio and Unconfined Compressive Strength which indicates that improved in strength. From these results, it was found that optimum Tile Waste and Recron-3S Fiber are 15% and 1.5% respectively, Gives the maximum increment inthe CBR and UCS compared with all the other combinations.

INTRODUCTION

A land-based building of any kind is only as strong as its foundation, with the soil serving as the main point of support for the whole construction. As soil is a natural material, its behavior may be quite unexpected. Soil is an important factor in the success of a building project because of this. Soil is either a component of the foundation or a raw material utilized in building. Soil engineering characteristics must be understood in order to achieve strength and economic performance. The process of increasing the appropriateness of soil for a certain building purpose is known as soil stabilization.
Stabilization is being used for a variety ofengineering works, where the main objective is to increase the strength or stability of soil and to reduce the construction cost by making best use oflocally

http://doi.org/10.36893/JNAO.2023.V14I1.582-586

112 - 114

Aspects and importance of compensation, having a focus on influences of employees' productivity at work

[1]S. Sridhar Reddy, [2]A. Jyothi, [3]Ch. Vijay Kumar, [4]Y. Arun
[1,2] Assistant Professor, [3]Associate Professor, [4]PG Student, [1,2,3,4]Department of MBA, Vaageswari College of Engineering, Karimnagar, Telangana, India

Abstract
Compensation is the payment made to an employee in exchange for their services to the company. By giving workers financial and non-financial perks, it is an organized process that seeks to balance the relationship between employer and employee. Payments for compensation may also include commissions from sales, bonuses, profit sharing, and overtime pay. Remuneration is a crucial component of human resource management that contributes to employee motivation and increased organizational effectiveness. Salary payments and health benefits are the two main components of direct compensation. The primary duty of the compensation management team is to develop pay scales and wage ranges for various jobs within the firm. Employees get the peace of mind that they are being paid properly when they receive direct remuneration that is in accordance with industry norms. Indirect Compensation focuses on the personal motivations of each person to work. Although salary is important, people are most productive in jobs where they share the company's values and priorities. These benefits can include things like free staff development courses, subsidized day care, the opportunity for promotion or transfer within the company, public recognition, the ability to effect change in the workplace, and service to others. Employees should be managed properly and motivated by providing best remuneration and compensation as per the industry standards. The lucrative compensation will also serve the need for attracting and retaining the best employees. The impact of compensation and benefits on employee performance and organizational effectiveness depends on the existing compensation and performance management programs in the organization. Typically, most employees respond to increases in pay and benefits with a positive and more productive attitude. Sometimes, employees only notice rewards of a salary increase the day the increase is communicated to them, and the day they receive the first paycheck that includes the salary increase. In this Paper I would like to discuss the components and importance of compensation and I would like to emphasis more on the impact of compensation on employee performance in the organization.
Keywords: Compensation, Components, Employee Performance and Importance.

INTRODUCTION

The management of a company's personnel is known as human resource management. One of the key purposes of HRM is to provide and maintain the appropriate balance of human resources for an organization's smooth operations. Nowadays, HR work encompasses many new and noteworthy areas in addition to the classic tasks of recruiting, selection, training, and development. There are direct and indirect rewards. Offering employees acceptable salary has a calming influence on both employee and organizational performance.

Remuneration is a crucial component of human resource management that contributes to employee motivation and increased organizational effectiveness. The efficiency of an organization's pay and performance management programmers determines how compensation and benefits affect employee performance. Typically, most employees respond to increases in pay and benefits with a positive and more productive attitude. However, the opposite is true as well. Sometimes, employees only notice rewards of a salary increase the day the increase is communicated to them, and the day they receive the first paycheck that includes the salary increase. The best people are most often drawn to the companies that pay the most and offer the best opportunity for advancement.

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

ISSN NO : 2347-3150

115-117

An analysis on the importance and implementation of an efficient online reputation management strategy throughout a company

[1]Ch. Vijay Kumar, [2]S. Sridhar Reddy, [3]A. Jyothi, [4]O Rajeswari
[1] Associate Professor [2,3]Assistant Professor, [4]PG Student, [1,2,3,4]Department of MBA, Vaageswari College Of Engineering - Karimnagara.

ABSTRACT
A few years ago, businesses could protect their reputations by managing the information that the public knew about them through carefully timed news releases and competent public relations personnel. Online reputation management has been added to reputation management as a result of the emergence of social media. The internet has experienced significant growth throughout the years, and more and more individuals have joined the hub. As practically everyone spends a lot of time online, there is a good probability that they will comment about you or your company there. If the conversations remain positive, it won't be a huge problem whether they are positive or negative. But if it does, the alarm will start to sound. Your internet standing is crucial role in your business and brand's growth. Over the due course of time, online reputation management is the way by which companies can deal with customer attacks on social media. That is why companies have to organize and execute an effective online reputation management. The paper will explain the and also the paper will provide the details about existing literature about online reputation management, extent the existing knowledge.
Keywords: Social media, customer attacks, Reputation damage, online reputation management, customer empowerment.

INTRODUCTION

Businesses face both great potential and great risk as more and more people use the internet as their major source of information and research. On the one hand, companies may now connect with customers through new, focused internet channels. One of the newest methods firms may use to interact with potential clients and consumers is search engine optimization. Other recent methods include pay per click (PPC) marketing and social media marketing. On the other hand, compared to radio or television, the internet is a far more open medium. Practically anybody or any group may make their voice or opinion known with little effort or expense. There are minimal defenses and no access hurdles for those who would utilize the medium to attack rivals, sabotage competitors, or flaunt grudges.

In many instances, these angry customers, bitterrivals, or disgruntled former employees succeed in gaining as much more visibility online the people or companies they seek to disparage. With this immensely and immeasurably growing internet technology, the need for online reputation management (ORM) is also growing accordingly. Online reputation management is the process of positioning, monitoring, measuring, talking and listening as the organization engages in a transparent and ethical dialogue with its various online stakeholders. ORM proactively influences what information people will find. Online reputation management is not about managing content in search engines though. It's also about managing negative business reviews andencouraging happy clients to contribute more positive feedback.

188-120

Investigating the Utilization of Multiport Converter in EV Car Design and Simulation for Effective grain and SIC device on power losses

[1]S.Mounika, [2]J.Raju, [3]D.Karuna, [4]SULTHAN SHIVA SAI
[1,2,3]Assistant Professor, [4]UG Student, [1,2,3,4]Department of Electrical and Electronic Engineering, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
The rising popularity of electric vehicles (EVs) as an ecologically friendly mode of transportation generates a strong need for widely distributed charging stations due to the limited on-board battery capacity. Nevertheless, rapid charging stations, especially super-fast charging stations, might stress the electrical system by posing a risk of overload during peak hours, a sudden power gap, and voltage sag. In this paper, a multiport converter-based EV charging station that is integrated with PV power generation and a battery energy storage system is modelled using MATLAB/SIMILINK. Through balancing power gaps, peak shaving and valley filling, and voltage sag correction, the control approach and combination of PV power generation, EV charging station, and battery energy storage (BES) outlined in this work increases stability. As a result of the match between daily charging demand and appropriate daytime PV generation, the impact on the power system is decreased. The benefits of this suggested multiport EV charging circuits with the PV-BES designare confirmed by simulation results. In addition, SiC devices are used in the EVcharging station to boost efficiency even more. Power losses and efficiency are explored and compared in simulation with standard Si devices based charging circuits for various modes and functionalities.
KEYWORDS: EV, BES, VOLTAGE SAG,PV.

INTRODUCTION

Electric cars (EVS) have emerged as a practical alternative to conventional gas-powered motor vehicles in response to the growing interest in reducing the use and pollution of petroleum products [1]. Due to the limited EV battery capacity, the current situation and growing use of EVS necessitate broadly distributed charging stations [2]. Nevertheless, the sheer number of directly matrix-related charging stations, especially rapid and superfast charging stations, puts a strain on the stability and soundness of the power lattice with regard to concerns with over-burden, voltage droop, and force holes [3]. Although some experts have been integrating photovoltaic (PV) technology with EV charging infrastructure [4], studies still see the PV integration as a modest source of force hotspot for EV charging stations. Concerning the more popularity of quick speed charging during daytime, tne fast improvement of PV age advances power utilization at top hours with its sufficient daytime ages. As for the irregularity of sun oriented energy, a battery energy stockpiling (BES) can be utilized to manage the DC transport or burden voltage, balance power hole, and smooth PV power [5]. Considering the powerful thickness and high effectiveness benefits of the multiport power converters [6], a multiport DC/DC converter is utilized in this paper for the EV charging station as opposed to utilizing three separate DC/DC converters. Among the previously mentioned research, the charging station models can be ordered into two geographies: utilizing AC transport or DC transport [7]. As PV yield and BES can both be viewed as DC current source [8], DC transport charging station is picked here to further develop the usage effectiveness ofsunlight based energy and decline the expense and misfortunes of converters. Contrasted and detached multiport converters, non isolated multiport converters that are normally gotten from buck or lift converters might highlight a more conservative plan, higher force thickness, and higher proficiency contrasted and disengaged multiport converters [9] [10]. In like manner, a DC transport non isolated structure with SiC switches is utilized in thispaper, to further develop effectiveness and limit the force misfortunes. To summarize, the works and commitments in this paper can be summed up as follows. To start with, the PV and BES

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

Recognizing the issue of comprehensive personal financial planning by an essential beginning

121-23

[1]A. Jyothi, [2]Ch. Vijay Kuma, [3]S. Sridhar Reddy, [4]B. Bhavani
[1,3]Assistant Professor, [2]Associate Professor, [4]UG Student, [1,2,3,4]Department of MBA, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
The purpose of this essay is to clarify the problems with thorough personal financial planning. Saving for a down payment and putting a sizeable sum of money into a Roth IRA are both difficult tasks. Unexpected sevents, ageing appliances that tend to break, and auto repairs are what make this aspect of goal planning so difficult. Challenges, in my experience, may either weaken or strengthen your devotion to your aim. It's simple to lose concentration and start to give up whenever an item malfunctions or an automobile requires extensive repairs. I've discovered that goal-setting techniques are really helpful in this area.

INTRODUCTION
More businesses in the financial services sector are continuing to set themselves up to provide complete personal financial planning (PFP) services. The goal to manage customer relationships and achieve economies of scope is reflected in PFP delivery methods. In this article, we contend that although the requirement for comprehensive PFP has a strong theoretical foundation, there is still a shortage of research to help with the theory's proper implementation. Complete PFP does not come without possible consequences, including as risks related to decreased client advisor diversification, decreased transparency, and agency issues. To address these risks, consumers likely will turn to credentials as a proxy for quality and trust worthing.

The study describes the structure of nonqualified tax-deferred annuities and examines when they are in the best interest of individual investors as savings vehicles. It concludes that, unless they are concerned about creditor protection, few individuals should consider saving in an annuity. Those few must decide between an annuity and a mutual fund held in a taxable account. In general, young investors with long investment horizons should consider annuities. Costs are a critical factor, however. Most annuities have high costs compared to mutual funds. This study concludes that investors fare better with either low-cost annuities or low-cost mutual funds.

DEFINITION
Personal finance is defined as the management of money and financial decisions for a person or family including budgeting, investments, retirement planning and investments. The industry that is concerned with advising individuals on financial and investment opportunities. Personal finance consultants give advice on life insurance, retirement savings, and investing in stocks and bonds, among other things. It is distinguished from corporate finance, which advises companies on raising money, and public finance, which helps governments raise funds.

OBJECTIVES
Organize Student Loans

If you have student loans, make sure you know the repayment schedule and come up with a plan for paying them off as quickly as possible. The National Student Loan Data System (NSLDS) is a great way to retrieve and track your loan information. Whenever you move, provide your lenders with change of address information. Remember, you are required to make payments whether you receive a bill for repayment or not.

Putting Aside for a Rainy Day

Financial experts recommend having an emergency savings account that will cover at least three months worth of living expense. If you're on a tight budget you may think you don't have much money to spare, but moving as little as 2 percent of your income into an emergency It's important to separate your financial assets

ISSN NO : 2347-3150

An examination of the design and management of series resonant DC-DC converters in high voltage wind turbines, DC

124-26

[1]S.Praveen, [2]M.Mamatha, [3]P.Sampath, [4]ADEPU HARIPRASAD
[1,2,3]Assistant Professor, [4]UG Student, [1,2,3,4]Department of Electrical and Electronic Engineering, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT

Technology for power conversion is continually changing to suit the demand for higher power density and efficiency. People have started to reevaluate the possible roles of dc systems in current and future electrical systems as a result of the rising usage of renewable energy sources and energy storage in recent decades. DC voltage distribution has been employed in a number of industries, including data centers, the aerospace sector, and dc micro-grids, for its high efficiency and power density. With its benefits of smooth switching and minimal EMI, resonance DC-DC converters are appealing solutions to these issues. The primary goal of this project is to detect and study the converter's working modes using the pulse removal approach. The innovative technique of operation offers transformer size reduction and soft-switching transition of insulated gate bipolar transistors (IGBTs) and line frequency diodes on the rectifier side by using variable frequency and variable phase displacement in sub- resonant mode. The converter employs a revolutionary mode of operation known as pulse elimination technology, which is distinguished by variable frequency and phase shift modulation. Using MATLAB/SIMULINK simulation results, the suggested control approach may be used to identify the reference switching function command to achieve high power efficiency.

INTRODUCTION

Throughout the past 200 years, people have relied on conventional energy sources including coal, petroleum, and other fossil fuel reserves. One of the most significant forms of energy distribution for a long time has been the distribution of electric power energy. Global industrialization and economic development were the results. The primary energy sources are still used to produce electricity, but this has undesirable side effects such air pollution and other environmental harm. The twenty-first century is predicted to see an increase in global air temperature of 1.5°C. Also, the rising worry about the depletion of resources like petroleum, coal, and natural gas compels people to look for alternative renewable energy sources. As a result of growing concern about nonrenewable resource overconsumption, the development of renewable energy sources has increased. Today, much of the research work in the fields of power electronics, electric motor drive, and electric power system has gone towards the development of alternative electricity generation technologies. Fuel cells, wind production, photovoltaic (PV), wave energy, and hydro-electric generating have been the most widely used renewable energy sources thus far. After many years of study and development, renewable energy resources have recently undergone a greater percentage rise. Renewable energy sources currently generate 19% of the world's electrical energy. Offshore wind power has emerged as a major energy resource in Europe in recent years. The MVAC collection grid could be replaced with MVDC (Medium Voltage Direct Current) grids to boost efficiency and minimise the bill of materials for the technology, lowering the levelized cost of electricity (LCOE) by up to 3%. MVDC grids are predicted to play a significant part in future energy distribution and collection systems. The fault-tolerant component serves to increase the system's supply, and several fault- tolerant solutions have been proposed in the literature. The majority of these approaches includea large amount of additional hardware (such as series connection of switches/fuses or semiconductors/leg redundancy to isolate the failure, increasing the cost and decreasing the device's performance). In this case, the use of the topology's innate fault-tolerant functionalitysuggests a fault-tolerant resolution with minimaladded hardware and no influence on SRC converterperformance. Individually from the device, the semiconductor might fail in two ways: open circuit or brief circuit. An OC failure is caused by bond- wire or ruptures, as well as a gate power failure, according to the motives.

