M.KUMARASAMY
COLLEGE OF ENGINEERING
NAAC Accredited Autonomous Institution
Approved by AICTE & Affiliated to Anna University
ISO 9001:2015 Certified Institution
Thalavapalayam, Karur – 639 113.

Criterion 1: Curricular Aspects

1.3 Curriculum Enrichment

1.3.4.1: Number of students undertaking field projects / internships / student projects

Programme Name: Master of Computer Applications

Sl.No.	Description	Page Number
1	Internships	2-7
2	Major Projects	8-391

INTERNSHIP PROOF

INTERNSHIP CONSOLIDATED DETAILS

S.NO	Register Number	NAME OF THE STUDENT	HOWMANY YEAR SCHOLARSHIP	COMPANY NAME	Duration	STIPEND/MONTH
1	927621MCA023	KARTHISWARAN P	Nil	ZOHO	07-11-2022 to 07-05-2023	20,000

HOD

Head of the Department,
Department of Master of
Computer Applications,
M.Kumarasamy College of Engineering,
Thalavapalayam, Karur - 639 113.

INTERNSHIP CERTIFICATE

This is to certify that Mr/Ms. **Karthiswaran P - PT-6571/23** has undergone his/her internship training in , from 07-Nov-2022 to 20-Apr-2023 . During this period, his/her performance and conduct were found to be good.

Yours Sincerely,

For

Amrutha K S

Amrutha K S

Associate HR

Date of issue: 21 Apr 2023

ATTESTED

PRINCIPAL,
M Kumarasamy College of Engineering
Thalavapalayam, Karur-639117

![M.Kumarasamy College of Engineering logo] M.Kumarasamy
College of Engineering
NAAC Accredited Autonomous Institution
Approved by AICTE & Affiliated to Anna University
ISO 9001:2015 Certified Institution
Thalavapalayam, Karur, Tamilnadu.

KR

INTERNSHIP APPROVAL FORM

Ref no: MKCE/T&P/INTERN/DEPT MCA   /No. 1   Date: 03.11.2022

NAME (in block letters)	1. P.Karthiswaran	3. —
	2. —	4. —
REG NO	1. 92762MCA022	3. —
	2. —	4. —
DEGREE (please tick the appropriate box)	B.E/B.Tech ☐ M.E ☐ MCA ☑ MBA ☐	
BRANCH	Master of Computer Applications	YEAR/SEM II / III
CGPA	1. 8.72 3. —	
	2. 8.5 4. —	
MOBILE NO	1. 7339282210 3. —	
	2. — 4. —	
INTERNAL GUIDE	NAME: Dr.S.Vanithamani	DEPT: MCA
	DESIGNATION: ASP	MOBILE NO: 9842449377
COMPANY/INDUSTRY NAME WITH ADDRESS (proposed for internship)	Zoho. Estanda IT Park, Vallanchod, Changalpattu. Tamil Nadu - 603 202	
COMPANY CONTACT PERSON	NAME: Saaj	EMAIL ID: Svajudeen-S@zohocorp.com
	DESIGNATION: HR	MOBILE NO: —
Stipend (Yes/No)	Yes	(if yes, Rs. 20,000 /month
TRAINING DOMAIN	Project Trainee	
DURATION OF INTERNSHIP	FROM : 07 / 11 / 2022	TO : 07 / 04 / 2023
SIGNATURE OF THE STUDENTS	1. P.Karthiswaran	3. —
	2. —	4. —
SIGNATURE WITH DATE	INTERNAL GUIDE S.Vani	CLASS ADVISOR M. Senthi 3/11/22

| HOD/DEAN | PLACEMENT OFFICER 3/11/22 | PRINCIPAL 3/11/22 |

Note :
✓ Permission letter from company is mandatory with this form
✓ Department staff coordinators are requested to collect the Attendance sheet & Internship report post to the internship

Zoho Corporation Private Limited

Plot 140, 151, Estancia IT Park, Vallancheri,
Chengalpattu District, Tamilnadu. 603 202.
Ph: +91 - 44 - 6744 7070
www.zohocorp.com

SEZ Unit

Date: 31-Oct-2022

To

Mr.KARTHISWARAN P,
178-B, EAST STREET,
THADICOMBU,
DINDIGUL-624709,TAMIL NADU.

Dear Mr.KARTHISWARAN P,

Based on your application and the subsequent discussions you had with us we are pleased to have you associated with us as a **PROJECT TRAINEE** for a period of 6 months from the date of commencement in our organization. During this association you will be paid Rs.20000/- **(RUPEES TWENTY THOUSAND ONLY)** per month as a consolidated amount.

The internship will be for a period up to 6 months from the date of commencement. Based on your performance during this period and your interest in continuing the internship, your manager may extend the internship period beyond the initial 6 months. On successful completion of your curriculum project, you may be observed as an employee of Zoho as **MEMBER TECHNICAL STAFF**. Salary will be decided at that time based on your performance.

This offer is subject to the following terms and conditions.

1. During the period of your association with Zoho, you shall keep strictly confidential any and all information that may come to your knowledge. You may share any such information with others, only on a 'need to know' basis.

2. You shall sign a Confidentiality Agreement with Zoho to protect the interests of the Company by maintaining confidentiality of all information, which may be accessible to you in the course of your association.

3. Zoho owns all right and interest to any intellectual property developed by you during the course of your association with the company.

4. Zoho reserves all rights to terminate you at any time during your association period, for any reason whatsoever, including without limitation, misuse of Zoho intellectual property, improper and unauthorized usage of internet Services, adverse finding in background verification report, misconduct and the like.

5. Zoho is under no obligation to recruit you on its roll of employees at the end of your project work. However if your project work and conduct are found to be completely satisfactory, you may be considered for employment, in accordance with Zoho's then current policy.

VALIDITY

This Project Trainee Offer is enclosed with some of our important policies. You are requested to download, read, understand and sign the documents on or before **07-Nov-2022**. Your signature indicates your acceptance of the terms and conditions of this offer.

Upon submitting your acceptance, you will be asked to provide a tentative date of joining in the personal details form. However, closer to the actual date of joining you will receive a confirmation email from us.

The matters related to your compensation are strictly confidential between you and the company and should be treated as such.

I am sure you will find this offer very exciting and I, on behalf of Zoho, assure you of a very rewarding career in our organization.

With Best Wishes,

Yours Sincerely,
For ZOHO CORPORATION PRIVATE LIMITED

M.I.Sohail
Manager - HR & Global Operations

I hereby confirm that I have read, understood and accepted the offer, agreement and the company policies.

Signature: *Karthiswaran*

Name : Karthiswaran P

Date of Offer acceptance: 31 Oct 2022

Place : Dindigul

MAJOR PROJECT

PROOF

CROWDFUNDING PROJECTS PLATFORM

PROJECT REPORT

Submitted by

D. BHARATH

Register No.: 927621MCA002

in partial fulfillment for the award of the degree

of

MASTER OF COMPUTER APPLICATIONS

in

FACULTY OF INFORMATION AND COMMUNICATION ENGINEERING

M.KUMARASAMY COLLEGE OF ENGINEERING

(Autonomous)

KARUR – 639 113.

APRIL 2023

M.KUMARASAMY COLLEGE OF ENGINEERING

(Autonomous)

KARUR – 639 113.

DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

PROJECT WORK

APRIL 2023

This is to certify that the project entitled

CROWDFUNDING PROJECTS PLATFORM

is the bonafide record of project work done by

D. BHARATH

Register No: 927621MCA002

of MCA during the year 2022-2023.

Project Guide   **Head of the Department**

Submitted for the Project Viva-Voce examination held on ___17.04.2023___

Internal Examiner   **External Examiner**

DECLARATION

I affirm that the project work titled **CROWDFUNDING PROJECTS PLATFORM** being submitted in partial fulfillment for the award of **MCA** is the original work carried out by me. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other University.

D.Bharath

Register No: 927621MCA002

I certify that the declaration made above by the candidate is true.

Dr. S.Vanithamani, MCA., M.Phil.,Ph.D.,

Head of the Department-MCA

TABLE OF CONTENTS

15

ABSTRACT

Crowdfunding project is based on a website where companies can post their projects, and individuals or teams can select and complete them to receive payment. This project-based approach offers various benefits and challenges. The website provides access to a range of projects that individuals or teams can choose from. This allows them to select projects that match their skills, interests, and availability. Completing projects provides an opportunity for individuals or teams to earn income, which can be beneficial for those looking to supplement their income or develop new income streams. Moreover, completing different types of projects can help individuals or teams develop new skills and gain experience in different areas. Once a freelancer is hired for a project, they can start working on it and submit their work for review. Once the work is approved, the freelancer will receive payment for their work. The platform aims to create a win-win situation for both parties by providing a convenient and secure way to connect people who need work done with those who can complete the work. Overall, this project offers a solution to the problem of finding reliable and trustworthy help for projects. The platform provides a centralized location for people to post their projects and for freelancers to find work, making it a valuable resource for both parties.

CHAPTER 8

CONCLUSION AND FUTURE ENHANCEMENTS

8.1 CONCLUSION

Project management platform has the potential to be a valuable tool for managing projects and working with freelancers. By creating a centralized platform that allows you to post projects, hire freelancers, and manage the entire process from start to finish, you can streamline your workflow and save time and money. With potential future enhancements such as payment integration, advanced project management features, and AI and ML tools, your platform can become even more powerful and efficient. By providing a reliable and easy-to-use solution for freelancers and businesses alike, your platform can help bridge the gap between supply and demand for freelance work, creating a win-win situation for everyone involved.