The SC failure, on the other hand, is most likely the result of a dynamic or static latch up, an overvoltage, a

127-29

INDIA'S FAST FOOD OUTLETS: A SURVEY ON GLOBALIZATION THROUGH EVOLVING MARKETING STRATEGIES

[1]M.Bharath, [2]B. Archana, [3]K. Swapna, [4]K. Shirisha
[1,2,3]Assistant Professor, [1]PG Student, [1,2,3,1]Department of MBA, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT

One of the world's fastest growing segments of the food sector is cheap food. Whatever the case, over an unspecified period of time, with an increase in the number of family units, financial growth, and rising per capita salaries together with globalization, cheap food culture in India acquired distinct quality. The investigation reveals that 64% of the respondents visit cheap food establishments once a week, the majority of respondents spend more than 15% of their monthly income on cheap food, and the most popular cuisine among respondents is western junk food. They likewise communicated that the markdown offered at the inexpensive food outlets are considered as the viable limited time action. The cheap food industry is exceptionally serious and overwhelmed by enormous organizations. Profoundly serious organizations must be smart in creating showcasing techniquesthat drive purchaser traffic. This involves remaining in steady touch with clients. Probably the most ideal ways for greatest inexpensive food organizations to keep in contact with their organizations is through advertising research. Inexpensive Food Company must realize what key clients need and will purchase before creating promoting and publicizing methodologies. Inexpensive food organizations frequently use market division as a promoting instrument. Inexpensive food organizations can drive traffic through collectibles, especially those that children appreciate. Select a film or well known vivified film Market division is the way toward distinguishing key purchasing bunches that disparage your eatery.

Introduction

Rapidly assembled and served meal is referred to as cheap food. While any meal with little preparation time might be considered cheap food, the word often refers to meals supplied to customers in take-out or removal-only structures at cafés or stores with subpar arrangements.

Writing REVIEW:

Focusing towards the buyer conduct K. Aswathappa (2012), states that specific components hadan effect on the individual conduct. These elements incorporate individual elements (age, sex, training, occupation, Innovativeness and so forth.), mental elements (learning, inspiration, character, observation, values, mentalities and so on.), natural variables (financial, political, innovative, legitimate, social, social and others) and hierarchical components (work life balance, authoritative structure and plan, administration, responsibility, physical offices and so forth.) Kara et al., (1997) analyzed how the view of clients towards drive-through eateries contrasted across two nations USA and Canada. The consequences of the examination uncoverednoteworthy contrasts in observation between the incessant cheap food purchasers in USA andCanada and further more contrasts between consumers" inclinations for drive-through joints according to age gatherings. Rezende and Avelar (2012) endeavored to depict the eating out propensities for purchasers in Brazil. The investigation uncovered that a „search for variety" was a helper for eating outside thehome. The craving for „convenience" was a significant component on numerous events of utilization. The more youthful individuals and individuals with higher earnings had more concentrated utilization and more great perspectives towards eating out. The examination additionally uncovered that in spite of the fact that eating out was an extremely famous pattern, huge numbers of the customers didn't voice any expectation of

130-82

AN EFFICIENT ANALYTICAL STUDY ON UNS S32760 STRESS ANALYSIS OF NOTCHED SUPER DUPLEX STAINLESS STEEL

[1]Dr.Ch.Srinivas, [2]D.Vijay Kumar, [3]K.Sudharshan, [4]G.Ranapratap Reddy
[1]Associate Professor, [2,3]Assistant Professor, [4]UG Student, , [1,2,3,4]Department Of Mechanical Engineering,
Vaageswari College Of Engineering - Karimnagar

ABSTRACT
The current project aims to investigate how the notch shape affects the tensile strength of the superb duplex stainless steel UNS S32760. The strain-lifestyles curve for the chosen fabric is initially calculated using Finite Element Method and empirical methodologies. Afterwards, an experimental inquiry is conducted to assess the consequences. The investigations' scope includes measuring the strain on the experimentally chosen material. Research on the effects of the notch parameters (depth, breadth, and notch crucial angle) on the tensile strength and fatigue life of the aforementioned material is also included in the scope. The structure of the tests uses project notches of various parameters using response floor methods to quantify the impact of notch parameters on fatigue lifetimes. Prediction of the effect of any notch variation at the fatigue lifestyles is likewise completed the use of regression analysis.
Keywords: Keywords: Fatigue Life, fatigue analysis, Fatigue failure, Low Fatigue analysis, S-N curve, ϵ-N curve, Super Duplex Stainless Steel, UNS S32760.

INTRODUCTION
Fatigue failure is the degradation of a material brought on by cyclic stress, which results in recent and localized structural damage that may be seen with the use of a cracking boom. A crack that has already started will get smaller with each load cycle until it reaches a significant length, at which point the pressure depth aspect of the crack causes fast propagation and often complete fracture of the component or form. Steel fatigue originated from the traditional association of fatigue with metal system failure.

Ship systems are exposed to many different cyclic mass variations from wind, waves, and load operations, which might cause fatigue damages in them. Fatigue cracks usually arise in advance than expected in numerous places of ships/different marine systems which significantly have an effect on their wellness and operations. During the last decades, there has been a speedy boom within side the international delivery markets and this created the want for accelerated length of ships. The improvements in production technology enabled this with the aid of using novel versions of stainless steels with better electricity to weight ratio in ships. The OOCL Hong Kong is the primary deliver ever to surpass the 21,000 TEU mark. With accelerated dimensions, the deliver's shape is liable to greater risk from the tidal masses that may bring about fatigue damages and this will venture the deliver's layout and safety. Hence, deliver systems must be designed with good enough fatigue electricity banking upon general policies and procedures. Though the deliver systems are constructed primarily based totally on general policies and pressure-primarily based totally strategies, screw ups are nonetheless determined because of fatigue. Due to the massive uncertainties like numerous wave environments, unsure hydro-dynamic repetitive masses, pressure concentrations etc. concerned with inside the fatigue layout procedure of ships, fatigue cracks arise a great deal in advance than expected. One of the motives for the poor fatigue layout of ships is the absence/ inadequate utilization of stress-primarily based totally strategies in the course of fatigue studies. The presence of unexpected geometry changes, notches and cracks at the surface additionally want to receive weightage in the course of the fatigue layout. Hence layout of deliver systems for fatigue loading is inadequate with out stress-primarily

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

Journal

ISSN NO : 2347-3150

133-35

aluation of the Thermolysis Process for the Production of Biofuel and Biochar from Sugarcane Bagasse

[1]D.VIJAY KUMAR, [2]G.THIRUPATHI REDDY, [3]R.SAINATH, [4]K.SATWIK SRIRAM
[1,2,3]Assistant Professor, [4]UG Student, , [1,2,3,4]Department Of Mechanical Engineering, Vaageswari College Of Engineering - Karimnagar

ABSTRACT

Biochar and fuel made from sugarcane bagasse Thermal pyrolysis has the potential to take the place of energy sources originating from fossil fuels. The numerous conversion processes, such as gasification, torrefaction, and pyrolysis, have all been considered, although the latter has received more attention due to its viability when compared to the former. The conversion of the biomass by pyrolysis was carried out at a range of pyrolytic temperatures ranging from (300-500C) at a heating rate of 250C/min, and the ideal temperature was discovered at 450C, which was determined to be 53.3% of bio-oil. The liquid product, or bio-oil, was examined using a variety of characterization methods, including GC-MS, 1H-NMR, physical characteristics, and CHNS. The bio-characteristics oil's were determined to be appropriate for usage as fuel. The effect of temperature on the yield of bio-oil, bio-char, bio-gas & reaction time were studied & plotted which showed that the bio-char yield decreased with increase of the pyrolytic temperature. The potential of the bio-char produced from biomass was analyzed by proximate, ultimate, BET surface area, SEM-EDX, anion chromatography, pH, Electrical Conductivity& Zeta Potential studies. The carbon percentage was high enough to be used as a soil amendment, the surface areas were also found to be more with low surface area as 132m2/gm for 300C bio-char to 510 m2/gm for highest temperature bio-char. This high surface area attributed towards application of the bio-char in soil amendment purpose. The ion-chromatography results also showed the presence of anions that are required as nutrients for plants for their metabolic activities. It will also serve as a good source of plant nutrients since it contains less toxic elements. The bio-char had a slightly acidic surface as found from the pH study. Thus from the above studies we found that the bio-fuel and the bio-char can serve as a source of energy as well as chemical feedstock for the future todepend on.

Keywords: Sugarcane bagasse, bio-oil, bio-char, TGA, XRD, Proximate analysis, CHNS analysis, BET surface area, Electrical Conductivity.

INTRODUCTION

People have relied on biomass for their energy needs since the beginning of time. Advances in manufacturing were made possible by the discovery of crude oil. The term "biomass" refers to the biological material derived from living things, and it often refers to the ecosystem's flora, which includes plants and components mostly generated from plants. As biomass is a renewable source of energy, after being transformed into useful goods, it may be used either directly or indirectly. The primary energy sources used to meet the need for energy are coal, oil, and natural gas. As petroleum sources are getting depleted, and also there is a demand for petroleum products, so we have to develop economical and energy-efficient processes for the production of fuels. Thus, a dire need to put a control over its consumption has been felt by environmentalists and economists aswell, to examine renewable and less cost substitute to fossil fuel to meet their energy demand. In regards to this, a lot of research work is going on around the globe on various alternative sources of energy such as solar, wind, geothermal, hydrogen, nuclear, bio fuel or biomasses.The main source of biomass generally comes from the forestry products, agricultural crops and residues and biological wastes. The energy

ISSN NO : 2347-3150

136-38

A FIR FILTER'S EFFICIENT VLSI DESIGNING APPROACH BASED ON FIXED COEFFICIENT RNS

[1]K. Jyostna, [2]R. Srinvias, [3]B. Bhargavendera, [4] M Madhumitha
[1]Assistant Professor, [2,3]Associate Professor, [4]UG Student, [1,2,3,4]Department of Electronics and Communication Engineering, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT

In this work, a residue number system (RNS)-based fixed coefficient finite impulse response filter implementation is provided for the moduli set of 2k-1, 2k, and 2k+1. By employing a pre-loaded product block, the novel multiplication method lowers the number of incomplete products. In comparison to the traditional modular multiplication, the suggested modular multiplication enhances clock frequency while using less area and power due to the reduction in partial products. Moreover, the current method does away with the necessity for a circuit that converts binary numbers to residue numbers, which is often required at the front end of RNS-based systems. Two fixed coefficient filter topologies using the novel modular multiplication technique are given in this paper. Performance comparison shows that the proposed structure involves significantly less ADP and less EPS than the existing block direct-form structure for medium or large filter lengths while for the short-length filters, the existing block direct-form structure has less ADP and less EPS thanthe proposed structure. Application-specific integrated circuit synthesis result shows that the proposed structure for block size 4 and filter length 64 involve 42% less ADP and 40% less EPS than the best available FIR filter structure of for reconfigurable applications. For the same filter length and the same block size, the proposed structure involves 13% less ADP and 12.8% less EPS than that of the existing direct-from blocks FIR structure.

INTRODUCTION

Finite impulse response (FIR) filters are favored over infinite impulse response (IIR) filters in many digital signal processing systems, including telephony and audio-video systems, since they are stable and always have a linear phase response. In the FIR filter transfer function, stability and linear phase response are produced by the presence of only zeros and symmetric filter coefficients, respectively. In higher clock frequency applications, the transposed direct form (TDF) FIR filter structure is recommended over the direct form (DF) filter architecture (Parhi, 2007). Due to the simultaneous arithmetic operations with tiny size residue numbers, the clock frequency may also be increased utilizing RNS-based FIR filter structures. A binary number is represented in RNS by a series of digits starting with { 1 m, 2 m , 3 m ..., q m } called moduli (P. V. A. Mohan, 2002). Here, q represents the number of modulus presented in a moduli set. These modulus values are relatively prime to each other. The dynamic range is defined as [0,M −1] for a given moduli set. Here M is the maximum number of a given moduli set and is defined in equation (1). The residues of any number between 0 to M −1 are represented uniquely for a given moduli set (P. V. A. Mohan, 2002). The RNS-based FIR filters are implemented with forward converter (for binary to residue conversion), arithmetic circuits such as modulo multipliers and modulo adders for each modulus and a reverse converter (for residue to binary conversion). In the past, several FIR filter implementations were reported using RNS (Jenkins & Leon, 1977; Wheaton & Current, 1982; Bayoumi, Jullien, & Miller, 1985; Soder-strand & Escott, 1986; Pardikar, Tummala, & Rao, 1987; C.-L. Wang, 1994; Conway, 2006; Zivaljevic, Stamenkovic, & Stojanovic, 2012; Vun, Premkumar, & Zhang, 2013). All these filters are implemented using {2k −1,2k ,2k +1} moduli set. The modulo multiplication and addition of 2k +1 modulus requires more hardware as compared to 2k −1 and 2k modulus. Also, modulo multiplication by powers of 2 is not as simple as left circular rotation in a 2k −1 modulus (Hiasat & Abdel, 1998). Hence, we considered {2k −1,2k ,2k• }1 −1} moduli sets for the filter implementations. In (S. Kotha, Singhvi, & Sahoo, 2013), filters are implemented with {2k −1,2k ,2k−1 −1}. FIR: It implies Finite Impulse Response Filter

We realize that consider computerized channels whose motivation reaction is of limited of length, so

139-41

An Evaluation of the Array and Booth Multiplier Designs Using a Multiplier that Multipliers According to Vedic Multiplier Area and Speed

[1]T.Nageswhar Rao, [2]Dr.Venkata Reddy Adama, [3]R.Srinvias, [4]Boini Archana
[1,3]Associate Professor, [2]Professor & HOD [4]UG Student, [1,2,3,4] Department of Electronics and Communication Engineering, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT

One of the essential pieces of hardware in most digital signal processing (DSP) systems is the multiplier. Digital communications, spectrum analysis, and digital filtering are examples of common DSP applications where multipliers are crucial. Power dissipation becomes one of the main design restrictions due to the fact that many modern DSP applications are aimed at portable, battery-operated systems. Reducing a multiplier's delay is crucial to achieving the design's goals since multipliers are fairly complicated circuits that often run at a high system clock rate. This study proposes a high speed multiplier that is effective in terms of speed, using half adders for partial product addition and Urdhva Tiryagbhyam[1], a sutra from Vedic mathematics, for multiplication. The code is written in VHDL and results shows that multiplier implemented using Vedic multiplication is efficient in terms of area and speed compared to its implementation using Array and Booth multiplier architectures. The hardware requirement is large thus increasing the time delay. The basic building blocks should be reduced to achieve less time delay. The work can be extended tothe adders used can be re modified using basic gates and multiplexer.