8.2 FUTURE ENHANCEMENTS

- Integration with payment gateways to enable secure and automatic payment to freelancers upon project completion.
- The ability to create and manage a team of freelancers for larger projects.
- Advanced project management features such as Gantt charts, task dependencies, and resource allocation.
- Integration with communication and collaboration tools such as Slack or Microsoft Teams to facilitate communication and file sharing between you and your freelancers.
- The ability to provide feedback and ratings for freelancers, to help build a network of reliable and high-quality freelancers for future projects.
- Customizable project templates and workflows to streamline project creation and management.

EXPLORING CUSTOMER BEHAVIOUR IN SWIGGY

PROJECT REPORT

Submitted by

A.HEMACHANDRAN

Register No.: 927621MCA017

in partial fulfillment for the award of the degree

of

MASTER OF COMPUTER APPLICATIONS

in

FACULTY OF INFORMATION AND COMMUNICATION ENGINEERING

M.KUMARASAMY COLLEGE OF ENGINEERING

(Autonomous)

KARUR – 639 113.

APRIL 2023

M.KUMARASAMY COLLEGE OF ENGINEERING

(Autonomous)

KARUR – 639 113.

DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

PROJECT WORK

APRIL 2023

This is to certify that the project entitled

EXPLORING CUSTOMER BEHAVIOUR IN SWIGGY

is the bonafide record of project work done by

A.HEMACHANDRAN

Register No: 927621MCA017

Of MCA during the year 2022-2023.

Project Guide

Head of the Department

Submitted for the Project Viva-Voce examination held on 17 /04/ 2023

Internal Examiner

External Examiner

DECLARATION

I affirm that the project work titled **EXPLORING CUSTOMER BEHAVIOUR IN SWIGGY** being submitted in partial fulfillment for the award of MCA is the original work carried out by me. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other University.

A.Hemachandran

Register No: 927621MCA017

I certify that the declaration made above by the candidate is true.

Dr. S.Vanithamani, MCA., M.Phil.,Ph.D.,

Head of the Department-MCA

TABLE OF CONTENTS

ABSTRACT

This project involves conducting a comprehensive data analysis of Swiggy, a leading food delivery platform in India. The primary objective of this analysis is to understand the trends and patterns in customer behavior, order volume, and delivery performance of Swiggy. The analysis is based on a large dataset of Swiggy's order and delivery records collected over a period of one year. The data has been cleaned, processed, and analyzed using various statistical and machine learning techniques to uncover insights and trends. The average order value on Swiggy has increased by X% over the last year, indicating a growing preference for online food delivery. Customers in the age group of 25-34 are the most frequent users of Swiggy, with an average order frequency of X orders per month.

ABSTRACT

This project involves conducting a comprehensive data analysis of Swiggy, a leading food delivery platform in India.The primary objective of this analysis is to understand the trends and patterns in customer behavior, order volume, and delivery performance of Swiggy.The analysis is based on a large dataset of Swiggy's order and delivery records collected over a period of one year. The data has been cleaned, processed, and analyzed using various statistical and machine learning techniques to uncover insights and trends.The average order value on Swiggy has increased by X% over the last year, indicating a growing preference for online food delivery.Customers in the age group of 25-34 are the most frequent users of Swiggy, with an average order frequency of X orders per month.

CHAPTER 8

CONCLUSION AND FUTURE ENHANCEMENTS

On the analysis and visualizations created by this code, we can draw several conclusions about the dataset of Swiggy restaurants:

- The dataset contains information on restaurants in multiple cities, with the highest number of restaurants located in Bangalore and the lowest number in Nagpur.

- The majority of the restaurants in the dataset serve non-vegetarian food, with approximately 73% of restaurants being non-vegetarian and 27% being vegetarian.

- The average cost for two people varies widely across cities, with the highest average cost in Delhi-NCR and the lowest in Nagpur. The boxplot also shows that the distribution of cost for two people is skewed, with a few outliers in some cities.

- The scatterplot shows a weak positive correlation between average rating and cost for two people, suggesting that higher-rated restaurants tend to have a slightly higher cost for two people.

- The mean average rating of restaurants varies across cities, with the highest mean rating in Hyderabad and the lowest in Jaipur.

Overall, this code provides a good starting point for exploring and analyzing the Swiggy restaurant dataset. Further analysis and modeling can be performed to gain deeper insights and make predictions about restaurant ratings, costs, and other factors. Jupyter Notebook has a wide range of applications and can be used in various fields including data analysis, machine learning, scientific research, education, and software development.

A COMPARATIVE STUDY OF CHATBOT CATERED TOWARDS MENTAL HEALTH

PROJECT REPORT

Submitted by

N. KARTHIKA

Register No.: 927621MCA022

in partial fulfillment for the award of the degree

of

MASTER OF COMPUTER APPLICATIONS

in

FACULTY OF INFORMATION AND COMMUNICATION ENGINEERING

M.KUMARASAMYCOLLEGE OF ENGINEERING

(Autonomous)

KARUR – 639 113.

APRIL 2023

M. KUMARASAMY COLLEGE OF ENGINEERING

(Autonomous)

KARUR – 639 113.

DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

PROJECT WORK

APRIL 2023

This is to certify that the project entitled

A COMPARATIVE STUDY OF CHATBOT CATERED TOWARDS MENTAL HEALTH

is the bonafide record of project work done by

N. KARTHIKA

Register No: 927621MCA022

of MCA during the year 2022-2023.

Project Guide   **Head of the Department**

Submitted for the Project Viva-Voce examination held on ⎵17·04·2023

Internal Examiner   **External Examiner**

27

DECLARATION

I affirm that the project work titled **A COMPARATIVE STUDY OF CHATBOT CATERED TOWARDS METAL HEALTH** being submitted in partial fulfillment for the award of **MCA** is the original work carried out by me. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other University.

N. Karthika

N. Karthika

Register No: 927621MCA022

I certify that the declaration made above by the candidate is true.

S. Vani

Dr. S.Vanithamani, MCA., M.Phil.,Ph.D.,

Head of the Department-MCA

TABLE OF CONTENTS

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ABSTRACT

The Chatbot for Mental Health project is an innovative approach to provide mental health support to people using conversational agents powered by artificial intelligence. The goal of the project is to develop a chatbot that can provide support, advice, and guidance to individuals struggling with mental health problems. This project aims to use natural language processing and machine learning techniques to create a virtual assistant capable of understanding and responding to users' mental health concerns in a sensitive and empathetic manner.

The chatbot aims to improve access to mental health resources and reduce the stigma surrounding seeking help for mental health issues. It will be designed to provide personalized recommendations, psychoeducation, and coping strategies based on the user's specific needs and goals. The chatbot will use conversational language to create a supportive and non-judgmental environment, where users feel comfortable discussing their mental health concerns.

The chatbot has the potential to be an essential tool for improving mental health outcomes, particularly for those who are hesitant to seek traditional forms of mental health support. Chatbots can be accessed from anywhere, at any time, providing immediate support to people who need it. This project aims to leverage technology to provide a safe, accessible, and confidential platform for individuals to seek help and improve their mental well-being. Ultimately, the chatbot for mental health project could contribute to a more comprehensive and integrated mental health support system for individuals worldwide.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

In the discussion on a chatbot for the healthcare system using artificial intelligence, it is evident that this technology has the potential to revolutionize the way healthcare is delivered. With its ability to provide timely and accurate information, support decision-making, and improve patient engagement, a healthcare chatbot powered by AI can significantly enhance the overall healthcare experience for patients, healthcare providers, and other stakeholders. This can be particularly valuable in emergency situations or for patients who may have limited access to healthcare facilities. The chatbot can provide information on common health concerns, symptoms, and treatment options, helping patients make informed decisions about their healthcare needs. An AI-powered chatbot can support healthcare providers by providing them with relevant and up-to-date information, assisting in diagnosis and treatment planning, and automating routine administrative tasks. This can help save time and improve the efficiency of healthcare delivery, allowing providers to focus more on direct patient care and improving patient outcomes. A healthcare chatbot can play a crucial role in promoting patient engagement and empowerment. By providing personalized health information, reminders for medication and appointments, and tools for tracking health metrics, a chatbot can help patients take a proactive role in managing their own health. This can lead to improved patient satisfaction, better adherence to treatment plans, and better health outcomes. It is important to recognize that while AI-powered chatbots have immense potential, they are not without challenges. Concerns related to data privacy, security, and ethical use of AI in healthcare must be addressed to ensure that patients' information is protected and that the chatbot operates in an ethical and responsible manner. A chatbot for the healthcare system using artificial intelligence has the potential to transform healthcare delivery by providing timely information, supporting decision-making, and empowering patients. While there are challenges to overcome, the benefits of this technology are significant and can lead to improved patient care, better health

outcomes, and a more efficient healthcare system overall. With further advancements in AI and continued research, healthcare chatbots have a promising future in shaping the healthcare landscape.