INTRODUCTION

In arithmetic operations, multiplication is a crucial fundamental process. In many Digital Signal Processing (DSP) applications, including convolution, Fast Fourier Transform (FFT), filtering, and in microprocessors in their arithmetic and logic unit, computation-based operations based on multiplication, such as multiply and Accumulate (MAC) and inner product, are currently implemented. Many algorithms, including the array, Booth, and modified Booth algorithms, can be used to implement multiplication. The well-known array multiplier has a predictable structure. The add-and-shift method is the basis of the multiplier circuit. The multiplicand is multiplied by one multiplier bit to produce each partial product. The partial product are shifted according to their bit orders and then added. Booth Multipliers is a powerful algorithm for signed-number multiplication, which treats both positive and negative numbers uniformly. This method that will reduce the number of multiplicand multiples. For a given range of numbers to be represented, a higher representation radix leads to fewer digits. The partial-sumadders can also be rearranged in a tree like fashion, reducing both the critical path and the number of adder cells needed. The presented structure is called the Wallace tree multiplier The tree multiplier realizes substantial hardware savings for larger multipliers. The propagation delay is reduced as well. In fact, it can be shown that the propagation delay through the tree is equal to O (log3/2 (N)). While substantially faster than the carry-save structure for large multiplier word lengths, the Wallace multiplier has the disadvantage of being vary irregular, which complicates the task of an efficient layout design.

LITERATURE SURVEY

Rapidly growing technology has raised demands for fast and efficient real time digital signal processing applications. Multiplication is one of the primary arithmetic operations every application demands. A large number of multiplier designs have been developed to enhance their speed. Active research over decades has lead to the emergence of Vedic Multipliers as one of the fastest and low power multiplier over traditional array and booth multipliers. Honey Durga Tiwari.et.al talked about designing a multiplier and square architecture is basedon algorithm of ancient Indian Vedic Mathematics, for low power and high speed applications. They explained Urdhvatiryakbhyam and Nikhilam algorithm and found that Urdhvatiryakbhyam, is applicable to all cases of multiplication but due to its structure, it suffers from a high

142 - 44

The CNN employed in the elimination of background was cleaned using an innovative image proposal method.

[1]T.Ravi Kumar, [2]M.Srinivas, [3]Yasmeen Sulthana, [4]Korandla Harshith Reddy
[1,2]Associate Professor, [3]Assistent Professor [4]UG Student, [1,2,3,4]Department of CSE, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT

The most widely used real-time application in the modern world is video surveillance. As machine learning has advanced, several methods for multi-object detection have been created. Several firms need real-time monitoring systems for security reasons; hence this area of study is crucial. This study suggests a fresh approach to identifying moving things. A transportable system is necessary for a number of applications, including operational robots and military surveillance systems. These real-time monitoring technologies are more advantageous for a range of individual needs, security issues, and information gathering. Many techniques are employed for this job, and substantial research is done to automate and secure this system. In the proposed method the clean original image and the CNN is used to subtract the background.
Keywords— multi-object detection, CNN, video surveillance

INTRODUCTION

A video is overlay in time with several pictures in the field of image analysis, which is closely related to video analytics. In addition to tasks specifically related to video, including object tracking (identifying objects over numerous frames), prediction of trajectory (estimating object trajectories), and activity detection, similar problems like video classification and object identification in video were also tackled (classifying actions in a video sequence). For these tasks, CNS produced excellent results, such as in the photo analysis. [1, 2].

The Gaussian Mixture Modeling approach (GMM) isutilized for motion modeling and its modifications are applied to the calculation of motion descriptors throughout the tracking process. Video streams are initially transformedto several frames and optical flow calculations are done on the frame extracted.

Various essential applications of huge significance in the real-time environment that give outstanding security employing video data in locations like theatres and shopping malls. Patients' quality of life is also improved as a result of medical care. For added security, video abstraction is available. During video analysis, traffic management professionals typically examine traffic flow and use video editing to create futuristic video effects. Various studies are used in video surveillance to detect objects in real time. Navigation, object detection and tracking, and finally object recognition and surveillance are all steps that must be included in most studies. Object detection is accomplished by segmenting images into foreground and background objects. Object tracking establishes the correlation between the objects in successive frames of a video stream.

LITERATURE SURVEY

Detecting all objects of a specific type in an image is the aim of object detection, as the name suggests. Alternatively, there may be several classes where each object needs to be accurately classified. An image is fed into an object detector,and the result is a list of bounding boxes, complete with labels if there are multiple classes. The pixel coordinates of the top-left and bottom-right corners of the bounding box, as well as the width and height of the box, are commonly used to depict a bounding box.

Most object detectors give each box a reliable value, indicating how reliable it is to detect. The average accuracy of all classes is a standard performance statistic for an object detector As mentioned above, CNN methods of object detection are state-of-the-art, outperforming older methods, such SVMs.

M. Elhoseny et al [3] developed Multi objection detection and tracking (MODT) with the Kalman filtering

145-47

Examination of the Block Chain for Secured EHR Sharing in Mobile Cloud-Based E-Health Systems

[1]Y.Susheela, [2]T.Ravi Kumar, [3]M.Srinivas, [4]Sunkari Dhanasri
[1,2,3]Associate Professor, [4]UG Student, [1,2,3,4]Department of CSE, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT

Electronic health records (EHRs) are increasingly being stored in mobile cloud environments, which merge mobile technology with cloud computing to make it easier for patients and healthcare professionals to share medical data. With the help of this cutting-edge paradigm, healthcare services may be provided at minimal operational costs with a great degree of flexibility. This new paradigm does, however, bring up issues with network security and data privacy for e-health systems. It is a difficult problem to properly exchange EHRs across mobile users while ensuring high security levels in the mobile cloud. Using a mobile cloud platform and the decentralized interplanetary file system (IPFS), we provide a unique EHRs sharing structure in this study. In particular, we provide a reliable access control system utilizing smart contracts to accomplish secure EHRs sharing among different patients and medical providers. Wepresent a prototype implementation using Ethereum block chain in a real data sharing scenario on a mobile app with Amazon cloud computing. The empirical results show that our proposal provides an effective solution for reliable data exchanges onmobile clouds while preserving sensitive health information against potential threats. The system evaluation and security analysis also demonstrate the performance improvements in lightweight access control design, minimum network latencywith high security and data privacy levels, comparedto the existing data sharing models.

EXISTING SYSTEM

Blockchain is a paradigm-shifting technology that has emerged over the past decade, which is based on peer-to-peercommunication technology, network theory, and crypto graphy .However, there are still some limitations in the existing blockchain framework that prevents its widespread adoption in the commercial world. One important limitation is the storage requirement, wherein each blockchain node has to store a copy of the distributed ledger. •us, as the number of transactions increases, this storage requirement grows quadratically, eventually limiting thescalability of a blockchain system.

Disadvantages of Existing System:

1. More security issues.

PROPOSED SYSTEM

In this paper, instead of saving entiretransaction of blocks we are saving only oneblock. To provide security to block author converting that block in to SHAMIR share and then all SHAMIR share will be distributed between all available nodes.While reconstruction application will obtain all shares from nodes and then apply SHAMIR SECRET to recover original blockdata. If any share missed or return incorrect value then reconstruction will be failed.SHAMIR secret will work based on random polynomial and prime number while generating secret polynomial will be appliedon block data and while getting original value will perform reverse polynomial.

SYSTEM MODEL

In this section, we present a system architecture and introduce the concept of data uploading and data sharing in our system. Further, design goals in this paper are also highlighted. FIGURE 1. The overview of blockchain based e-health system on mobile cloud. FIGURE 2. The data flow of the proposed mobile cloud blockchain system.

148-150

EXAMINATION AND DETERMINATION OF CUSTOMERS' CHURNS USING DATA MINING MODELS IN THE BANKING INDUSTRY

[1]R.Sagar, [2]Y.Susheela, [3]A.Sowjanya, [4]Katukojula Shivaprasad
[1,3]Assistant Professor ,[2] Associate Professor, [4]UG Student, [1,2,3,4]Department of CSE, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT

A fresh approach to studying and forecasting client churn has been put forth. The technique uses a data mining paradigm in the banking sector. This was brought about by the fact that there are an estimated 1.5 million churning consumers per year, a number that is continuously growing. Churn customer prediction is the process of determining whether or not a customer will leave a business. One technique to predict customer attrition is to use a classification strategy from data mining that creates a machine learning model. This study tested five different categorization algorithms using a dataset of 57 variables. Multiple comparison experiments between various classes were carried out. With a 50:50 comparison, the Support Vector Machine (SVM) was used. At an Indonesian private bank, class sampling data is the most effective tool for predicting client attrition. The results of this modeling can be used by businesses to take strategic measures to avoid client attrition.

Keywords—customer churn, prediction, data mining, classification, machine learning

INTRODUCTION

One of the largest banks in Indonesia, XYZ Bank, has thousands of thousands of customers who must be treated well in order for them to continue using the services offered by the business. Businesses have understood that they must work to retain current customers in addition to acquiring new ones since, if current customers churn, the number of clients would decrease if there are no additional new consumers. Around 1.5 million customers at our case study (XYZ Bank) leave each year, and that number is rising. Despite the fact that it may contribute to the deterioration of new customers, to get new clients fees 5 to six instances higher than preserving current customers. Some techniques can be executed to protect ancient customers, which is to predict clients who will churn. Predicting churnclients goals to pick out potential churnclients primarily based on previous dataand preceding behavior so that incentives can be provided to survive. Data evaluation can be described as an in-depth examination of the means and necessary values handy in the records to discover necessary data the use of precise strategies and techniques [3]. One approachthat can be used is information mining techniques. Some preceding research [1],[4],[5],[6] many have shown that statistics mining methods can be used to predict churn customers. The cause of this find out about is to attain the first-class facts mining studying mannequin thatcan be carried out by way of XYZ Bank to stop clients from leaving them.

LITEARTURE SURVEY

Customer churn analysis in banking sector using data miningtechniques

AUTHORS: Oyeniyi, A., & Adeyemo

Customer churn has become a major problem within a customer centred banking industry and banks have always tried to track customer interaction with the company, in order to detect early warning signs in customer's behaviour such as reduced transactions, account status dormancy and take steps to prevent churn. This paper presents a data mining model that can be used to predict which customers are most likely to churn (orswitch banks). The study used real-life customer records provided by a major Nigerian bank. The raw data was cleaned, pre-processed and then analysed using WEKA, a data mining software tool for knowledge analysis. Simple K-Means was used for the clustering phase while a rule- based algorithm, JRip was used for the rule generation phase. The results obtained showed that the methods used can determine patterns in customer behaviours and help banks to identify likely churners and hence develop customer retention modalities. The regulatory framework within which financial institutions and insurance firms

151-153

ANALYSIS ON IDENTIFICATION AND CATEGORIZATION OF HAPP SYSTEMS FOR SMART HOME USES ON PERSONAL ACTIVITIES

[1]A.Mahendar, [2]E.Kiran Kumar, [3]A.Kalpana, [4]D.Akhila
[1,3]Assistant Professor, [2]Associate Professor, [4]UG Student, [1,2,3,4]Department of CSE, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
The research suggests a model (HAPP) that heavily relies on home-related data as a means of learning and discovering human action plans for smart home applications. from the tenant's mentality. The HAPP system focuses on the requirement to dissect the mechanical level of life planning, which is referred to in law as human mobility.

INTRODUCTION
Surveys indicate that 66% of the world's population will reside in urban regions by 2050. Urban regions are under too much stress as a result of this enormous class transition to reevaluate how inhabitants' welfare is currently managed. In the middle of these developments, a lot of houses have innovative equipment that generates a lot of wonderful information and indexes that may be looked into to assist with managing medical services (such as smart meters, sensors, etc.). - A sensor, a primary product structure, and a complementary interface are what make up a bright house. They foresee and respond to occupants' needs and aspirations while also providing luxury, comfort, and security Trying to move forward. Smart Homes implements or recognizes various management and mechanized companies such as room temperature control and smart forced ventilation systems such as complex tasks such as inspections or residential area expectations. For example, it is possible to indirectly determine a person's health status based on historical data by monitoringchanges in the use of home appliances in smart homes.

LITERATURE REVIEW
Title: Modeling the scaling properties of humanmobility
The post-fat recovery size and suppressed temporal representation represent the same human phenomenon that strongly suggests the importance of the CTRWpattern of human diversity time, but humans do not really Also does not accept that this series is reallyarbitrary. Given the importance of human transportation, from the concept of tragedy to traffic forecasting and civic organization, we need a quantitative model that can represent the measurement characteristics of individual human awareness. Here, using accurate human transportation information obtained on the following mobile phones, we show that the expectations of the CTRW model are contrary to the experimental results. It offers two principles for monitoring human cognition, which allow us to create small self-predicting models for the unique diversity of human beings. This model can not only record the laws of scale, but it can also make diagnostic predictions for most instances of appropriate scales.
In addition to the law of observed scale, most examples of proper measurement can also be predicted by diagnostic methods.
Authors: Kim Yoon Joo, Diane Cook, Sammy Hurl.
Title: Identifying Human Activities and DiscoveringModels
At a critical level, developmental affirmations can be misused with key points of social interest, especially considering all applications of human leadership, such as elderly thinking and social protection. This article focuses on basic human activities. Observing complex activities remains a difficult and dynamic field of study,and the potential for human activity presentschallenges. Understanding human activity combines the validity of activity with the disclosure of development plans. An important feature is the careful awareness of human activities, which is the subject of a default development model. Development Facility Disclosure Specialistcreates an unpreventable The system searches for sensor data before and after searching the activity plan. Authors: Jinko Morakami, Shinchi Ato.
Title: Detecting Human Activities Using MMFOverview:
At this time, we propose the management of human behavior recognition using electroencephalogram (EEG). First, let's measure the subject's brain wave information. EEGs with a large number of sensors are used, especially for regular surveys. Therefore, subjects should eat or smoke while using the EEG interface. In any case, this situation does not help the subject. At thispoint, we record the weight of the subject and use

154 - 156

Analysis on using Revit and AutoCAD software to design and implement a soft landscaping for a building

[1]Kodurupaka Rajesh, [2]Rambade Ganesh, [3]Rupa Gaddam, [4]D Shravani
[1,2]Associate Professor & [1]HOD, [3]Assistant Professor, [4]UG Student, [1,2,3,4]Department of Civil Engineering, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
Landscape architecture of the "soft scaping" variety with live horticultural components of a landscape is referred to as softscape. Flowers, plants, shrubs, trees, flower beds, and tasks like weed/nuisance care are all examples of soft landscaping. Using rakes, shovels, picks, and gas powered tools, planting, trimming, spraying, and digging for everything from plants and shrubs to flower beds are standard practises. This expression has gained popularity recently in pop culture (2006 onwards). Softscape is used to give landscape personality, create an aura and ambiance, and reflect the sensibilities of locals. We must do correct plantation in rhythm and line form order by creating an idea of the overall site area and the amount of space used by buildings, labs, and play areas, etc.
Keywords: Autocad, soft scaping, buildins

I. INTRODUCTION

The arranging and altering of features in a landscape urban area or garden is known as landscape design, sometimes known as landscape architecture it entails the creation of urban and rural landscapes through the planning, designing, and management of open spaces.

The term "softscape" describes a landscape's living horticulture components. Flowers, plants, shrubs, trees, flower beds, and tasks like grading, planting, mowing, trimming, aerating, spraying, and digging for everything from plants and shrubs to flower beds are all examples of soft scaping. Common tools include wheelbarrows, as well as hand tools like rakes, shovels, and picks, as well as gas powered tools. This expression has gained popularity in modern mainstream culture since 2006, thanks to programmes like Home & Garden Television. The goal of soft landscaping is to lend character to the landscaping, create an aura, ambience, and reflect the sensibilities of the inhabitants.

The term softscape stands in contrast to hardscape, which represents inanimate objects of a landscape such as pavers, stones, rocks, planter boxes, arbors, water feature as well as structures of wood and natural stone and concrete, like retaining walls, patios, fences and decks, pergolas, and stairs.

Objectives

- To know the total site area of the college.
- To locate the vegetation actually present in the college.
- To calculate the open space in the college.
- To provide new plantation inside the college.

Methodology

1. Existing tree roots

Where roots of existing trees have been damaged or exposed, the following treatment shall be carried out:

- Shall be wrapped with straw or hessian during construction of the works. This includes all roots exposed during excavation.

152-159

A DIGITAL SMART VOTING SYSTEM ANALYSIS USING CNN, AUTHENTICATION, AND IMAGE PROCESSING

[1]Dr.P.Venkateshwarlu, [2]P.Sathish, [3]Anvesh Kumar, [4]K.Rachana
[1,2,3]Assistant Professor, [4]PG Student, [1,2,3,4]Department of MCA, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
Despite being a democratic country, India still conducts its elections using costly, labor-intensive polling machines. The web-based system allows voters to cast their ballots from anywhere in the world. The Indian government developed a limited IP address for use in the online election. People should go to the website to register their names and addresses. Each voter will have their fingerprints and picture taken by the electoral commission. The photos will be stored in a database or on a server. Because a database comparison is done when the images are retrieved on Election Day, voting is safe. Faces and fingerprints are used to access the voting process, much too how mobile phones work. The existing system necessitates voter physical presence, which many voters find inconvenient. In addition, the procedure takes less time. The number of bogus voters can be minimized by detecting facial and fingerprint images. To make the system safer, the space between the eyes and the eyebrows remains consistent with age.
Keywords: Online website voting, face capture, Haar cascade face recognition, fingerprint, image pre-processing, Convolutional Neural Networks (CNN).

INTRODUCTION

Any democracy must have elections, and when citizens choose their own leaders, democracy is genuinely alive. However, individuals and political parties are taking advantage of flaws and loopholes in the current electoral system used in our nation. Numerous flaws in the existing system, such as the potential for voting twice, the ability to tamper with Electronic Voting Machines (EVMs), and the ability to fabricate results, all work against democracy in its purest form. Elections are often held in a specified region utilizing electronic equipment, which are labor- and energy-intensive. It costs a lot of money to relocate and maintain the machine. The method provided offers a resolution to all the problems stated. People who do not live in the same area, the elderly, or those who cannot wait in huge lines for long periods of time will benefit from the Smart voting system, which uses facial and fingerprint identification. The voter can vote from anywhere, and the possibility of duplicate votes is reduced as a result. Using haar Cascade Algorithm, this online voting system employs image processing to detect voter faces[1] .

To extract the lips, face, and eyes from a whole face and compare them to a database image of a face. The image of a fingerprint is matched using CNN Deep Learning. CNN reduce the computational time for processing the large size images[2]. The Artificial Neural Networks (ANN) training takes a long period. Future detection and picture classification are two steps of CNN. The features of face and fingerprint images are measured and compared to the database. When it's the same, the voter will be permitted to vote. In an election, voters can vote for any candidate. After that, the additional leader slots will be disabled. The votes are recorded on a server, and the counting is completed at the conclusion of the election. Client and server commission are critical to the system's success[3].

The Internet Protocol (IP) address is obtained from the election website of the government. After the crucial information is provided to the system to separate the eligible voters from the false ones, counting is very simple and takes very little time compared to the present system. Importantly, the system designed is totally web-based, making it very cost-effective in comparison to current methods. In addition, if the website is properly secured,

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 51, Issue 8, August : 2022

160-162

A UNIQUE 15-LEVEL ANNUAL BASED SOLAR FED CASCADED INVERTER USING PI, ANN, AND FL BASED CONTROLLERS TO IMPROVE POWER QUALITY

[1]M.RamanaReddy, [2]K.Chandramouli, [3]K.Ramesh, [4]Kokku Sandeep
[1]Assistant Professor [2]Professor & HOD, [3]Associate Professor, [4]UG Student, [1,2,3,4]Department of Electrical and Electronic Engineering, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
Harmonics impair power quality in solar Photovoltaic (PV) energy conversion systems. This paper's goal is to study harmonic removal utilizing proportional integral (PI), artificial neural network (ANN), and fuzzy logic (FL) based controllers in a solar supplied cascaded fifteen level inverter in order to address this issue. In contrast to current methods, the suggested FLC-based methodology helps reduce harmonic distortions, improving power quality. This research proposes output voltage control to maintain voltage and frequency at the inverter output end in compliance with grid connection standards in addition to increasing power quality. For solar fed cascaded simulations, the MATLAB / Simulink environment is used for solar fed cascaded 15 level inverter incorporating PI, ANN and FL based controllers.

INTRODUCTION
The improvement of sustainable living conditions, which is a top priority in many developing nations, requires access to electrical energy in rural regions. The three most crucial areas of study today are sustainability, electrical supply, and energy efficiency. Energy that is sustainable, renewable, affordable, dependable, and secure is essential for a nation's industrial, human, and economic development. More effective energy utilization has become more crucial due to environmental concerns, diminishing petroleum supplies, and a growing reliance on fossil resources from unstable places. Both thermal and nuclear energy sources, which have been used to produce power for some time, have benefits and drawbacks of their own. The growing emphasison reducing the carbon footprint (CO2) has increased interest in research on non-fossil based fuel as a source of energy. As a result,a more sustainable energy supply is needed in all sectors, including residential, transportation, industrialization, andagriculture. This unforeseen environmental pressure and challenge has encouraged energy providers to innovate and transform the energy system more effectively. Inrecent years, the complexity of various energy policies has been reduced, and investment options in the energy sector haveincreased globally. Renewable energy canbe defined as life from unending natural resources. Natural renewable energy resources include sunlight, water, air,biomass, and geothermal heat. In comparison to other forms of energy, suchas fossil fuels, which are limited and concentrated to specific localities, the scope and opportunities for renewable energy resources are vast over a specified geographical area. The economic andenvironmental benefits of rapid deployment of renewable energy are enormous, and it would result in significant energy security while reducing environmental effects. This includes positive developments in improved healthcare and lower infant mortality ratesas a result of reduced pollution effects, as well as countries saving millions on healthcare. Renewable energy frequentlyreplaces conventional energy requirementsin rural areas for the generation of electricity, water heating, transportation, andenergy services (off grid).

Literature survey
a.Enhanced Local Grid Voltage Support Method for High Penetration of Distributed Generators:
The most notable barriers to allowing a largenumber of distributed generator (DG) connections on medium voltage (MV) and low voltage (LV) electricity networks aregrid voltage rise and thermal loading of network components. Other barriers, such asgrid power quality (harmonics, voltage unbalance, flicker,

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 51, Issue 8, August : 2022

163-65

AN EXAMINATION OF THE ELEMENTS THAT WOULD MOTIVATE CUSTOMERS TO CONVERT TO ELECTRONIC PAYMENTS DURING COVID-19 PANDEMIC

[1]V. Harini, [2]M.Bharath, [3]B. Archana, [4]A. Govardhan
[1]Associate Professor, [2,3] Assistant Professor, [4]PG Student, [1,2,3,4]Department of MBA, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
In 2019-2021, the pandemic of covid-19 has changed the approach to dealing with electronic payments even in developing countries. For Instance, before the spread of covid-19, the concept of digital financial services, included system.
Purpose: - This study aims to find out the factors that influence customers' intention to switch from cash payment to e-payment services during COVID-19.
Methodology: - A descriptive literature review methodology is adopted to complete the study and to get the desired result.
Findings: - In this research, this study talks about how different factors like social, and technical personnelwill affect customer to switch from cash payment to e-payment and how the covid-19 impact towards them Future: -. However, this research still has some limitations. This study does not discuss the influence of therespondents' demographic relationship on the factors proposed in the research model. If this is taken intoaccount in future research, the research will further increase knowledge regarding whether demographicfactors are also a mediating factor influencing user migration from Cash to e-payment services.
Keywords: - Covid-19; E-payment; E-commerce; Perceived Risks; Swishing Intention; perceived factors.

INTRODUCTION
Electronic payment is described as "the transfer of an electronic value of payment from a payer to a payee using an e-payment method that enables consumers to remotely access and control their bank accounts and transactions over an electronic network" (Teoh et al., 2014, p.467). There are several varieties, which are categorized according to the transaction environment and payment mechanism, like electronic cash, online credit card payment, and electronic checks, (Gholami et al., 2010). Globally, there has been a surge in demand for digital and cashless payments. The behavioural intention of users to accept mobile money and its acceptance has changed dramatically. Several prior research has been conducted in the literature to investigate various aspects that impact users' willingness to accept and utilize e-payment. E-paymentsprovide several administrative advantages to governments, enterprises, and economies. They enable governments and financial institutions to reduce transaction costs. They improve trade at the local and international levels by facilitating e-commerce (Yokumah et al., 2017, Gholami et al., 2010; Ho and Wu, 2009). Furthermore, the e-payment system is a factor that reduces the expenses of money in circulation, resulting in significant economic advantages (Yokumah et al., 2017). However, consumers have a variety of misgivings about using online payment methods (Tella, 2012). This might explain why most e-retailers provide a variety of payment alternatives to clients, such as cash on delivery and other electronic payment instruments, such as a debit card or money transfers through e-banking,The basic uniqueness of this approachis that it does not focus on e-payment as an innovation since it does not employ traditional models of innovation adoption. Indeed, the findings suggest that characteristics other than those included in the Technology Acceptance Model (Davis, 1989) or the UTAT (Venkatesh et al., 2003) might explain perceptions of e-payment in comparison to cash payment. The cognitive variables are the advantages

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 51, Issue 8, August : 2022

166-68

AN ENHANCED PERSONAL CONCEPTUAL FRAMEWORK ANALYSIS ON PREDICTING A EMPLOYEE DEDICATION AND ENGAGEMENT AT WORKPLACE

[1]B. Archana, [2]B. Ashok, [3]M.Bharath, [4]Sai Pranay
[1,2,3]Assistant Professor, [4]PG Student, [1,2,3,4]Department of MBA, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
Employee engagement refers to workplace method designed to improve an employee's feelings and emotional attachment to the company, their job duties and position within the company, theirfellow employees, and the company culture. To make or maintain company's sustainability, leaders of companies will work hard to engage their employees using various practices such as fair pay & benefits, effective co-operation, ethical behavior, job satisfaction, career developmentetc. The purpose of this study is to understand the importance and the necessity of the employee engagement which is seen as a driving force for not only in increasing employee commitmentbut also enhancing business and individual performance. Through the literature reviewed it is observed that there are some common factors that are constantly affecting the employee engagement such as compensation, recognition, leadership, training & development, work environment, career opportunities and HR practices. On the other hand there are new andcontemporary variables that also affect employee engagement such as CSR activities, whereas HR analytics and employee motivation are acting as moderating variables.
Key Words: Employee engagement, compensation, performance, Leadership, recognition.

INTRODUCTION
Over the years, it's been one of the toughest challenges faced by CEO, HR, and corporate leadersin many companies. All organizations recognize the importance of engaging and motivating theiremployees. This has become more important over time. The organization was to ensure thatwhen employees logged in each day, they logged in not just physically both mentally and emotionally. In short, organizations need to make sure that employees are genuinely engaged. Employee Engagement is a key driver of today's business. It actually affects employee morale, productivity and reason to stay with the company. Organizations use dedicated employees as a tool of strategic ability. Engaged employees are aware of business conditions and collaborate with colleagues to improve performance within the workplace for the benefit of the organization and themselves. It is a positive attitude towards the organization and its employee's value. Dedicated employees work with complete commitment and enthusiasm.