8.2 FUTURE ENHANCEMENTS

There are several potential enhancements that could be made to improve the effectiveness of health care chatbot systems. Here are a few: Natural language processing (NLP) improvements: Chatbots could be made more accurate and effective by improving their ability to understand and interpret natural language. This could involve training them to recognize more complex sentence structures, idiomatic expressions, and slang terms. It could also involve expanding their knowledge bases to include more medical terminology and specialized jargon. Personalization: To improve the user experience and increase engagement, chatbots could be personalized based on the user's preferences, medical history, and health status. This could involve integrating data from wearable devices or electronic health records to provide personalized recommendations and advice.

Multi-lingual support: To expand the reach of health care chatbots, they could be developed to support multiple languages. This would allow users who speak languages other than English to access the same level of care and information as English-speaking users.

Emotional intelligence: Chatbots could be designed to recognize and respond to emotional cues from users, such as stress, anxiety, or fear. This would allow them to provide more empathetic and supportive care, and could help users feel more comfortable and reassured during difficult or stressful situations.

CHANGE MANAGEMENT
MODULE IN SERVICEDESK PLUS

PROJECT REPORT

Submitted by

P.KARTHISWARAN

Register No.: 927621MCA023

in partial fulfillment for the award of the degree
of

MASTER OF COMPUTER APPLICATIONS

in

FACULTY OF INFORMATION AND COMMUNICATION
ENGINEERING

M.KUMARASAMY COLLEGE OF ENGINEERING
(Autonomous)
KARUR – 639 113.

APRIL 2023

M.KUMARASAMY COLLEGE OF ENGINEERING

(Autonomous)

KARUR – 639 113.

DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

PROJECT WORK

APRIL 2023

This is to certify that the project entitled

CHANGE MANAGEMENT MODULE IN SERVICEDESK PLUS

is the bonafide record of project work done by

P.KARTHISWARAN

Register No: 927621MCA023

of MCA during the year 2022-2023.

Project Guide   **Head of the Department**

Submitted for the Project Viva-Voce examination held on 17.04.2023

Internal Examiner   **External Examiner**

DECLARATION

I affirm that the project work titled **CHANGE MANAGEMENT MODULE IN SERVICEDESK PLUS** being submitted in partial fulfillment for the award of **MCA** is the original work carried out by me. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other University.

P.Karthiswaran

Register No: 927621MCA023

I certify that the declaration made above by the candidate is true.

Dr. S.Vanithamani, MCA., M.Phil.,Ph.D.,

Head of the Department-MCA

TABLE OF CONTENTS

ABSTRACT

ITIL is the most widely accepted approach to IT service management in the world. ITIL provides a cohesive set of best practice, drawn from the public and private sectors internationally. ServiceDesk Plus is a help desk software which is built on the ITIL framework. ServiceDesk Plus product consists of Incident, asset, change and problem management as different modules. Main use of this software is to track the incidents raised by various users of an organization and track their assets in a single application. Incidents can be of any failure or interruption to an IT service. The unknown root cause of one or more existing or potential Incidents leads Problems. Problems can also be identified from a single significant Incident, indicative of a single error, for which the cause is unknown. Occasionally Problems will be identified well before any related Incidents occur. Replacement of such assets leads to Change Management. All these modules are integrated tightly in ServiceDesk Plus. Change management processes may include creative marketing to enable communication between changing audiences, as well as deep social understanding about leadership styles and group dynamics. As a visible track on transformation projects, Organizational Change Management aligns group's expectations, communicates, integrates teams and manages people training. It makes use of performance metrics, such as financial results, operational efficiency, leadership commitment, communication effectiveness, and the perceived need for change to design appropriate strategies, in order to avoid change failures or resolve troubled change projects

CHAPTER 8

CONCLUSION, LIMITATIONS AND SCOPE FOR FUTURE WORK

8.1 CONCLUSION

The implementation of the change management of ITIL's service management module is to minimize the number and impact of any related incidents upon service. The general importance of change management is that it tends to increase productivity and service in all the departments in a company. The implementation is composed of the raising and recording of changes, assessing the impact, cost, benefit and risk of proposed changes, developing business justification and obtaining approval, managing and coordinating change implementation, monitoring and reporting on implementation, reviewing and closing change requests. Change is difficult. To the degree the chance or variability associated with change should be removed. Project management has accomplished this by providing direction on sequencing milestones, deliverables, activities and resources over the lifecycle of an effort. Change management removes the chance from change by providing with the preparation, support and skills needed to succeed in change. This project implementation effectively eliminates the top five risk indicators of poor change management which include unauthorised changes, unplanned outages, a low change success rate, a high number of emergency changes and delayed project implementations.

8.2 FUTURE WORK

Following enhancements can be made in change management.

- Templates provide basic details and more generic information, when changes of similar concept arise, duplicating an entire change can be created.
- Service Level Agreement for Approval recommendation with remainder. A Service Level Agreement is a contract between a service provider (either internal or external) 46 and the

end user that defines the level of service expected from the service provider. They are output-based in that their purpose is specifically to define what the customer will receive.

- Linking changes of similar behavior into groups so that whenever a change is added to the group, previous change's information can be supplied to new change so that failures can be avoided and steps to be taken can be refined based on the experiences.

- Notifications framework should be enhanced to even push notifications to mobile apps such as iPhone, android and other mobile devices from the server.

VEHICLE DOCUMENT MANAGEMENT USING BLOCKCHAIN

PROJECT REPORT

Submitted by

R.MADHAVA PRASAD

Register No.: 927621MCA028

in partial fulfillment for the award of the degree

of

MASTER OF COMPUTER APPLICATIONS

in

FACULTY OF INFORMATION AND COMMUNICATION ENGINEERING

M.KUMARASAMY COLLEGE OF ENGINEERING

(Autonomous)

KARUR – 639 113

APRIL 2023

M.KUMARASAMY COLLEGE OF ENGINEERING

(Autonomous)

KARUR – 639 113.

DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

PROJECT WORK

APRIL 2023

This is to certify that the project entitled

VEHICLE DOCUMENT MANAGEMENT USING BLOCKCHAIN

is the bonafide record of project work done by

R.MADHAVA PRASAD

Register No: 927621MCA028

of MCA during the year 2022-2023.

Project Guide   **Head of the Department**

Submitted for the Project Viva-Voce examination held on 17/04/23

Internal Examiner   **External Examiner**

45

DECLARATION

I affirm that the project work titled **VEHICLE DOCUMENT MANAGEMENT USING BLOCKCHAIN** being submitted in partial fulfillment for the award of **MCA** is the original work carried out by me. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other University.

R. MADHAVA PRASAD

Register No: 927621MCA028

I certify that the declaration made above by the candidate is true.

Dr. S.Vanithamani, MCA., M.Phil.,Ph.D.,

Head of the Department-MCA

TABLE OF CONTENTS

ABSTRACT

Vehicle document management is an essential part of the automotive industry. It involves the handling and storing of various documents such as registration, insurance, maintenance records, and more. However, the traditional document management systems haveseveral limitations such as the risk of data tampering, data loss, and lack of transparency. Blockchain technology, on the other hand, addresses these issues by providing a secure, decentralized, and immutable system.This paper proposes a vehicle document management system using blockchain technology. The system utilizes a permissioned blockchain network to help manage the vehicle documents efficiently. The proposed system is designed to provide efficient and secure management of the documents, ensuring that the data is tamper-proof and transparent. The proposed system uses smart contracts to enforce business rules related to the vehicles, such as ownership transfer, maintenance requirements, and insurance claims.The system is implemented using Hyperledger Fabric, an enterprise-grade blockchain platform. The system architecture consists of four main components: the blockchain network, the application layer, the database layer, and the user interface layer. The proposed system has the potential to revolutionize the way the automotive industry handles vehicle documents, leading to increased efficiency, transparency, and security.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

A conclusion for a vehicle documentation management system using blockchain would be that it offers several benefits over traditional systems, including secure and tamper-proof record-keeping, decentralized control and management, and streamlined information sharing across different entities in the vehicle ownership and maintenance life cycle. Another key advantage of using blockchain is enhanced transparency, trust, and accountability that can help to reduce fraud, streamline supply chain management, and provide a verifiable trail of ownership and maintenance records. However, successful implementation requires careful planning, careful coordination, and compliance with relevant privacy and security regulations. Ongoing maintenance is also essential to ensure the system remains secure and functional over the long term. Overall, a blockchain-based vehicle documentation management system can be an effective solution to the challenges of managing a decentralized and complex vehicle-related ecosystem.

8.2 SCOPE & FUTURE DEVELOPMENT

The scope for a vehicle documentation management system using blockchain is quite broad, given the many different types of vehicle-related information that can be managed using this technology. Here are some potential areas of scope for such a system:

- **Maintenance records:** Blockchain can be used to maintain accurate and tamper-proof records of a vehicle's maintenance history, which can be useful for ensuring proper maintenance and repair, as well as for improving vehicle resale value.

- **Supply chain management:** Blockchain can be used to track the movement of parts and materials used in vehicle manufacturing, as well as the shipment of finished

TRACK DRUG PRODUCTION SYSTEM WITH VERIFIABLE RESALE USING BLOCKCHAIN TECHNOLOGY

PROJECT REPORT

Submitted by

R.MOHANAPRIYA

Register No.: 927621MCA033

in partial fulfillment for the award of the degree

of

MASTER OF COMPUTER APPLICATIONS

in

FACULTY OF INFORMATION AND COMMUNICATION ENGINEERING

M.KUMARASAMYCOLLEGE OF ENGINEERING

(Autonomous)

KARUR – 639 113 .