OBJECTIVE OF THE STUDY
- To identify the factors that influence employee engagement

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 51, Issue 8, August : 2022

169 - 171

A STATISTICAL EVALUATION ON THE EFFECTIVENESS OF THE DIGITAL BANKING ASSESSMENT IN TERMS OF CUSTOMER SATISFACTION

[1]B.Manohar, [2]V.Harini, [3]B. Ashok, [4]M. Madhuri
[1,2]Associate Professor, [3] Assistant Professor, [4]PG Student, [1,2,3,4]Department of MBA, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
This study establishes that digital banking refers to the use of the internet, mobile devices, and other electronic mediums as a delivery channel for banking services. These services include all conventional ones like checking your account balance, printing a statement, transferring money to another account, paying bills, and making payments without having to physically visit a bank. Given how prevalent digital banking is becoming, it is essential to conduct a survey and ascertain the degree of client satisfaction with online banking. We conducted the poll using primary data in order to determine the level of client satisfaction. In my questionnaire, I listed 10 questions. In today's highly competitive financial markets, developing long-term connections with consumers has become a critical strategy for the majority of financial institutions. By this survey we get to know the how efficient is the digital banking and how it is useful to its customers.
Keywords: Banks, customers, Digital banking, satisfaction, Transactions.

INTRODUCTION
People can now purchase, sell, communicate, and engage in other activities all in one location thanks to advancements in modern culture. People today rely heavily on technology and the internet, which helped to create the digital age. The banking industry is undergoing a digital revolution that makes use of technology to make it easier for clients and other stakeholders to communicate and conduct business with banks through a range of channels, including the internet, wireless devices, ATMs, and physical branches. Digital banking relies on the internet, which is a reliable and economical channel forcompanies to communicate with their clients. The number of digital banking services tocustomers continues to grow and the internet offers huge opportunities for banks and other financial organizations. It can say that finally banks are finding that a comprehensive online banking strategy is essential for success in increasingly competitive financial service market. Competition inadvancements in technology and lifestyles have changes the face of banking in the present environmentare seeking alternative way to provide and differentiate their services. For success in growinglycompetitive financial market, banks are finding that an extensive online banking strategy is essential which also provides the security requirements.

Objective of the study
To study the level of satisfaction of the customers using digital banking

LITERATURE REVIEW
Ashima Tondon, Manisha Goel and Sunita Bishnoi (2016), Digital banking is regarded as a delivery channel, which over a period of time has gain recognition. It is in fact growing in many countries and has changed the traditional banking. This channel has been provided competitive advantage to the banks. With the help of digital banking the consumer has an access to number of services just at clickof mouse.

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 51, Issue 8, August : 2022

172-74

ANSYS SECTIONS FOR THE RELIABILITY EVALUATION OF CONICAL ELIMINATE DIFFUSER THERMAL AND CFD ANALYSIS

[1]B.Laxminarayana, [2]Md.Yaqub Ali, [3]V.Arunpandu, [4]P.Sriraj Chakravarthy
[1, 2,3Assistant] professor, [4]ug student, [1,2,3,4]Department Of Mechanical Engineering, Vaageswari College Of Engineering - Karimnagar

ABSTRACT
In a fluid machine, such as a gas turbine, the exhaust diffuser recovers static pressure by slowing the flow and transforming kinetic energy into pressure energy. This makes it an essential part of a turbomachine's environment and a key factor in determining the performance of a turbomachine. As a result, if the diffuser design is improved for efficient pressure recovery, the fluid machine's efficiency can be increased. Based on the findings of a computational fluid dynamics (CFD) research on diffusers with different half-cone angles, the form that gave the greatest pressure recovery was selected. The diffuser's optimal form was then manufactured and tested. CFD analysis to calculate mass flow rate, heat transfer coefficient, pressure drop, and velocity and heat transfer rate for various conical exhaust diffusers (rectangular, circular, and hexagonal), conical exhaust diffuser models modeling using CREO parametric software, and analysis in ANSYS software for different conical exhaust diffusers (rectangular, circular, and hexagonal). CFD and thermal study of conical exhaust diffusers using ANSYS analysis modules.
Keywords: CFD, shapes, thermal analysis, pressure drop and ANSYS.

INTRODUCTION
A blown diffuser is a device that modifies diffuser airflow by interacting with exhaust gases. The definition of a diffuser is "a device for enhancing the static pressure while lowering the velocity of a fluid passing through a system." Diffusers are used to increase static pressure while reducing fluid flow. The phrase "pressing factor recovery" refers to how the static pressing factor of a liquid rises as it passes through a pipe. Yet, a spout is designed to increase release speed, decrease pressure, and specifically coordinate the stream. Investigations can have significant frictional implications, yet these effects are frequently ignored. Typically, pipes containing low-speed liquids may be examined using Bernoulli's rule. Compressible stream relations are commonly used to examine conduits streaming at higher speeds with mach esteems more noteworthy than 0.3.

Supersonic Diffusers: A supersonic diffuser is a duct that shrinks in size as it moves in the flow direction. Fluid temperature, pressure, and density rise as the duct gets smaller, while velocity falls. These changes in pressure, velocity, density, and temperature are caused by compressible flow. In a supersonic diffuser, shock waves may also play a crucial function.. Diffusers come in a variety of shapes, including circular, rectangular, and linear slot diffusers (LSDs, for example). Linear slot diffusers are made up of one or more long, narrow slots that are usually partially hidden in a fixed or suspended ceiling. [1] Diffusers are occasionally employed in the other direction, as air inlets or returns. This is especially true for 'perf' and linear slot diffusers. Grilles are most typically utilised as return or exhaust air inlets. A gas turbine engine's divergent exhaust diffuser is a critical component. It essentially lowers the fluid velocity that exits the low-pressure turbine stage and raises the static pressure.

LITERATURE REVIEW

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 51, Issue 8, August : 2022

125-77

A COMPREHENSIVE REPORT ON THE QUALITY OF SERVICE AND CUSTOMER SATISFACTION OF THE NATURALS SPA AND SALOON IN THE MODERN WORLD

[1]R. Swetha Reddy, [2]B. Manohar, [3]V. Harini, [4]K. Anusha
[1,2]Associate Professor [3] Assistant Professor, [4]PG Student, [1,2,3,4]Department of MBA, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
The satisfaction feelings are an important factor in the process of acquisition and retention of customers. Investigation and monitoring of the level of their satisfaction become essential process of marketing research carried out by companies operating in almost all sectors of the economy. It is pointing out the shortcomings, weaknesses offered goods, services or their quality. Compliance of consumer's expectations and demands, recognition of their unconscious needs, is not currently a priority, but it is standard. Aim. The aim of the study was to know how often customer's visits saloon, treatments do they prefer and what is their satisfying level. The primary data is collected through a structured questionnaire. The investigation was performed via the Internet among a group of nearly 103 respondents. The results shows that that customer visits several times a year mostly for hair services, facials, for skin care treatment and they feel satisfied and relaxed visitto the saloon. It is found that most of the customers heard about the saloon through social media so the naturals unisex saloon and spa should focus mostly on advertisements to attract more customers.
Key Words: Customer satisfaction, Beauty parlors and SPA, Customer preference, Advertisements, Skin and hair services

INTRODUCTION
The lifestyles of the peoples now a days changed rapidly over the past few years, people are realizing the importance of good health and presentation and thus becoming more concerned about their health and beauty.Nowadays in India beauty parlors and salons have become the stress-buster hubs of the 21st century Indians. People fulfill their wish of good-looking by frequently visiting the mind and body renewing spa and salons. Beauty salon is fast growing in line with the economic growth and changes in modern life-style. Increase in the knowledge of grooming made increase in technology, and sanitation levels, the contribution of salons and beauty parlors in people's life has also increased.
Spa centers were known from the roman thermos and are more popular. The International Spa Association defined Spas as entities devoted to enhancing overall well being through a variety of professional services that encourage the renewal of mind, body and Spirit. The spa industry has grown at a phenomenal rate in the past ten years. The growth of health food, gyms and the investment in leisure facilities proves that consumersare looking for more than relaxation during a break or holiday; this unsurprising given time is so precious to contemporary consumers.
The spa market is one of the fastest growing leisure sectors, where societal trends and aspirations find instantreflection in the developments on both the demand and supply sides. The market is very fragmented, each segment catering for different customer needs, which continuously change in line with social and lifestyle changes.

Naturals Unisex Salon and Spa
Naturals were established a decade ago, with a dream to change not just the way people looked but to add sample positively in their attitude to life. Groom India Salon & Spa Private Limited is the registered namefor the chain of Spa & Salons across the country known as **Naturals Unisex Salon & spa**. Naturals, is synonymous today with beauty care and styling in India. Naturals is acknowledged

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 51, Issue 8, August : 2022

178-80

A SIGNIFICANT RESEARCH ON USING FUNCTIONALLY GRADED MATERIALS FOR 3D MODELING DISC BRAKE DESIGNING AND THE ANALYSIS

[1]N.Srinivas, [2]J.Vijaykumar, [3]N.Raj Kumar, [4]D.Nivas Rao
[1,2,3]Assistant Professor, [4]UG Student, [1,2,3,4]Department of Mechanical Engineering, Vaageswari College Of Engineering - Karimnagar

Abstract
A brake disc rotor spins together with the wheel hub assembly to serve as the foundation brake. A foundation brake's primary job is to provide a retarding torque by turning mechanical energy into thermal energy through the relative sliding friction created at the rotor-pad contact. The temperature increase in the braking components may have a big impact on how well a car brakes. Using functionally graded material, a disc brake's strength and temperature distributions under internal pressure and temperature are examined Two disc brake models—one without holes and one with holes—are taken into consideration. Comparing different materials includes using functionally graded and conventional materials. Examples of conventional materials are Cast Iron and Aluminum Alloy 6061. The Functionally Graded Material with metal Aluminum alloy 6061 using Ceramic as interface zone is taken for analysis. FGM's are considered for volume fractions of K=2. Theoretical calculations are done to calculate the material properties for each layer up to 10 layers. Structural and Thermal analysis are done on the model by varying materials. 3D modeling is to be done in Pro/Engineer and analysis is done in Ansys.
Key Words: Functionally graded materials; disc; Thermo elasticity; pressure; stress.

INTRODUCTION

Most of the time, the reinforcement in composites used as supplementary materials in various aviation and automotive applications are distributed uniformly. Practically tested materials (FGMs) are being used as wear-safe layers in machine and motor segments, as interfacial zones to reduce the remaining and heated concerns in reinforced dissimilar materials, and to improve the holding quality of layered composites. They have recently attracted a lot of attention in this regard.

One advantage of FGMs over overlays is that there is no pressure to dispose of possible basic uprightness, such as delamination, because there is constant material property variability.

Analysis of a pivoting plate is an imperative subjectbecause of the extensive variety of utilizations in mechanical designing. A logical arrangement to discoverthe worries in an isotropic pivoting circle under mechanical or warm loads can be found in writing (Timoshenko and Goodier 1951). A few investigations that arrangement with fiber strengthened composite circles have additionally been found in the writing. Zenkour (2006) has introduced precise versatile answers for the pivoting variable thickness as well as uniform thickness orthotropic roundabout chambers. Çallıoglu (2004, 2007) has explored the weights on pivoting rectilinearly or polar orthotropic circles subjected to different temperature circulations. Sayman and Arman (2006) have done an elastic– plastic pressure analysis in a thermoplastic composite plate fortified by steel strandscurvilinear under unfaltering state temperature dissemination.

Albeit a great part of the work on FGMs has been donenumerically, the mechanical and scientific displaying ofFGMs is presently a dynamic research territory. Durodola and Attia (2000) have examined twisting andworries in practically reviewed turning plates byutilizing limited component technique and directnumerical coordination of administering differential Conditions. Chen et al (2007) have exhibited threedimensional systematic answers for a pivoting circlemade of transversely isotropic practically reviewedmaterials. Mohammadi and Dryden (2008) have inspected the part of non homogeneous firmness on thethermo elastic stretch field. Tutuncu (2007) has acquired power arrangement answers for stresses and removals in practically reviewed barrel shaped vessels subjected to interior weight by utilizing the little twisting hypothesis. You et al (2007) have examined the weights on the FG pivoting roundabout circles under uniform temperature. Çallıoglu (2008) has contemplated the pressure analysis of the pivoting empty plates made of capacity

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 51, Issue 8, August : 2022

181-83

A SIGNIFICANT REDUCTION OF COUNTING BASED BLOOM FILTERING FOR SECURE DATA TRANSFER IN CLOUD COMPUTING

[1]S.Sateesh Reddy, [2]Gulab Singh, [3]K.Sridhar, [4]V.Nithya
[1,2,3]Associate Professor, [4]UG Student,[1,2,3,4]Department of CSE, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
Since cloud storage technology advances quickly, more and more data owners are choosing to outsource their data to a cloud server, which may significantly reduce the cost of local storage. Because different cloud service providers provide excellent data storage services, including security, dependability, and access speed, and pricing, cloud data switch has become a crucial demand of the information owner to transfer cloud provider providers. The secure transfer of data from one cloud to another and the permanent deletion of the transferred data from the original cloud become crucial problems for information owners. In this study, we put together a novel counting Bloom filter-based strategy to address this issue. The proposed scheme no longer solely can obtain impervious information switch however additionally can realize everlasting records deletion. Additionally, the proposed scheme can fulfill the public verifiability barring requiring any depended on 0.33 party. Finally, we also strengthen a simulation implementation that demonstrates the practicality and affectivity of our proposal.

Key words — Cloud storage, Data deletion, Data transfer, Counting Bloom filter, Public verifiability

INTRODUCTION
Cloud computing is the merger and evolution of parallel, distributed, and grid computing as a new paradigm for computing. One of the most alluring services provided by cloud computing is cloud storage. By connecting a large number of dispersed storage devices in a network, cloud storage may give customers easy data storage services as well as corporate access services. Users of cloud storage have the option to offload their data to the cloud server, considerably reducing the need for local hardware, software, and human resources. The widespread use of cloud storage in daily life and at business is a result of its alluring benefits. As a consequence, more and more customers with limited resources, including people and businesses, prefer to use cloud storage services. Even while it has many benefits, cloud storage inevitably suffers from some new security problems because of the separation of outsourced data ownership and management, such as data confidentiality, data integrity, data availability and data deletion. These problems, specifically fordata deletion, if not solved well, may impede the acceptance of cloud storage to the public. As the last phase of the data life cycle. data deletion directly determines whether the data life cycle can come to an end favorably, which is very important for data security and privacy preserving. However,data deletion attracts much less attention compared with data integrity, which has been well studied and solidly solved.Although some verifiable deletion schemes have been proposed for outsourced data in cloud computingenvironment, there are still some problems and challenges that urgently need to be solved solidly. To realize secure data migration, anoutsourced data transfer app, Cloudsfer, has been designed utilizing cryptographic algorithm toprevent the data from privacy disclosure in the transfer phase. Butthere are still some security problems in processing the clouddata migration and deletion. Firstly,for saving network bandwidth, the cloud server might merely migrate part of the data, or even deliver some unrelated data to cheat the data owner. Secondly, because ofthe network instability, some data blocks may lose during the transfer process. Meanwhile, the adversary may destroy the transferred data blocks. Hence, the transferred data may be polluted during the migration process. Last but notleast, the original cloud server might maliciously reserve the transferred data for digging the implicit benefits. The data reservation is unexpected from the data owners' point of view. In short, the cloud storage service is

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 51, Issue 8, August : 2022

184-85

DATA SECURITY CONTROL AND GROUND PERFORMANCE IN THE INDUSTRIAL IOT PLATFORM BY EMPLOYING A SAFE AND FINE GRAINED SYSTEMS

[1]Md.Sirajuddin, [2]S.Sateesh Reddy, [3]Md.Sirajuddin, [4]B.Shravya
[1,2,3]Associate Professor, [4]UG Student, [1,2,3,4]Department of CSE, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
Industrial IoT platforms, such as smart factories and oilfield industrial control systems, have become a new trend in the development of smart cities as a result of the overwhelming popularity of IoT devices. Although many manufacturers provide special attention to the peculiar functional requirements of IoT platforms, they seldom examine security problems, especially in terms of data security, which has resulted in a significant number of cases of privacy leakage. Several efforts have been made to provide secure and reliable communication alternatives for industrial IoT systems; however, because different communication protocols and interaction styles are used in various contexts, these solutions are largely distant and fragmented. Hence, putting up a large, strongly integrated cross-platform system is a critical task closed conversation scheme for industrial IoT platforms. In this article, we analyze the good judgment and necessities of special industrial IoT situations to abstract them into a widespread model. We summarize the viable assaults on special industrial IoT structures and plan a protection scheme toseize these assaults based totally on the conditional proxy re-encryption primitive. The proposed scheme ensures that information can't be accessed through an unauthorized user. We additionally consider the protection and overall performance of our scheme, and the experimental outcomes exhibit that our scheme can obtain the performance and safety necessities with low overhead.
Index Terms: Protocols,Control systems,Cloud computing, Data security

INTRODUCTION
The development of the IoT has undoubtedly sped up the introduction of smart city technologies. Consumers are no longer limited to smart home software and are shifting their focus to industrial control systems. Industrial IoT management has developed into a hot topic with outstanding benefits for remote monitoring, data collection, and labor cost reduction [1]. As a result, it has been widely employed in situations including smart grid [2], digital oilfield [3], smart manufacturing facility [3], smart chemical firm, and other IoT manipulation. Industrial IoT management software enables two-way communication between remote equipment and the manipulate end, allowing for the centralization of infrastructure monitoring and management. Every industrial IoT structure has a unique set of roles and responsibilities. For example, Supervisory Control and Data Acquisition (SCADA) device has been extensively used in clever grid and digital oilfield [4]. In the area of infrastructure configuration, sensors,Programmable Logic Controller (PLC),Remote Terminal Unit (RTU) are additionally geared up to accumulateinformation and manipulate facilities. Data are transmitted thru community verbal exchange to nearby region community for processing. However, in eventualities such as clever factory, the massive quantity of statistics and complicated administration commonsense make the records generally be preliminarily analyzed and processed via the third-party cloud, and then forwarded to the corresponding corporations or customers [5]. Decentralized infrastructure and various utility necessities truely make bigger the danger of facts leakage in IoT systems. However, industrial companies and designers of industrial statistics verbal exchange protocols have now not paidadequate interest to the plausible safety troubles [6]. Power grid and oil enterpriseare traditional high-risk industries, many records administration and message transmission modules, however, arestruggling from intensive assaults launched through insiders or outsiders [7]. Common industrial IoT protocols,

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 51, Issue 8, August : 2022

186-88

APPROACHES FOR DETECTING SPAMMERS AND IDENTIFYING FAKE USERS ON SOCIAL NETWORKS THAT RELY ON RANDOM FORESTS AND NAIVE BAYS

[1]M.SRINIVAS, [2]K.SRIDHAR, [3]T.RAVI KUMAR, [4]N.SATHWIKA
[1,2,3]Associate Professor, [4]UG Student, [1,2,3,4]Department of CSE, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
Social networking platforms are utilized by a wide variety of people worldwide. Social media platforms like Twitter and Facebook have a significant impact on the extraordinary unforeseen consequences that emerge in our daily lives as a result of consumer interactions. Social networking platforms are used as a goal by spammers to spread a lot of inaccurate and dangerous material. Twitter is a prime example of how it has evolved into one of the most important systems for an excessive amount of unsolicited mail in all times for fake people to tweet and promote organizations or offerings that have a significant impact on legitimate customers while also disrupting the use of aid. The writer of this paper describes a approach for detecting unsolicited mail tweets and false consumer debts on the on-line social community Twitter. Author makes use of Twitter dataset and 4 unique algorithms to notice faux content: Fake Content, Spam URL Detection, Spam Trending Topic, and Fake User Identification. Usingthe aforementioned 4 strategies, we can decide whether or not a tweet is regular or spam, and then educate the dataset the usage of the Random Forest information mining algorithm to classify the quantity of junk mail and non-spam tweets, as nicely as false and non-fake accounts. To categories tweets as unsolicited mail or non-spam, the authors of every approach use distinctive statistics mining techniques, alternatively right here we use the Random Forest classifier.

INTRODUCTION
By using the Internet, it is now relatively straightforward to obtain any kind of info from any source anywhere in the globe. The increased popularity of social networking sites allows users to collect a large amount of data and information on users. Large amounts of information available on these websites also attract the attention of fictitious users [1]. Twitter has swiftly become into a popular online location for collecting ongoing customer data. Customers may post anything without restriction on Twitter, an Online Social Network (OSN), including news, opinions, and shockingly, their emotional states. There might be some disagreements on a variety of topics, including governmental concerns, current events, and important occurrences. When a customer tweets something, it is immediately forwarded to his/her supporters, permitting them to extended the got data at a lot more extensive level [2]. With the development of OSNs, the need to examine and dissect clients' practices in internet based socialstages has escalated. Many individuals who don't have a lot of data in regards to the OSNs can without much of a stretch bedeceived by the fraudsters. There is additionally an interest to battle and placea control on individuals who use OSNs just for promotions and consequently spamothers' records.

LITEARURE SURVEY
C.Chen et.al has proposed Statistical structures built constant identification ofdrifted Twitter spam-Twitter spam has become a major topic now a days. Late works centered on relating AI methods for Twitter spam location which utilize the measurable features of tweets. Here tweets acts as a data index, be that as it may, we see that the factual belongings of spam tweets vary by certain period, and in this way, the presentation of prevailing AI builtclassifiers reduces. This problem is alludedto as "Twitter Spam Drift". In order to switch this dispute, , we first do a deep investigation on the measurable features for more than one million spam and non- spam tweets. At this point we suggest a new Lfun conspire. The projected plan is changing spam tweets since unlabelled tweets and consolidates them

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 51, Issue 8, August : 2022

189-91

A UNIQUE MEDIAN FILTER ALGORITHM FOR DECISION-BASED SALT AND PEPPER NOISE REMOVAL FROM COLOR IMAGES USING ADVANCED ANALYSIS

[1]S. Arun Kumar, [2]Bhargavendera, [3]B. Thirupathi, [4]Kokkonda swetha
[1]Assistant Professor [2,3]Associate Professor, [4]UG Student, [1,2,3,4]Department of Electronics and Communication Engineering, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
Digital pictures serve as the primary information source for many different sectors, including science and engineering, in the modern world. These digital photos are saved and transmitted in various forms in accordance with the requirements. Yet, this digital image gets distorted with many types of noise during transmission. We focus on impulse noise in this instance since it primarily affects visuals and is also known as salt and pepper noise. The image is losing useful information as a result of this noise. There have been many different filtering methods employed in the past to eliminate this impulse noise, but our suggested approach will produce better filtering even at high noise densities. The proposed algorithm which gives the better peak signal to noise removal (PSNR) factor at different noise densities. The differentprevious algorithms like MF, SMF,AMF, AWMF are compared with the proposed algorithm.
Keywords: Salt noise, pepper noise and advance decision based median filter

INTRODUCTION
Impulse noise is one of the various forms of noise that typically taints digital pictures connected to digital signals. Impulse noise is made up of a collection of randomly selected pixels with extreme contrast values. Hence, even a tiny amount of impulse noise will significantly distort the image compared to other sounds. As a pre-processing stage in image processing, picture noise reduction is crucial. Potential distortions in digital photographs are introduced by the imperfect imaging equipment. Electronic image sensors, film granularity, channel noise, etc. can all contribute to noise disturbances. As high noise levels are never desired, noise reduction must be applied before the picture can be utilized for further research. The phrase "salt & pepper noise" is called impulse noise, which is also known as intensity spikes. Thisis caused generally due to dead pixels, ADC errors,errors in data transmission, malfunctioning of pixel elements in the camera sensors, wrong memory locations or timing errors in scannig or imaging process. It has only two possible values i.e., a and b. The probability of each is typically lessthan 1. The noisy pixels are set alternatively to theminimum or to the maximum intensity values, giving the image a "salt and pepper" like appearance. Uncorrupted pixels remains unchanged. For an 8-bit image, the typical intensity value for pepper and salt noise is 0,1 respectively

LITERATURE SURVEYMEDIAN FILTER
Median filter is the one of the type innonlinear filters. It is not much effective at removing impulse noise, the "salt and pepper" noise, in the image. The main aim of this median filter is to replace the gray level of each pixel by the median of the gray levels in a neighborhood of the pixels, instead of using the mean performance. For median filtering, we specify the kernel size, list the pixel values, covered by the kernel, and determine the median level. initially it consider 3*3 matrix to determine the median value and replace it into our noisy pixel suppose the median value is 0 or 255 then it increases the window size to 5*5 if the

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 51, Issue 8, August : 2022

192-94

XILINX SOFTWARE STIMULATING THE PARITY-PRESERVING GATES, WHICH ARE MODELED FOR VERILOG HDL AND USED TO PERFORM ALU OPERATIONS

[1]B. Rammohan, [2]B. Thirupathi, [3]T. Nageswhar Rao, [4]M Sriharshith
[1,2,3]Associate Professor, [4]UG Student, [1,2,3,4]Department of Electronics and Communication Engineering, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
With the development of MOSFETs in the 1960s, the semiconductor industry has seen great improvements in terms of speed and device performance owing to device scaling, but power dissipation has also been a significant issue. Researchers are looking for a game-changing technology since gadget scaling has hit its limit. Reversible computing is one of the VLSI industry's growing topics. This technology's zero power dissipation in reversible logic circuits has drawn the attention of researchers in major part. Here, research into creating an ALU with reversible quantum gates is being suggested. The suggested ALU may detect a single bit error in addition to performing both arithmetic and logical operations, which can be chosen depending on the situation. The design uses Fredkin and CNOT gate, which are parity preserving gates. The proposed design is modelled using Verilog HDL and stimulated in Xilinx software. The Design is focused on reducing the amount of gates, quantum cost, garbage outputs and ancillary inputs or constants inputs.

INTRODUCTION
Reversible circuit synthesis has recently become more and more important, offering alternatives to traditional Boolean networks. Two significant findings served as the impetus for reversible computing. Such circuits have two advantages over conventional circuits: first, they consume less energy, and second, they are intimately related to a number of cutting-edge technologies like quantum circuits. In 1961, Landauer demonstrated that irreversible circuits always use power and release heat at a minimum rate of kTln2 for any little amount of information erasure, where k is the Boltzmann constant and T denotes temperature. Later, Bennett showed that in theory, arbitrarily small or zero energy dissipation is merely possible if no information is lost during computation. This is good for reversible circuits as input and output data is processed without losing any of the original information. Though the fraction of the facility consumption in current VLSI circuits due to information loss is negligible, this is often expected to vary as increasing packing 2 densities force the facility consumption per gate operation to decrease, making reversible computation a beautiful alternative. Studying the reversible circuits enriches our knowledge of quantum computation, as reversibility is an integrated part. Additionally, the applications of reversible circuits are found in low power CMOS designs, adiabatic circuits, cryptography, optical computing and digital signalprocessing.

EXISTING METHOD AND PROPOSEDMETHOD
EXISTING METHOD
In computing, an arithmetic and logic unit may be a combinational digital circuit that performs arithmetic and logical operations. An ALU consists of Adder, Subtractor, Multiplexer, Demultiplexers, Shift registers etc. and are designed with MOSFET transistors. The MOSFET transistors utilized in digital circuits, which uses irreversible logic gates. And it's certain limitations like more power dissipation, space consumption, propagation delay.

PROPOSED METHOD
In proposed method, a 4-bit ALU architecture is designed using parity preserving gates. Reversible

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 51, Issue 8, August : 2022

195-97

A STUDY ON EMPLOYING THE ADAPTABLE VOTING CLASSIFIER COMBINED TECHNIQUE FOR PRE-DIAGNOSIS OF BREAST CANCER

[1]M.Srinivas, [2]K.Sridhar, [3]T.Ravi Kumar, [4]N.Sathwika
[1,2,3]Associate Professor, [4]UG Student, [1,2,3,4]Department of CSE, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
The main cause of mortality for women is breast cancer. Breast cancer is the most terrible illness for women, and it appears to be growing globally over the past several years, according to Cancer Report. Despite the vast volume of data in the medical industry, certain tools and approaches are required to manage that data. One of the most used strategies is classification. This approach uses a classification technique to predict the likelihood of breast cancer. The % likelihood of developing breast cancer is provided by this system. This system makes advantage of the real-time dataset to produce precise predictions. The datasets are analyzed using three key machine learning algorithms, namely Nave Bayes, Decision Tree, and Support Vector Machine, in the Python programming language (SVM) algorithm. The aims of the systemto shows which algorithms are best touse in order perform prediction tasks in medical Filed. Algorithm results are calculated in terms of accuracy rate and efficiency and effectiveness of each algorithm.
Keywords: breast cancer, classification, python, machine learning.