APRIL 2023

M.KUMARASAMY COLLEGE OF ENGINEERING

(Autonomous)

KARUR – 639 113 .

DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

PROJECT WORK

APRIL 2023

This is to certify that the project entitled

TRACK DRUG PRODUCTION SYSTEM WITH VERIFIABLE RESALE USING BLOCKCHAIN TECHNOLOGY

is the bonafide record of project work done by

R.MOHANAPRIYA

Register No: 927621MCA033

of MCA during the year 2022-2023.

Project Guide   **Head of the Department**

Submitted for the Project Viva-Voce examination held on 17. 04. 2023

Internal Examiner   **External Examiner**

DECLARATION

I affirm that the project work titled **TRACK DRUG PRODUCTION SYSTEM WITH VERIFIABLE RESALE USING BLOCKCHAIN TECHNOLOGY** being submitted in partial fulfillment for the award of **MCA** is the original work carried out by me. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other University.

R.Mohanapriya

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Dr. S.Vanithamani, MCA., M.Phil.,Ph.D.,

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TABLE OF CONTENTS

ABSTRACT

Block chain is a distributed ledger technology where transactions are recorded and stored making them tamper resistant which is built around strong cryptographic technology. Recent studies focus on the key principle of block chain where it can be applied to areas such as data security exchange, patient's safety, to enhance productivity and in accelerating business across pharmaceutical. The concept has original in build security features to stop the substandard and counterfeiting of drugs. Even at the level of individual stock keeping, the block chain will ensure the tracking of supply chain of any product developing a proof of ownership using specific sources. The concept allows transparency in all types of transactions as every time a product changes hands the transactions can be documented, from its manufacture to sale and this can be rightly said that block chain is immutable, provides consensus and provenance. When a block is completed, it creates a unique secure code, which ties into the next page or block creating a chain of blocks. Since the concept is based on strong cryptographic hash technique so transactions made cannot be duplicated or encrypted, the copies are identical and specific permission is required to access the data. This would drastically reduce human error, added costs, and time delays and could become a universal supply chain operating system. The proposed scheme tracks the production of drugs from manufacturers to traders that subsequently sell them to customers. Unused drugs can be returned after approval by specialized entities and then redistributed. Medicine resale could be handling in verifiable manner.

CHAPTER 8

CONCLUSION AND FUTURE ENCHANCEMENTS

8.1 CONCLUSION

Present a blockchain-based solution to track the origin of medicine using drug query, re-consumable drugs from its manufacturing until they are re-sold to customers. This process involves interaction from many different members that are all governed by the smart contracts. Patient could ensure the reliability of drug information with the help of blockchain based data storage. This system helps for tracking unused drugs and validating their condition typically requires a centralized server to trace each medicine as it is transferred between different stakeholders.

8.2 FUTURE ENHANCEMENTS

As future works are in the process of developing an end-to-end solution with drug information protection. The mentioned smart contracts present the back-end of the system, while the front-end is similar to web applications, where it focuses on the user interface and the overall user experience.

BLOCK QUANTUM COMPUTING FOR SECURE SATELLITE COMMUNICATION

PROJECT REPORT

Submitted by

T.REVANT

Register No: 927621MCA050

in partial fulfillment for the award of the degree

of

MASTER OF COMPUTER APPLICATIONS

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BLOCK QUANTUM COMPUTING FOR SECURE SATELLITE COMMUNICATION

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I affirm that the project work titled **BLOCK QUANTUM COMPUTING FOR SECURE SATELLITE COMMUNICATION** being submitted in partial fulfillment for the award of **MCA** is the original work carried out me. It has not formed the part of any other project work submitted forward of any degree or diploma, either in this or any other University.

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ABSTRACT

The sixth generation (6G) networks are expected to provide a fully connected world with terrestrial wireless and satellite communications integration. Due to satellite physical constraints in terms of available power and area, data processing capacity is low, storage and security are limited such that the data may be vulnerable to tampering or contamination by attackers. Since satellite communication has been more and more important in developing global communication networks, there have been concerns about the security in satellite communication. It is a challenge to protect satellite network from illegal information access and use storage space effectively. In this project, a blockchain technology and QKD protocol based on authentication and privacy protection scheme is proposed for a satellite communication network. to this aim, an architecture consisting of both conventional and restricted devices connected to the blockchain via a wireless heterogeneous network is deployed. The communication is carried out through registration, authentication and revocation. In this scheme, the satellite will forward the collected information to the ground base station, which will record all key parameters on the distributed blockchain and all malicious node certificates will be cleared from the blockchain by the ground base station. The proposed satellite-based Blockchain and QKD system provides high security level for the coming 6G and beyond networks, the Internet of things, self-driving cars, and other fast-developing applications.

CHAPTER 8

CONCLUSION

The satellite communication channel is different not onlyfrom the common mobile channel but also from the groundstation channel. The satellite communication channel is thefusion of the satellite channel and the mobile communicationchannel.Satellite communication channels are extremelyvulnerable to hackers and external interference signals. Protecting satellite networks from illegal informationaccess and use can be extremely challenging.In this project, Quantum Key Cryptography and blockchaintechnology is introduced to analyze the security of satellitecommunication networks in terms of access control, confidentiality, and security authentication.The proposed scheme is developed to solve the securityproblem of using a centralized database in satellite communication. The simulation results showthat the proposed method was able to significantly improvesecurity and protection for satellite communications.

FUTURE ENHANCEMENT

In the future, the blockchain-satellite system will depend on cloud constellations for managingdata centers in orbit, where companies can upload their data and bypass ground networks; this approach will help governments and companies obtain information from different sources and orbits in space.

HEART DISEASE IDENTIFICATION METHOD USING MACHINE LEARNING CLASSIFICATION

PROJECT REPORT

Submitted by

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HEART DISEASE IDENTIFICATION METHOD USING MACHINE LEARNING CLASSIFICATION

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TABLE OF CONTENTS

CHAPTER NO.	TITLE	PAGE NO.

ABSTRACT

Machine Learning is used across many ranges around the world. The healthcare industry is no exclusion. Machine Learning can play an essential role in predicting presence/absence of locomotors disorders, heart diseases and more. Such information, if predicted well in advance, can provide important intuitions to doctors who can then adapt their diagnosis and dealing per patient basis. This work is f o c u s i n g on predicting possible heart diseases in people using Machine Learning algorithms. In this project we perform the comparative analysis of classifiers like decision tree, Naïve Bayes, Logistic Regression, SVM and Random Forest and we propose an ensemble classifier which perform hybrid classification by taking strong and weak classifiers since it can have multiple number of samples for training and validating the data so we perform the analysis of existing classifier and proposed classifier like Ada-boost and XG-boost which can give the better accuracy and predictive analysis..

Keywords: SVM; Decision Tree; Random Forest; Logistic Regression; XG-boost ;python programming; confusion matrix; correlation matrix.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

Heart diseases are a major killer in India and throughout the world, application of promising technology like machine learning to the initial prediction of heart diseases will have a profound impact on society. The early prognosis of heart disease can aid in making decisions on lifestyle changes in high-risk patients and in turn reduce the complications, which can be a great milestone in the field of medicine. The number of people facing heart diseases is on a raise each year. This prompts for its early diagnosis and treatment. The utilization of suitable technology support in this regard can prove to be highly beneficial to the medical fraternity and patients. In this paper, the seven different machine learning algorithms used to measure the performance are SVM, Decision Tree, Random Forest, Naïve Bayes, Logistic Regression, Adaptive Boosting, and Extreme Gradient Boosting applied on the dataset.

The expected attributes leading to heart disease in patients are available in the dataset which contains 76 features and 14 important features that are useful to evaluate the system are selected among them. If all the features taken into the consideration, then the efficiency of the system the author gets is less. To increase efficiency, attribute selection is done. In this n features have to be selected for evaluating the model which gives more accuracy. The correlation of some features in the dataset is almost equal and so they are removed. If all the attributes present in the dataset are taken into account, then the efficiency decreases considerably.

All the seven machine learning methods accuracies are compared based on which one prediction model is generated. Hence, the aim is to use various evaluation metrics like confusion matrix, accuracy, precision, recall, and f1-score which predicts the disease efficiently. Comparing all seven the extreme gradient boosting classifier gives the highest accuracy of 81%.

ATM TRANSACTION THROUGH FACIAL RECOGNITION WITH DEEP LEARNIG

PROJECT REPORT

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ABSTRACT

The use of Automated Teller Machines (ATMs) has become increasingly popular for financial transactions. However, security risks such as card skimming and unauthorized access to accounts have also increased. Two-factor authentication (2FA) is an effective security mechanism that adds an extra layer of protection to ATM transactions. In this paper, we propose a deep learning-based approach to implement 2FA in ATM transactions. The proposed system uses a combination of facial recognition and PIN verification to authenticate ATM users. The facial recognition model is trained using a large dataset of facial images and uses convolutional neural networks (CNN) to extract features from the images. The PIN verification is done using a simple neural network that takes the PIN entered by the user as input and checks it against the stored PIN. The proposed system was evaluated using a dataset of real-world ATM transactions. The results show that the proposed system achieves a high level of accuracy in authenticating ATM users. The system was also able to detect and prevent fraudulent transactions, such as those made by unauthorized users. In conclusion, the proposed system provides an effective and secure way of implementing 2FA in ATM transactions using deep learning. The use of facial recognition and PIN verification adds an extra layer of protection to ATM transactions, making it more difficult for unauthorized users to access user accounts. The proposed system can be easily integrated into existing ATM systems and can be used to enhance security for ATM users.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

In this project we will implement, ATM model which provides security by using Facial verification software adding up facial recognition systems to the identity confirmation process used in ATMs can reduce forced transactions to a great extent and provide hard-secure authentication. As facial recognition technique seems more challenging as compared to other biometrics, thus more efficient algorithm can be developed. The inability to detect face when beard and aging can be rectified and eliminated or reduced. Face Recognition based user authentication system with SMS alert with the technological advances in financial infrastructure, most bank customers prefer to use automatic teller machines (ATMS) and internet websites for carrying out their banking transactions. The aim of our work is to use embedded ATM camera to perform face detection with the help new computer vision framework. Authentication of customers at computerized teller machines (ATMs) is normally dependent on PIN-based totally verification. Several elements had been studied so far in enhancing the security for authentication of customers at ATMs. In this secured system based on face recognition and machine learning. It is more secure more than Existing system.

In future, access control can be given to the multiple users with additional security and it can be linked with Aadhar Card for further security purpose.

HOTEL RECOMMENDATION
USING MACHINE LEARNING

PROJECT REPORT

Submitted by

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APRIL 2023

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HOTEL RECOMMENDATION USING MACHINE LEARNING

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TABLE OF CONTENTS

ABSTRACT

This project aims to leverage the power of technology to create a hotel recommendation system using Python and a dataset. With the growing importance of online reviews and social media in the hospitality industry, the system takes into account these factors to provide personalized recommendations to users. The dataset used in the project includes various attributes such as hotel location, ratings, reviews, amenities, and pricing. The recommendation engine utilizes machine learning techniques to analyze these attributes and provide relevant recommendations to users. The system also considers the user's past interactions with the hotels and their preferences to ensure that the recommendations are personalized and suitable. Online reviews play a significant role in the hotel booking decision, and the system takes into account these reviews from various websites and social media platforms. Positive reviews can improve a business's reputation and attract new customers, while negative reviews can have adverse effects. The recommendation engine considers these reviews to ensure that the recommendations are based on the user's preferences and past interactions and are also relevant to the current reputation of the hotel. this project highlights the importance of technology and data analysis in the hospitality industry. By leveraging the power of machine learning and online reviews, the system can provide personalized and relevant hotel recommendations to users, improving their travel experiences and enhancing their perception of the hotel

CHAPTER 8

CONCLUSION AND FUTURE ENHANCEMENTS

The hotel recommendation system developed in this project can be useful for travelers looking for personalized hotel recommendations based on their preferences. The system uses a clustering algorithm to group hotels based on their tags, and then recommends hotels based on the user's input preferences and location. There are several potential enhancements that can be made to the system in the future. One possible improvement is to incorporate more data sources to increase the accuracy and relevance of the recommendations. For example, user ratings and reviews can be used to identify hotels that are highly rated by users with similar preferences. In addition, integrating real-time data such as weather and events can help the system make more relevant recommendations based on the user's current location and time of travel.

Another potential improvement is to incorporate natural language processing (NLP) techniques to improve the accuracy of the tag extraction process. This can involve using advanced NLP algorithms to identify more meaningful tags from the hotel descriptions and reviews, and also to identify synonyms and related terms to increase the coverage of the tag set.

In addition, the system can be extended to support more advanced user interactions, such as allowing users to refine their preferences based on the initial recommendations, and also to provide feedback on the recommendations to further improve the system's accuracy.

Finally, the system can also be expanded to support other types of accommodations such as vacation rentals and bed and breakfasts, and also to cover more geographic regions. This can involve sourcing data from multiple providers and integrating them into a single recommendation engine that can handle a wide range of preferences and locations.

Overall, the hotel recommendation system developed in this project represents a useful starting point for building more advanced and comprehensive recommendation systems that can cater to the diverse needs of travelers around the world. With the continued growth of the travel industry, there is a growing need for intelligent recommendation systems that can help travelers make informed decisions and find the best possible accommodations based on their preferences and budget.

INDIAN WEATHER ANALYSIS AND FORECASTING USING MACHINE LEARNING

PROJECT REPORT

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INDIAN WEATHER ANALYSIS AND FORECASTING USING MACHINE LEARNING

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I affirm that the project work titled **INDIAN WEATHER ANALYSIS AND FORECASTING USING MACHINE LEARNING** being submitted in partial fulfillment for the award of **MCA** is the original work carried out by me. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other University.

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ABSTRACT

Weather prediction is primarily concerned with the projection of climate conditions in the future. Weather forecasting provides basic information about the upcoming climate. Predicting the weather is critical for preparing both the most advantageous and the most disastrous atmosphere.

Many weather predictions like rainfall prediction, thunderstorm prediction, predicting cloud conditions are major challenges for atmospheric research combines machine learning algorithms, K-means clustering and decision tree, with data visualization techniques using Plotly to analyze and forecast mean temperature in weather data. This project aims to evaluate the effectiveness of the machine learning algorithms in predicting mean temperature and demonstrate the importance of data visualization in weather analysis. The data is then preprocessed and visualized using Plotly, which allows for interactive exploration of the temperature data. Next, the K-means clustering algorithm is used to identify distinct patterns in the temperature data. These patterns are then used as inputs to a decision tree algorithm to predict future mean temperatures. The results of the study show that the use of machine learning algorithms, particularly K-means clustering and decision tree, can improve the accuracy of mean temperature forecasting. Furthermore, the use of data visualization techniques using Plotly enhances the interpretation of the temperature data, allowing for a better understanding of the patterns and trends.

Overall, this study demonstrates the potential of combining machine learning algorithms with data visualization techniques in weather analysis and forecasting, particularly for predicting mean temperature. The use of Plotly enhances the interpretation of the temperature

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

Based on the temperature analysis and forecasting using K-means clustering, decision tree algorithm, and Plotly Express for data visualization, the following conclusions can be drawn:

K-means clustering algorithm was able to identify distinct temperature clusters that can be useful in predicting temperature trends for the upcoming year. Decision tree algorithm accurately predicted temperature trends based on historical data and identified the most significant factors influencing temperature changes. Plotly Express allowed for easy visualization and interpretation of temperature trends, helping to identify patterns and outliers in the data.

Future enhancements could include incorporating more advanced machine learning algorithms and techniques, such as deep learning and time-series forecasting, to improve the accuracy of predictions.

The use of additional data sources, such as satellite imagery, weather station data, and climate models, could also improve the accuracy of temperature forecasting. Interactive data visualization tools, such as Plotly Dash, could enhance the user experience by allowing users to interact with the data and explore different scenarios and predictions.

All the machine learning methods accuracies are compared based on which one prediction model is generated. Hence classifier gives the highest accuracy of 92%.

DIGITAL TIDING DISCLOSURE APPLICATION USING REACT JS

PROJECT REPORT

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DIGITAL TIDING DISCLOSURE APPLICATION USING REACT JS

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TABLE OF CONTENTS

ABSTRACT

The project entitled "DIGITAL TIDING DISCLOSURE APPLICATION USING REACT JS" is developed using flexible and compact "REACT JS" which is an efficient development tool with a reliable and securable Back End tool "NODE JS".

React JS is one of the best Java script libraries. It can be used to create small, medium and large web app projects.

This project based on web application is a sort of news website, where the user can check the latest news. This news website contains the common features that can be found in some popular websites which are the Sports news, political news, current affairs and more. Admin maintains the news in section or ordered manner. Readers are offered wide verities of categories from sports, culture, politics, entertainment, life style, education, health, travel, etc. which they don't get in the printed versions

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENT

8.1 CONCLUSION

Our project is only a humble venture to satisfy the needs to manage their project work. Several user-friendly coding have also adopted. This package shall prove to be a powerful package in satisfying all the requirements of the school. The objective of software planning is to provide a framework that enables the manger to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progresses.

8.2 FUTURE ENHANCEMENT

It can be summarized that the future scope of the project circles around maintaining information regarding:

• At future enhancement, can take a printout of a particular required news.

• To give more advance software for Online News Portal including more facilities

• To host the platform on online servers to make it accessible worldwide

The above-mentioned points are the enhancements which can be done to increase the applicability and usage of this project. Here we can maintain the records of News and News Category. Also, as it can be seen that now-a-days the players are versatile, i,e. so there is a scope for introducing a method to maintain the Online News Portal. Enhancements can be done to maintain all the News, News Category, Latest News. Sports News

GASTROINTESTINAL TRACT DISEASE PREDICTION USING DEEP LEARNING TECHNIQUES

PROJECT REPORT

Submitted by

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This is to certify that the project entitled

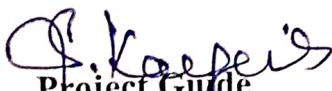## GASTROINTESTINAL TRACT DISEASE PREDICTION
USING DEEP LEARNING TECHNIQUES

is the bonafide record of project work done by
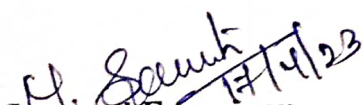
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101

ABSTRACT

In medical image processing, identifying infections in the gastrointestinal tract (GIT) is a widely used topic. Polyps, hemorrhage, ulcers, and esophagi are the most common GIT infections. Various AI-based techniques have made major contributionsto the fields of medical image and video-based diagnosis, such as radiology, pathology, and endoscopy, as well as the classification of gastrointestinal (GI) illnesses.