INTRODUCTION
In the modern day, breast cancer is one of the most deadly and diverse diseases, killing a huge number of people all over the world. The second-leading cause of mortality in women is this illness. For the prediction of breast cancer, a variety of machine learning and data mining methods are being employed. One of the key goals is to identify the most relevant and acceptable algorithm for breast cancer prediction. Malignant tumors are where breast cancer begins when a cell's development spirals out of control. Breast cancer is brought on by the abnormal proliferation of many fatty and fibrous breast tissues. The cancer cells have dispersed throughout the tumors, causing various stages of cancer. There are different types of breast cancer which occurs when affected cells and tissues spread throughout the body. Ductal Carcinoma in Situ (DCIS) is type of the breast cancer that occurs when abnormal cells spread outside the breast it is also known as the non- invasive cancer. The second type is Invasive Ductal Carcinoma (IDC) and it is also known as infiltrative ductal carcinoma. This type ofthe cancer occurs when the abnormal cells of breast spread over all the breast tissues and IDC cancer is usually foundin men. Mixed Tumors Breast Cancer (MTBC) is the third type of breast cancerand it is also known as invasive mammary breast cancer. Abnormal duct cell and lobular cell causes such kind of cancer. Fourth type of cancer is Lobular Breast Cancer (LBC) which occurs inside the lobule. It increases the chancesof other invasive cancers. MucinousBreast Cancer (MBC) is the fifth typethat occurs because of invasive ductal cells, it is also known as colloid breast cancer. It occurs when the abnormal tissues spread around the duct. Inflammatory Breast Cancer (IBC) is lasttype that causes swelling and reddening of breast.

LITERATURE SURVEY:
Analyze data to in his Methodology hecompared most of the machinelearning approaches including both supervised and unsupervised learning.WEKA Tool used for experiment and PROMISE -NASA Data set is used totrain the model. Introduced retrieval and classification model using (CNN)and Long Short-Term Memory (LSTM) for accurate detection. Proposed a method by usingSupervised Learning algorithm mainly logistic regression, Naïve Bayes, and Decision Tree using historical data set. And

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 51, Issue 8, August : 2022

198-200

AN AUTOMATE MULTIMEDIA CLOUD COMPUTING: A COMPUTING SYSTEM AND EFFICIENT RESOURCE ALLOTMENT BASED ON DYNAMIC PRIORITY

[1]Dr.V.Bapuji, [2]B.Anvesh Kumar, [3]P.Sathish, [4]E.Soumya
[1]Professor, [2,3]Assistant Professor, [4]PG Student, [1,2,3,4]Department of MCA, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
In an intelligent transportation system, smart vehicles are fitted with a range of sensing devices that offer a range of multimedia services and applications related to smart driving assistance, weather forecasting, traffic congestion information, road safety alarms, and a range of entertainment and comfort-related applications. These smart cars produce a huge amount of multimedia-related data that demands quick and real-time processing but can't be efficiently handled by independent onboard computer equipment due to their limited computational power and storage capacity. To accommodate such multimedia applications and services, the underlying networking and computer infrastructures have to be modified. Recently, the integration of vehicles with cloud computing has come to light as a solution to a number of problems with processing multimedia content (such as resource cost, rapid service response time, and quality of experience) have a significant impact on vehicular communication performance. To address the aforementioned issues, we present an effective resource allocation and computation architecture for vehicular multimedia cloud computing in this research. Using the Clouds simulator, the proposed scheme's performance is assessed in terms of quality of experience, serviceresponse time, and resource cost.

INTRODUCTION
High-speed Internet is becoming a prerequisite for autonomous or driverless vehicles, which the automotive sector is focusing on globally in collaboration with academics. These smart cars can take high-resolution pictures, record movies, and understand a huge quantity of sensory data, as shown in Figure 1, to ensure a successful and smooth voyage as well as to enjoy a range of multimedia applications and services from comfort to entertainment [3]. Also, through a roadside infrastructure, smart vehicles may interact and share a variety of information with one another, including pictures of road maps, information on road safety, and traffic load data for safe driving. Also, these cars may exchange a range of additional data (for example, automatic parking, map position, Internet connection, cooperative cruise control and driving, security distance and collision alerts, driver assistance, and road information broadcast) [1] [2]). As a result, cars generate a large amount of vital andtime-sensitive data, which necessitates on-time processing to assure on-time delivery and preserve the quality of the experience. However, because to the limited storage and computational capabilities of isolatedonboard devices, such a large volume of multimedia-related data cannot be processed. Furthermore, intermittent connectivity, short radio communication,lack of bandwidth, and high mobility can make the task more challenging.

Principal
Vaageswari College of Engineering
KARIMNAGAR-505 527.

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 51, Issue 8, August : 2022

201 - 208

EVALUATING TUBE-IN-TUBE STRUCTURES WITH SHEAR WALLS AND BRACINGS UNDER VARIOUS SOIL CONDITIONS

[1]Erram Rakesh reddy, [2]Kodurupaka Rajesh, [3]Dr.Kante Mallikarjuna, [4]S Varshini
[1,2]Associate Professor, [3]Professor [4]UG Student, [1,2,3,4]Department of Civil Engineering, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT
More land must be occupied due to the rapidly growing population, especially in urban areas where utility, commercial, and residential structures are required. Houses for habitation must be constructed horizontally on land in metropolitan regions in order to minimise vertical development, often known as tall buildings or high-rised structures. While designing a tall building, take into account factors like strength, usefulness, stability, and user comfort. Wind load, live load, dead load, earthquake load, snow load, and special load are all load factors that must be considered while constructing tall structures. We are taking into consideration a tubular system since it is a revolutionary technology in the field of tall building construction and has a high stiffness in comparison to other systems. Tube-in-tube. braced tube. bundled tube, and framed are a few tubular systems to improve a structure's stability using a tube in tube structure. Tube in tube structures gives an enhanced strength and stiffness to tall building structure. Tube in tube is like a hallow cylindrical it consists of outer tube and inner tube made up of steel outer tube will helps to resists the lateral loads on buildings and inner tube resists the vertical loads and shear lag effect in structure. To increase the serviceability, strengthening, stiffness of building used different bracings and tubular systems and analyzed by story analysis, equivalent static and dynamic time history analysis. Displacement, base force using SAP2000 to taking this reference concept we going to analyze the tube in tube structural frames with shear walls and bracings with different soil types.
Keywords: tube in tube, shear wall, bracings, base shear, story displacement, time period, story drift.

INTRODUCTION
Construction of towering structures has become the norm as a result of the growing population, the desire for additional space, and the high cost of land. However the lateral forces that frequently impact these towering constructions cause a lateral displacement in the structure, which leaves individuals feeling exposed and uneasy. In the modern context, structural engineers' main goal is to build tall structures that can sustain lateral loads. As a result, while selecting the structural systems for a tall structure, resistance to lateral stresses and gravity loads should be taken into account. Braced Frame System, Rigid Frame System, and Shear Wall System, Coupled Shear Wall System, Tubular System are three examples of the various structural systems that are utilized for lateral load resistance.

Bracing
The diagonal members which are present in the frame with girders and run between the top ends of a column to bottom end of another column are known as bracing. These diagonal member along with column play a very important role in resisting the horizontal shear, compressive actions as well as the lateral loads. The bracing in the structure is mainly done with steel system because they are mainly subjected to the tension. Sometimes the bracing is also done with concreting as double diagonal and each diagonal act as compression member and completely resist the external shear.

Industrial Engineering Journal
ISSN: 0970-2555
Volume : 51, Issue 8, August : 2022

204-06

A UNIQUE TECHNIQUE EMPLOYING NUTRIENT FILIM TECHNIQUE (NFT) FOR AN EFFECTIVE HYDROPONIC IRRIGATION FOR CROP YIELD

[1]Dr.Kante Mallikarjuna Rao, [2]Kodurupaka Rajesh, [3]Erram Rakesh Reddy, [4]D Vaishnavi

[1]Professor [2,3]Associate Professor [4]UG Student, [1,2,3,4]Department of Civil Engineering, Vaageswari College of Engineering, Karimnagar, Telangana, India

ABSTRACT

In the current state of affairs, India needs food security, which means that every person must have physical and financial access to safe and nourishing food to meet dietary demands. This research work examines the soil-less production of plants. Lack of useable water for agriculture reduces food production, which in turn causes a big number of people in our nation to go hungry and suffer from malnutrition. Therefore, there is a critical need for the adoption of technology in agriculture that can help save water and have a favorable effect on food availability and production. One such type of soilless production is hydroponics, which uses water more efficiently than traditional systems. Currently, hydroponic farming is gaining popularity all over the world because of its management of resources in a very efficient way and production of quality foods. Several benefits of this technique include less growing time of crops than conventional crop growing in soil, round the year production, minimum disease, pest infestation and elimination of several intercultural operations like weeding, spraying, watering etc. which is labor intensive.

Keywords- Hydroponic forming, Mineral Nutrition solution, NFT (Nutrient Film Technique)

INTRODUCTION

Using an inert substrate to provide mechanical support, hydroponics is a method of growing plants in nutrient solutions. According to Maharana and Koul, hydroponics is a method of growing plants without soil while submerging their roots in nutrient solution. Savaas defines hydroponics as the practice of growing plants without the need of soil. Therefore, it is evident that in hydroponics, plants are grown without the use of soil, and they receive their nutritional needs from fertilizer solutions diluted in water. The phrases "Hydroponics" and "Ponos," which in Greek represent water and labor respectively, are the roots of the name. W.F. Gericke from the University of California used hydroponics for the first time in the modern era in the 1930s. In India, Hydroponics was introduced in year 1946 by an English scientist, W.J. Shalto Duglas. He established a laboratory in Kalimpong area, West Bengal and had written a book on Hydroponics, named as 'Hydroponics- The Bengal System (Pant et al., 2018) [4] Other similar terms related to hydroponic are 'aqua (water) culture', 'hydroculture", 'nutriculture', 'soilless culture', 'soilless agriculture', 'tank farming', or 'chemical culture'.

3. OBJECTIVE

- To identify the advantages of hydroponics farming over soil-based agriculture.
- To describe how hydroponics differs from traditional agriculture.
- To provide consumers with ability to grow herbs in urban living environment easily and cost effectively.

Hydroponics Methods

Type of Hydroponic System

The techniques which are followed in hydroponics system include

Principal
Vageswari College of Engineering
KARIMNAGAR-505 527.

Optical and Quantum Electronics (2023) 55:1187
https://doi.org/10.1007/s11082-023-05487-0

Design and analysis of photovoltaic solar based longer transmission of data in ADHOC networks

Rajanish Kumar Kaushal[1] · Smitha Sasi[2] · H. K. Sowmya[3] · Udutha Rajender[4] · G. Ramkumar[5] · Essam A. Al-Ammar[6] · Amjad Iqbal[7]

Received: 27 July 2023 / Accepted: 26 September 2023

Abstract

A multi-hop transitory non-central network is formed by a collection of mobile nodes in an PV Adhoc network. These mobile nodes are equipped with wireless communication transceivers. Setting up a mobile communication network is straightforward and can be done in a short amount of time. This is made possible by the fact that all nodes in the network have the same mobility and status wherever they travel. PV Adhoc networks were first developed for use in the military and the civilian sector, but they are now finding widespread application in industries as diverse as search and rescue, industrial monitoring, mobile commerce, and many more. Because of the innovative traits it possesses, there is a lot of conversation going on about it right now in the information technology and telecommunications sectors. When it comes to addressing security concerns, one might take a number of various ways, depending on the particulars of the circumstance. There are a variety of approaches that can be taken to address the concerns regarding safety that are brought up by performing multiple jobs at once. Even though quality of service (QoS) is accorded a high value in the real-world PV Adhoc network environment, it is sometimes disregarded in the research that is being done today since defense against attacks is given a higher priority. Evaluation and comparison offer the most solid foundation on which to build in-depth study and an accurate assessment of the quality of services provided. The proposed algorithm not only enhances routing security and protects against malicious attacks in PV Adhoc networks but also outperforms existing methods in terms of end-to-end delay time, packet delivery rate, and control overhead. This demonstration of improved performance and security underscores the significance and novelty of the proposed algorithm in the field. This concept is now used in a great number of different algorithms. The results of our simulation tests show that the proposed algorithm can improve the routing security of PV Adhoc networks and provide protection against malicious attacks. It also clearly outperforms other methods that are currently available in terms of end-to-end delay time, packet delivery rate, and control overhead.

Keywords PV Adhoc network · Non-central · Mobile nodes · Solar · Wireless communication

Extended author information available on the last page of the article

Published online: 17 October 2023

International Journal of Scientific Research in Engineering and Management (IJSREM)
Volume: 07 Issue: 01 | January - 2023 Impact Factor: 7.185 ISSN: 2582-3930

Designing of Synthetic Aperture Radar Based Control Algorithms for the Autonomous Vehicles

Dr.Udutha Rajender
Department of ECE
Vaageswari College of Engineering, Karimnagar, India

***Abstract*— The rise in popularity of self-driving cars can be attributed to advancements in modern technology. The surge in interest in self-driving cars has led to an increase in their development, but this has also brought some challenges. A large part of the solution to these problems is satellite remote sensing and GIS technology. Optical data remote sensing technologies alone have limited potential for long-term forest management sustainability. Active Synthetic Aperture Radar (SAR) remote sensing technology has grown in importance in forestry because of its uniqueness and rapid advancement. For example, SAR has an all-weather capability that is sun light independent, cloud and rain-resistant, and highly penetrating. SAR and optical, SAR and LiDAR, optical and LiDAR remote sensing have all been shown to be useful for accurate forest AGB estimation when compared to single sensor data. These types of sensor data integrations are becoming increasingly common. This is made possible by the fact that the scattering process heavily influences the polarimetric signatures that can be observed. The inclusion of SAR polarimetry improves classification and segmentation quality compared to conventional SAR with a single channel. Decomposition products' outputs have been classified.**

Keywords*— *Synthetic Aperture Radar, LiDAR, Autonomous Vehicles,

I. INTRODUCTION

Because it makes use of microwaves, imaging RADAR technology known as Synthetic Aperture Radar (SAR) creates images with a high resolution and is able to capture RADAR images regardless of the weather. The speckle effect, which is induced by the coherent processing of backscattered signals, is to blame for the noisy appearance of SAR images. Speckles are a type of background noise that are present in every single SAR image. Before utilising the photographs, remove the background noise. The elimination of noise is one method for improving the appearance of digital photographs. The objective of the method is to lessen the amount of noise while maintaining the integrity of small details like edges. Soft computing methods are being more and more frequently used for the purpose of reducing noise in SAR images [1]. We have conducted research into a variety of methods for filtering speckle noise in SAR images, and we have presented speckle noise filters that are based on soft computing. A device that can detect and find things is known as a RADAR, which stands for radio detection and ranging. Vision in humans can be improved so that it works better in low light, rain, and other adverse conditions. The foundation of a RADAR system is comprised of the antennas for both the transmitter and the receiver. The transmitter is responsible for emitting electromagnetic waves into space so that they can be used to pinpoint the target. The energy that was diverted by the target is brought into the receiving antenna so that it can be processed. The quantity of energy that an item reflects can be affected by a number of factors, including its physical properties, its structural properties, and its chemical properties [2]. There is a correlation between the radiation's strength, wavelength, and angle of incidence. [3] The receiver is responsible for processing the reflected energy, also known as echoes, in order to retrieve target identifying parameters such as range, velocity, and angular location. It wasn't until the early 1920s that RADAR was first put to use to spot ships and aero planes in the sky.

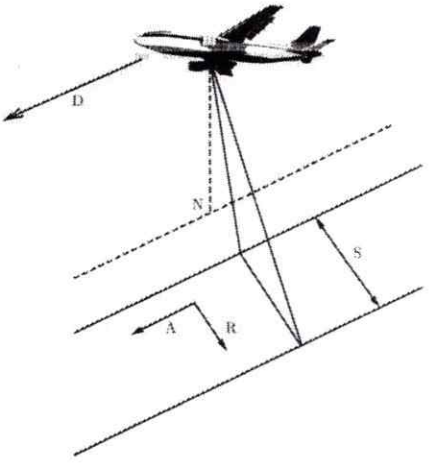


Fig. 1. Geometry of SAR viewing

In the 1970s, search and rescue (SAR) technology was made accessible to the general population. The majority of the time, a SAR system will be mounted on either a spaceship or an aero plane [4]. It illuminates the surface being scanned in a direction perpendicular to its plane by means of a beam of coherent electromagnetic pulses. When the illuminated surface sends back an echo, the SAR receiver is able to pick it up, file it away in its memory, and then use it as input for image processing to produce an image of the target surface. Because it is impractical for a spaceship to carry a very large

ISSN: 0976-9102 (ONLINE)
DOI: 10.21917/ijivp.2023.0441

REAL-TIME OBJECT DETECTION IN VIDEOS USING DEEP LEARNING MODELS

M. Monika[1], Udutha Rajender[2], A. Tamizhselvi[3] and Aniruddha S Rumale[4]

[1]*Department of Master of Computer Applications, Cambridge Institute of Technology, India*
[2]*Department of Electronics and Communication Engineering, Vaageswari College of Engineering, India*
[3]*Department of Information Technology, St. Joseph's College of Engineering, India*
[4]*Department of Information Technology, Sandip Institute of Technology and Research Centre, India*

Abstract

Video object detection plays a pivotal role in various applications, from surveillance to autonomous vehicles. This research addresses the need for real-time object detection in videos using advanced deep learning models. The current landscape of object detection techniques often struggles to maintain efficiency in processing video streams, leading to delays and resource-intensive computations. This study aims to bridge this gap by proposing a novel methodology for real-time object detection in videos. With the surge in video data across domains, the demand for swift and accurate object detection in real-time has become imperative. Existing methods face challenges in balancing speed and precision, prompting the exploration of more robust solutions. This research endeavors to enhance the efficiency of video object detection, offering a timely and accurate approach to address contemporary demands. The primary challenge lies in achieving real-time object detection without compromising accuracy. Traditional methods often compromise speed for precision, leading to inadequate performance in dynamic video environments. This study seeks to overcome this dilemma by introducing a methodology that optimizes both speed and accuracy, catering to the real-time constraints of video processing. Despite the advancements in object detection, a notable research gap exists in the domain of real-time video object detection. Existing models exhibit limitations in adapting to the dynamic nature of video streams, necessitating the development of novel methodologies. This research aims to fill this void by proposing an innovative approach that addresses the specific challenges posed by real-time video data. The proposed methodology integrates state-of-the-art deep learning models, optimizing them for real-time video object detection. Leveraging advanced architectures and streamlining the inference process, the model aims to provide accurate detections at unparalleled speeds. Additionally, a novel data augmentation technique is introduced to enhance the model's adaptability to dynamic video scenarios. Preliminary results demonstrate the effectiveness of the proposed methodology, showcasing a significant improvement in both real-time processing speed and object detection accuracy. The model exhibits promising performance across diverse video datasets, highlighting its potential to outperform existing methods in real-world applications.

Keywords:

Real-Time Object Detection, Deep Learning, Video Analysis, Computer Vision, Model Optimization

1. INTRODUCTION

In recent years, the proliferation of video data across various domains has underscored the critical need for efficient and accurate object detection methods. The ability to detect and track objects in real-time within video streams is essential for applications ranging from surveillance to autonomous systems. This introduction provides a contextual overview of the background, challenges, problem definition, objectives, novelty, and contributions of the research [1].

The advent of deep learning has revolutionized computer vision, enabling unprecedented advancements in object detection. However, while these methods excel in image-based scenarios, adapting them to real-time video analysis poses unique challenges. The dynamic nature of video data demands specialized approaches that balance speed and accuracy, prompting the exploration of novel methodologies [2].

Real-time video object detection [3] introduces a set of challenges distinct from image-based detection [4]. These challenges include the need for rapid processing of consecutive frames, maintaining accuracy in varying lighting conditions [5], and accommodating the inherent complexity of dynamic scenes [6]. Addressing these challenges is crucial for unlocking the full potential of video analytics [7].

The primary problem addressed in this research is the inefficiency of existing object detection methods [8] when applied to real-time video streams. Balancing the trade-off between speed and accuracy remains a persistent challenge, hindering the seamless integration of object detection into applications requiring timely and precise insights from video data.

The objective of this research is to develop a real-time object detection methodology that overcomes the limitations of current approaches. Specific objectives include optimizing deep learning models for video analysis, enhancing speed without sacrificing accuracy, and addressing the nuances of dynamic scenes in a variety of application domains.

The novelty of this research lies in the proposed methodology's innovative approach to real-time video object detection. By combining advanced deep learning architectures with tailored optimization techniques, the model aims to redefine the standards for speed and accuracy in video analytics. The contributions extend beyond the development of a novel methodology to include insights into adapting deep learning models to the intricacies of real-time video data, providing a foundation for future advancements in the field.

2. RELATED WORKS

Several research efforts have contributed significantly to the realm of real-time object detection and video analysis. Understanding the landscape of existing methodologies provides valuable insights into the evolution of the field and highlights areas where improvements are needed.

Faster R-CNN (Region-based Convolutional Neural Network): Pioneering the integration of deep learning into object detection, Faster R-CNN introduced region-based approaches, achieving notable accuracy [9]. However, its computational demands posed challenges for real-time applications. YOLO (You Only Look Once): YOLO emerged as a breakthrough with

DOI: 10.21917/ijme.2023.0274

BALANCING COST AND PERFORMANCE IN VLSI SYSTEMS USING RMSPROP ALGORITHM-ASSISTED DESIGN SPACE EXPLORATION

M. Pradeep[1], Udutha Rajender[2], Pravin Prakash Adivarekar[3] and Sumit Kumar Gupta[4]

[1]*Department of Electronics and Communication Engineering, Shri Vishnu Engineering College for Women, India*
[2]*Department of Electronics and Communication Engineering, Vaageswari College of Engineering, India*
[3]*Department of Computer Engineering, A.P.Shah Institute of Technology, India*
[4]*Department of Physics, St. Wilfred's PG College, India*

Abstract

As Very Large Scale Integration (VLSI) technology advances, the need to efficiently balance cost and performance in VLSI systems becomes paramount. To address this challenge, we propose a novel approach that leverages the RMSPROP algorithm for assisted design space exploration. The RMSPROP algorithm, which has proven effective in the field of deep learning optimization, is adapted to navigate the complex design space of VLSI systems. By integrating RMSPROP into the design space exploration process, we can intelligently search for optimal trade-offs between cost and performance, leading to highly efficient VLSI designs. Our experimental results demonstrate the effectiveness of the RMSPROP algorithm-assisted design space exploration, showcasing significant improvements in cost-performance trade-offs compared to traditional design methodologies. This research opens new avenues for designing VLSI systems with improved efficiency, enabling the realization of high-performance yet cost-effective integrated circuits.

Keywords:

VLSI Systems, RMSPROP Algorithm, Design Space Exploration, Cost-Performance Trade-Offs

1. INTRODUCTION

In recent years, the demand for high-performance and cost-effective Very Large Scale Integration (VLSI) systems has surged, driven by the rapid growth of modern technologies such as artificial intelligence, Internet of Things (IoT), and cloud computing. VLSI systems, comprising intricate integrated circuits (ICs), form the backbone of numerous electronic devices and play a pivotal role in shaping technological advancements [1]. However, designing VLSI systems that strike an optimal balance between performance and cost remains a significant challenge, given the increasing complexity and scale of these systems [2].

Traditional VLSI design methodologies often rely on manual exploration of the design space to identify suitable trade-offs between performance metrics, such as speed and power consumption, and the cost of fabrication. As the design space becomes increasingly vast and intricate, manual exploration becomes impractical and time-consuming, hindering the discovery of optimal solutions [3]. Consequently, there is a pressing need for innovative approaches that can efficiently navigate the design space, leading to the development of VLSI systems that maximize performance while minimizing costs [4].

We propose a pioneering approach that harnesses the power of the RMSPROP algorithm to facilitate design space exploration for VLSI systems. The RMSPROP algorithm, initially designed for optimizing deep learning models, demonstrates remarkable efficiency in finding convergence paths while efficiently handling the variance of gradients. By adapting RMSPROP to the VLSI domain, we aim to address the challenge of balancing cost and performance in VLSI systems.

The primary objective of this research is to present a systematic and effective framework that combines the RMSPROP algorithm with design space exploration techniques to efficiently explore the vast solution space of VLSI systems. Through this integration, we seek to uncover a range of design options that offer favorable trade-offs between performance metrics and fabrication costs, thus enabling the development of high-quality VLSI systems with enhanced efficiency and cost-effectiveness.

2. RELATED WORKS

Various research efforts have been dedicated to exploring design space exploration techniques for VLSI systems. These studies often focus on optimization algorithms, evolutionary strategies, and multi-objective optimization methods to efficiently search for optimal design points in the vast solution space. While these approaches have shown promising results, there is still a need for novel methodologies that can handle the increasing complexity and size of modern VLSI systems [5].

In the field of deep learning, optimization algorithms like RMSPROP, Adam, and stochastic gradient descent (SGD) have been extensively studied to train complex neural networks efficiently. These algorithms address challenges such as convergence speed, handling large-scale datasets, and alleviating the problem of vanishing or exploding gradients. Drawing inspiration from the success of these algorithms, researchers have started exploring their adaptability to other domains, including VLSI design [6].

The trade-offs between cost and performance are critical considerations in VLSI system design. Researchers have examined various techniques to optimize power consumption, chip area, clock frequency, and other performance metrics, while still adhering to stringent cost constraints. These studies often utilize analytical models, heuristics, or machine learning approaches to find the best compromise between performance and cost [7].

Machine learning techniques have been increasingly employed in VLSI design to automate various tasks, such as layout generation, optimization, and synthesis. Reinforcement learning, genetic algorithms, and neural architecture search are some of the machine learning-based methods used for exploring the design space and improving the efficiency of VLSI [8].

Several research efforts have focused on developing methodologies that streamline the VLSI design process, reduce design time, and enhance overall productivity. These methodologies often incorporate intelligent algorithms and

Journal of Harbin Engineering University
ISSN: 1006-7043

Vol 44 No. 11
November 2023

5G Mobile Communication Integrating Robot Controller Communication Model

Annaji M Kuthe[1], Dr. Udutha Rajender[2], Mrs. C. Poonguzhali[3], Hanamant Yaragudri4, V. Vasudhevan[5]

[1]Asst. Professor, Department of CSE,
KDK College of Engineering Nagpur, India,
[2]Assistant Professor, Electronics and Communication Engineering
Vaageswari College of Engineering, Karimnagar, Telangana,
[3]Assistant Professor. Department of Electronics and Communication Engineering, S. A. Engineering college, Chennai,
[4]Senior Assistant Professor, Department of Mechanical Engineering, New Horizon College of Engineering Bangalore 560103,
[5]Assistant Professor, Panimalar Engineering College, Chennai.

Abstract

In broadening its applicability to a variety of industries, 5G technology not only meets the vast data traffic demands but also broadens the potential for the development of intelligent communication while increasing productivity. Despite the widespread usage of 5G mobile communication technology in communication engineering, market development has become more complex due to the quick pace of technological innovation. The actual use of 5G technology in communication engineering is constrained by this circumstance, which impedes advancement in both fields.This paper incorporates a communication technique using robot controllers to address this issue. We thoroughly study the use of 5G technology in communication engineering by examining the features and present uses of mobile communication technology. This study conducts simulated tests, analyzing the use of 5G technology in communication engineering based on three crucial aspects: throughput rate, energy efficiency, and signal suppression impact. This is done to illustrate the efficacy of the robot controller communication technique. The outcomes are then contrasted with conventional communication techniques.The results of the signal suppression trials are compelling: whereas the average peak signal level used in conventional communication methods is 18.134 dB, the average peak level used in the method described in this work is substantially lower at 11.296 dB. As a result, communication engineering professionals can benefit practically from combining 5G technology with the robot controller communication approach.

Keywords: practically, communication, conventional, 5G technology

I. Introduction

In the age of information technology, the development of mobile communication technology has improved social production and everyday living efficiency while also enhancing the material and spiritual well-being of individuals. As 5G technology becomes more widely used, the mobile communication sector is developing toward higher-quality services. The quick transmission of data in communication engineering is made possible by 5G technology, which is a significant advancement over 4G technology. This raises the bar for communication project building and offers crucial support for the development of intelligent network communication in the years to come.

The uncertainty surrounding its growth and the complexity of the market environment and structure present difficulties for the actual deployment of 5G technology in communication engineering, notwithstanding the potential benefits. As a result, there are still important problems in both sectors that need to be solved. Therefore, it becomes crucial to improve the