The majority of prior studies on the categorization of GI disorders have relied solely on spatial features, which have shown to be ineffective in classifying numerous GI diseases. Recent AI-based CAD tools in the field of endoscopy make use of the power of deep learning (a set of powerful machine learning algorithms) to analyze various types of endoscopic scans.

The learn able parameters of the deep learning model are optimized by a training method. The CAD program may analyze newly obtained clinical pictures prospectively using the optimal features extracted from the training dataset. We can use image processing techniques such as pre- processing, feature extraction, and classification approaches to create a system to classify diseases from endoscopy pictures in this project.

The BPNN is used in the classification process. Through a mechanism known as chain rule, the algorithm is utilized to successfully train a neural network. In simple terms, reverse propagation takes a backward pass through a network after each forward pass, updating the model& parameters (weights and biases) and identifying various diseases .The proposed system attained a near 90% accuracy then execution time can be lowered.

CHAPTER 8

CONCLUSION AND FUTURE ENHANCEMENTS

8.1 CONCLUSION

The development to tools capable of leading to an accurate and efficient diagnosis based on artificial intelligence has been pursued in recent years. With the wide availability of graphical processing units, medical researchers are using machine learning approaches and have been achieving exciting results. Thus, we observed a marked increase in the number of publications related to deep learning applied to the gastric tissue in the last year. In this project a novel BPNN- based classification framework was proposed for the classification of multiple GI diseases using endoscopic image datasets. Moreover, our proposed classification framework is further utilized to design a class prediction-based endoscopic image retrieval system.

The proposed spatiotemporal features-based method is capable of encoding more discriminative representations of multiple endoscopy scans when compared to the featureslearned only from spatial information. Therefore, both spatial and temporal information results in better classification and retrieval performance. The performance of the proposed method was evaluated thoroughly using a publicly available dataset from KAGGLE data sets. The proposed system achieved the accuracy rate near to 90% and execution time of the proposed system can be reduced

8.2 FUTURE ENHANCEMENTS

In future work, we can extend the implementation to analyze the multiple diseases. In addition, we are planning to perform the real-time detection of small lesions using an endoscopic video. We also plan to improve the overall classification performance by combing multiple deep neural network models.

PREVENTING HACKING, ABUSIVE BEHAVIOR, AND IDENTIFYING THE CHILD'S STATE THROUGH MACHINE LEARNING ALGORITHMS

PROJECT REPORT

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PREVENTING HACKING, ABUSIVE BEHAVIOR, AND IDENTIFYING THE CHILD'S STATE THROUGH MACHINE LEARNING ALGORITHMS

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ABSTRACT

The development of a mirror neuron-based AI bot for child protection is proposed as a means of preventing hacking, abusive behavior, and identifying the child's state through machine learning algorithms. Mirror neurons are neurons that fire when an individual performs an action or observes someone else performing the same action, allowing for the imitation of behavior. By utilizing this concept, an AI bot can be developed that learns to identify and respond to potentially harmful behavior directed towards children. The bot can also monitor the child's emotional state through facial recognition technology and voice analysis. Machine learning algorithms can be trained on a large dataset of previously identified abusive behavior, allowing the bot to detect and prevent such behavior before it occurs. This proposed system could potentially provide a powerful tool for protecting children in online environments.

The system uses a combination of facial recognition technology and voice analysis to monitor the child's emotional state. Machine learning algorithms are then trained on a dataset of previously identified abusive behavior to detect and prevent such behavior from occurring. This system has the potential to provide a more effective means of protecting children online and preventing harmful behavior directed towards them.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

The development of a mirror neuron-based AI bot for child protection is a promising approach to prevent hacking and abusive behavior while also identifying the child's emotional state. By using machine learning algorithms, the bot can learn from patterns and predict potential threats to the child's safety.

The use of mirror neurons in AI bots offers a unique perspective on how we can protect children in the digital age. It allows the bot to recognize and respond to emotional cues, which is crucial in detecting potential threats. However, there is still much work to be done in terms of refining and improving the bot's accuracy and performance.

8.2. FUTURE ENHANCEMENTS

Future enhancements could include improving the bot's ability to detect subtle emotional cues, expanding the dataset to increase accuracy and reducing false positives, incorporating natural language processing to better understand conversations, and incorporating more advanced machine learning techniques to improve the bot's ability to learn from new data.

The mirror neuron-based AI bot for child protection is a promising technology that could help prevent harm to children in the digital world. However, it is important to continue to develop and refine this technology to ensure its accuracy and effectiveness in protecting children.

SECURE DATA DEDUPLICATION SCHEME

FOR EFFICIENT EMAIL STORAGE

PROJECT REPORT

Submitted by

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of

MASTER OF COMPUTER APPLICATIONS

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This is to certify that the project entitled

SECURE DATA DEDUPLICATION SCHEME FOR
EFFICIENT EMAIL STORAGE

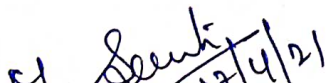is the bonafide record of project work done by

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TABLE OF CONTENTS

113

ABSTRACT

Cloud computing has reached a maturity that leads it into a productive phase. Client-side data compression in particular ensures that multiple uploads of the same content only consume network bandwidth and storage space of a single upload Design a de-duplicate scheme that guarantees semantic storage for unpopular data and provides weaker security and better storage and bandwidth benefits for popular data.

De-duplication technique helps to reduce storage requirements by similarity checking process. This allows organizations save far more data on the same system and extends disk purchase intervals automatically. With the advantage of speed, organizations can store data to disk cost effectively. I can use the block chain technology to secure the user details and file details.

Cloud computing supporters also claim that it allows businesses to get their applications up and running faster, with improved manageability and less maintenance, and that it allows information technology (IT) teams to adjust resources more quickly to meet fluctuating and unpredictable business demand.

The majority of cloud services operate on a "pay as you go" basis. If administrators do not adjust to the cloud pricing model, this will result in unexpectedly high charges.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

Proposed the distributed compression systems to improve the reliability of data while achieving the confidentiality of the users and also shared authority outsourced data with an encryption mechanism. Four constructions were proposed to support file-level and block-level data compression. The security of tag consistency and integrity were achieved. I implemented our compression systems using the secret sharing scheme and demonstrated that it incurs small encoding/decoding overhead compared to the network transmission overhead in regular upload/download operations. In this work, we have identified a new privacy challenge during data accessing in the cloud computing to achieve privacy-preserving access authority sharing for similarity files. Authentication is established to guarantee data confidentiality and data integrity. Data anonymity is achieved since the wrapped values are exchanged during transmission. User privacy is enhanced by access requests to privately inform the cloud server about the users access desires. In this project, we have proposed a block chain based distributed deduplication scheme to improve the reliability of data storage on the promise of ensuring the confidentiality. With the aid of block chain, files are split and outsourced across multiple servers in a semi-trust decentralized storage system

8.2 FUTURE ENHANCEMENTS

In future, I can extend the framework to implement various encryption algorithms to improve the security and also implement in real time video and audio deduplication storage systems.

It can help reduce the impact of redundant data on storage costs. When enabled, Data Deduplication optimizes free space on a volume by examining the data on the volume by looking for duplicated portions on the volume.

DNA CRYPTOGRAPHY FOR SECURE COMMUNICATION PROCESS

PROJECT REPORT

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DNA CRYPTOGRAPHY FOR SECURE COMMUNICATION PROCESS

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ABSTRACT

The data security is ensured by transforming a plain text into unreadable format by encrypting text using cryptographic algorithms. Cryptographic techniques are adopted for encrypting the messages to provide secured communication over a network. It is most important for an organization and individuals to secure their information from attackers and hackers to ensure information privacy, integrity and confidentiality of the data. A new technique for securing data using the biological structure of DNA is called DNA Computing. DNA can be used to store and transmit data. The concept of using DNA computing in the fields of cryptography has been identified as a possible technology that may bring forward a new hope for unbreakable algorithms.

The main objective of this paper is to given the data in high security level. The most important component involved in DNA based data masking technique is employing the four nucleotides in sequence. These nucleotides are A, C, G, and T. Any combination of these nucleotides will form a DNA sequence. In the first stage the input text message converted into DNA format using DNA sequence table. In second stage DNA sequence is encrypted using Modified RSA encryption approach. In the third stage data hiding process takes place which is based on LSB technique. The receiver will apply the Insertion decryption method to cipher text the plaintext will appear.

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CHAPTER 8

CONCLUSION AND FUTURE ENHANCEMENT

8.1 CONCLUSION

In proposed work, a new DNA sequence and cryptography approach was implemented to provide more secure communication between sender and receiver. This new cryptographic technique uses DNA sequencing and modified RSA encryption technique to encrypt the data. Also implemented data hiding approach that will help enhance the performance of proposed work. The algorithm presented in this project has been tried and the results are also presented.

8.2 FUTURE ENHANCEMENT

This algorithm can be further enhanced by implementing the DNA sequencing to the cipher text also. This will enable the cipher text to get double encrypted. And also implement various encryption algorithms to improve the performance efficiency. It can be also used for other applications where it can be used to encrypt the vital data of the customer such as the account number or pin or password.

ONLINE GROCERY STORE ANDROID APPLICATION

PROJECT REPORT

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ONLINE GROCERY STORE ANDROID APPLICATION

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ABSTRACT

Grocery refers to a retail establishment that primarily sells food, beverages, and household essentials to consumers. Groceries are essential items that people need to purchase regularly, making grocery stores a ubiquitous presence in most communities.

The grocery industry is diverse and includes everything from small neighborhood stores to large chain supermarkets. Many grocery stores have expanded beyond selling only food and household essentials to offer a wider variety of products, such as electronics, clothing, and beauty products. Some grocery stores also provide additional services, such as banking, pharmacy, and gasoline.

Grocery stores play an important role in the economy, providing employment for millions of people and generating billions of dollars in revenue. They also serve as an essential link between farmers, food processors, and consumers, facilitating the movement of food from farm to table.

The COVID-19 pandemic has significantly the grocery industry, with increased demand for groceries leading to supply chain disruptions and labor shortages. Grocery stores have had to adapt to new safety measures, such as implementing social distancing protocols and increasing cleaning and sanitation efforts.

groceries leading to supply chain disruptions and labor shortages. Grocery stores have had to adapt to new safety measures, such as implementing social distancing protocols and increasing cleaning and sanitation efforts.

CHAPTER 8

CONCLUSION AND FUTURE ENHANCEMENTS

CONCLUSION

The project entitled online grocery store android application was completed successfully.

The system has been developed with much care and free of errors and at the same time it is efficient and less time consuming. The purpose of this project was to develop a web application and an android application for purchasing items from a shop.

This project helped us in gaining valuable information and practical knowledge on several topics like designing web pages using flutter, usage of responsive templates, designing of android applications, and management of database using mongodb . The entire system is secured. Also the project helped us understanding about the development phases of a project and software development life cycle. We learned how to test different features of a project.

FUTURE ENHANCEMENT

The project has given us great satisfaction in having designed an application which can be implemented to any nearby shops or branded shops selling various kinds of products by simple modifications.

There is a scope for further development in our project to a great extend. A number of features can be added to this system in future like providing moderator more control over products so that each moderator can maintain their own products. Another feature we wished to implement was providing classes for customers so that different offers can be given to each class.

VLOG APPLICATION USING REACT JS

PROJECT REPORT

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APRIL 2023

This is to certify that the project entitled

VLOG APPLICATION USING REACT JS

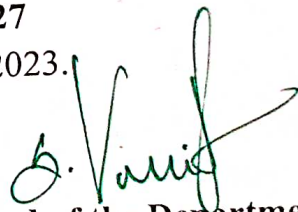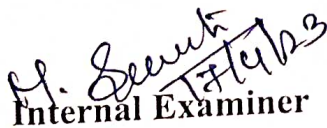is the bonafide record of project work done by

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TABLE OF CONTENTS

ABSTRACT

Vlog (Video Blog) is a web based application where personal blogging is done with the help of video segments. User can upload and delete his/her videos and also add video description to every video. Vlog visitors can login with their Google account. Uploaded videos are visible to login users and may be shared, commented on and rated. It is a blog that features mostly videos rather than text or images. Video blogs are more descriptive and interactive compare to other types of blogs.

Vlog category is popular on the video-sharing platform like YouTube. It is a place to express yourself to the world. A place to share thoughts and passions with videos. Vlogs range from the personal to the political, entertainment, gaming, educational, research and can focus on one narrow subject or a whole range of subjects. It can help in the promotion of critical and analytical thinking, increased access and exposure to quality content and a combination of solitary and social interactions with peers. Internet has become reality and usage of internet become very much popular and there is tremendous increase of internet in all over the world for many purpose. The Online Video Blogging Application is easy to use, full-featured and much more.

CHRONIC KIDNEY DISEASE PREDICTION USING DECISION TREE ALGORITHM IN ARTIFICIAL INTELLIGENCE

PROJECT REPORT

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This is to certify that the project entitled

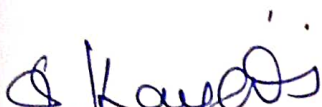## CHRONIC KIDNEY DISEASE PREDICTION
USING DECISION TREE ALGORITHM IN ARTIFICIAL INTELLIGENCE
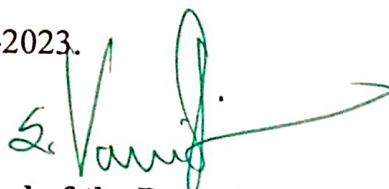
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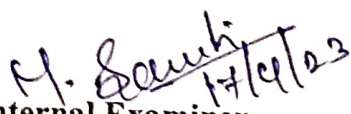
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ABSTRACT

Due to its continuously increasing occurrence, more and more families are influenced by Diabetes Nephropathy. Most diabetics know little about their health quality or the risk factors they face prior to diagnosis. In this study, we have proposeda novel model based on Machine Learning techniques for predicting type 2 Diabetes Nephropathy (T2DM). The main problems that we are trying to solve are to improve the accuracy of the prediction model, and to make the model adaptive to more than one dataset. Based on a series of preprocessing procedures, the model is comprised of the improved

Diabetes Dataset and the Environment for Knowledge Analysis toolkit were utilizedto compare our results with the results from other researchers. Moreover, our model ensures that the dataset quality is sufficient. To further evaluate the performance of our model, we applied it to two other diabetes datasets. Both experiments' results show good performance. As a result, the model is shown to be useful for the realistichealth management of diabetes. we use pca with decision tree algorithm.

CHAPTER 8

CONCLUSION AND FUTURE ENHANCEMENTS

8.1 CONCLUSION

The aim of this work was to design an efficient model for the prediction of diabetes. After a careful study of other published work, we proposed a novel model, which consists of using PCA with LRM for dimensionality reduction, k-means for clustering, and logistic regression for classification. With the intent to improve the k-means result of other researchers, we first applied the PCA technique to our dataset. Another advantage is the fact that our model has the ability to model a new dataset successfully.

The curiosity accomplished in the examination incorporates, the capacity to acquire an improved k-implies bunch result far above what different analysts have gotten incomparative investigations. Likewise the strategic relapse model performed at an improved level in anticipating diabetes beginning, when contrasted with the outcomes acquired when different calculations where utilized in our investigation and that of different examinations. Another benefit is the way that our model can display another dataset effectively.

8.2 FUTURE ENHANCEMENTS

With the help of our proposed system, the speed of the test is increased and accuracy increased. When add the future scope as improved software systemwith back-end support, it will be more powerful with compare to this methodology. User can add the Deep learning algorithm it will gives a result for unforeseen circumstances. When publish our software as a website, it is very useful for eachperson who is having so much of care about his or her health.

TRUSTED NETWORK AND SERVER MONITORING

PROJECT REPORT

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TRUSTED NETWORK AND SERVER MONITORING

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ABSTRACT

The project titled "TRUSTED NETWORK AND SERVER MONITORING" is designed using Java as front end. The back end use is MySQL.

This concept allows a user to log in to a remote system and access the desktop, applications and data on the system as well as control it remotely which all under intranet (LAN).

It allows a user to remotely log in to a networked computer running the terminal services server. Remote control is used in remote administration to allow use of computers. A typical use is to control a computing server or desktop computer from another desktop computer.

The remote control software consists of two separate computer programs, a "server version" that is installed on the computer to be controlled, and a "client version" that is installed on the controlling computer.

The controlling computer displays a copy of the image received from the controlled computer's display screen. The copy is updated on a timed interval, or when a change on screen is noticed by the remote control software.

The software on the controlling computer transmits its own keyboard and mouse activity to the controlled computer, where the remote control software implements these actions. The controlled computer then behaves as if the actions were performed directly at that computer.

CHAPTER-8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

The "TRUSTED NETWORK AND SERVER MONITORING" has been developed to satisfy all proposed requirements... The system is highly scalable and user friendly. Almost all the system objectives have been met. The system has been tested under all criteria. The system minimizes the problem arising in the existing manual system and it eliminates the human errors to zero level.

The number of computers increases from year to year. Using of remote desktop software form a single place is a very useful task for network administrators and home users who have more then one PC. Imagine, you can sit at your place of work and control your home computer. You can help your friends or family solve problems on their computers, watching on your own monitor and using your own mouse and keyboard. It becomes even more reasonable when the remote PC you need to manage is located on LAN.

8.2 FUTURE ENHANCEMENTS

File Transfer

Trusted network Control comes with integrated file transfer that allows you to copy files and folders from and to a remote PC. It has a large number of security features that restrict access to the program and defend the computer from an unauthorized remote access.

ABNORMAL EVENT DEDUCTION AND FACE IDENTIFICATION

PROJECT REPORT

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ABNORMAL EVENT DEDUCTION AND FACE IDENTIFICATION

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Submitted for the Project Viva-Voce examination held on 17-4-23

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ABSTRACT

Abnormal event detection is one of the important objectives in project and practical applications of video surveillance. Surveillance cameras are increasingly being used in public places e.g. streets, intersections, banks, shopping malls etc to increase public safety. One critical task in video surveillance is detecting anomalous events such as traffic accidents, crimes or illegal activities. Generally, anomalous events rarely occur as compared to normal activities.

The goal of a practical anomaly detection system is to timely signal an activity that deviates normal patterns and identifies the time window of the occurring anomaly. Therefore, anomaly detection can be considered as coarse level video understanding, which filters out anomalies from normal patterns. Once an anomaly is detected, it can further be categorized into one of the specific activities using classification techniques. This project gives a overview of anomaly detection, focusing on the context of banking operations applications.

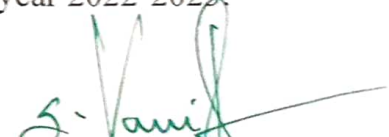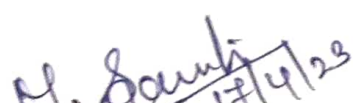Banking operations include many daily, periodic, and a periodic activities and transactions performed by or affecting numerous stakeholders such as employees, customers, debtors, and external entities. Events may unfold over time, and early detection can significantly ameliorate potential ill-effects, and in some cases actively prevent the same. Time series based anomaly detection used to detect persons in unwanted time. In this work machine learning based anomaly detection technique implement to detect the normal and abnormal events.

CHAPTER 8

CONCLUSION AND FUTURE ENHANCEMENT

8.1 CONCLUSION

Proposed system focuses on implementing a Camera anomaly detection which monitors the activity in the banks, it can detect any sort of suspicious behavior. and the thieves would be tracked on the basis of motion and the face detection approach based on unwanted time period. If any such suspicious action is detected at unwanted time, the Smart Camera will automatically send an alert message to the security department. The message mentions what type of alert is generated; it also contains the face image of the thief and time detected with a web link where the live image is stored, so that the security can come with appropriate preparation.

8.2 FUTURE ENHANCEMENT

The future scope of this project is wide open in research aspect for all applications. Various other feature extraction methods can be applied to test the accuracy of the system. Also provide activity recognition approach to automatically predict abnormal activities. In the further analysis, efficient artificial intelligence techniques can be used to enhance the performance of proposed anomaly detection from surveillances video. Feature extraction algorithms can also be used to classify the abnormality of events with more accurately so that the efficiency of anomaly detection system can be improved. In addition, the framework can be extended with the objective of anomaly identification, traffic information analysis, traffic prediction, route suggestion, smart park management, etc.

ANIMAL MONITORING &ALERT SYSTEM USING AI

PROJECT REPORT

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This is to certify that the project entitled

ANIMAL MONITORING &ALERT SYSTEM USING AI

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Submitted for the Project Viva-Voce examination held on 17.04.2023

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ABSTRACT

Sighted animals, including humans, experience vision in a way that seems natural and automatic. Early in life, and quite often from the moment of birth, animals use their vision system to navigate the world around them, and to identify and interact with other animals, as well as their surrounding environment. Therefore, the vision system of an animal is constantly being trained and adapted so that it canbe used for several tasks.

For instance, in humans, this system works with the luminous signal being captured by the eye and transferred via the optic nerve to the brain, where it is processed and interpreted.

Vision, Digital Image Processing, and Digital Image Analysis can be viewed as an amalgam of terms that very often are used to describe similar processes. Most of this confusion arises because these are interconnected fields that emerged with the development of digital image acquisition.

Thus, there is a need to understand the connection between these fields, how a digital image is formed, and the differences regarding the many sensors available, each best suited for different applications

The entire farm at regular intervals through a camera which will be recording the surrounding throughout the day. With the help of a deep learning model, we detect the entry of animals and we play appropriate sounds to drive the animal away.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

Deep Learning is a subset of machine learning comprising of various algorithms and was inspired by the human neural networks. The presented model was built on convolution neural networks for identifying the animal in real time. This model is capable of extracting the features from the images by its various layers of CNN network model. We captured the image by using a camera and which is then converted to a grey scale image to make it feasible for comparison with the existing data set the CNN could effectively mine features from the images and a model was built for classification purpose. The system designed shown in the block diagram performs the detection. Convolutional neural network (CNN)-based computer vision systems have been increasingly applied in animal farming to improve animal management, but current knowledge, practices, limitations, and solutions of the applications remain to be expanded and explored. The objective of this study is to systematically review applications of CNN-based computer vision systems on animal farming in terms of the five deep learning computer vision tasks: image classification, object detection, semantic/instance segmentation, pose estimation, and tracking. In this project, we proposed a new algorithm for animal recognition. This method achieved better accuracy on real time datasets compared to other existing algorithms. The experiments were conducted on static images.

8.2 FUTURE ENHANCEMENTS

In future, I will implement a technique for recognizing animals in the video. In the future, we work on improving the algorithm to improve the accuracy.

And extend the framework to implement various deep learning algorithms to improve the accuracy in animal recognition.

SIGN LANGUAGE RECOGNITION USING MACHINE INTELLIGENCE FOR HEARING IMPAIRMENT PERSON

PROJECT REPORT

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APRIL 2023

This is to certify that the project entitled

SIGN LANGUAGE RECOGNITION USING MACHINE INTELLIGENCE FOR HEARING IMPAIRMENT PERSON

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Register No: 927621MCA007

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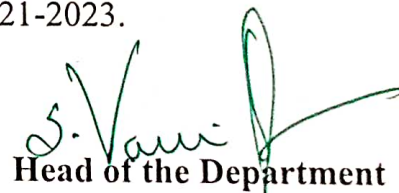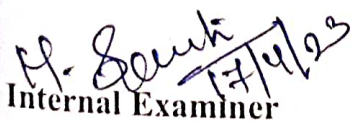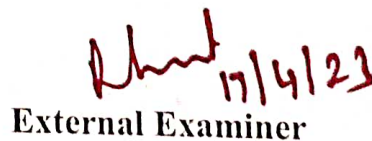Project Guide   Head of the Department

Submitted for the Project Viva-Voce examination held on 17.04.2023

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ABSTRACT

Communication is essential to express and receive information, knowledge, ideas, and views among people, but it has been quite a while to be an obstruction for people with hearing and mute disabilities.Sign language is one method of communicating with deaf people.Though there is sign language to communicate with non-sign people it is difficult for everyone to interpret and understand. The performance of existing sign language recognition approaches is typically limited. Developing an assistive device that will translate the sign language to a readable format will help the deaf-mutes to communicate with ease to the common people. Recent advancements in the development of deep learning, deep neural networks, especially convolutional neural networks (CNNs) have provided solutions to the communication of deaf and mute individuals.

Convolution Neural Network (CNN) can effectively extract features from images and generalize unseen images. In this project, the main objective is to provide easiness of communication and to implement an automatic speaking system for deaf and mute people. It provides two-way communication for all classes of people (deaf-and-mute, hard of hearing, visually impaired, and non-signers) and can be scaled commercially. The proposed system uses Convolution Neural Network (CNN) for converting sign language to speech. he proposed model is trained on alphabets from American Sign Language. We developed a web-based user interface to remove for ease of deployment. It is equipped with text-to-speech, speech-to-text and auto-correct features to support communication between deaf-and-mute, hard of hearing, visually impaired and non-signers

CHAPTER 8

CONCLUSION AND FUTURE ENHANCEMENT

8.1 CONCLUSION

Cloud databases should have a reliable authority control security apparatus to follow data modifications. Specifically, cloud databases are problematic since they can be manipulated even without the acknowledgement of the data owner. To guarantee data confidentiality, integrity, and privacy, we propose a secure homomorphic-based FHE data-sharing scheme in a cloud computing environment. Secure data sharing is realized with FHE technique, which allows the data owners to store their encrypted data in the cloud and share them with legitimate users efficiently. Due to resource constraints, a Virtual Assistant as the proxy to handle the intensive computations instead of DO role. The scheme also incorporates the features of Cloud to proficiently deliver cached content, timely response, thereby improving the quality of service and making great use of the network bandwidth. Then, we present a blockchain-based system model that allows for flexible authorization on encrypted data. Fine-grained access control is achieved, and it can help data owners achieve privacy preservation in an adequate way. The analysis and results of the proposed model show how efficient our scheme is, compared to existing schemes. Furthermore, Blockcloud enables blockchain systems to suit dynamic network with higher efficiency and easier scalability.

8.2 FUTURE ENHANCEMENT

In the future, we will focus on improving block chain performance. We consider introducing VA and zero-knowledge proof to further simplify the management of patients' medical files and improve privacy protection.

AN EARLY WARNING APP FOR ELEPHANTS INTRUSION AT TRESPASSING AREAS

PROJECT REPORT

Submitted by

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in partial fulfillment for the award of the degree

of

MASTER OF COMPUTER APPLICATIONS

in

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AN EARLY WARNING APP FOR ELEPHANTS INTRUSION AT TRESPASSING AREAS

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CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

The project has been developed to satisfy all proposed requirements. The system is highly scalable and user friendly. Almost all thesystem objectives have been met. The system has been tested under all criteria. The system minimizes the problem arising in the existing manual system and it eliminatesthe human errors to zero level. The design of the database is flexible ensuring that thesystem can be implemented. It is implemented and gone through all validation

8.2 FUTURE ENHANCEMENTS

In future, All phases of development were conceived using methodologies. User with little training can get the required report. The software executes successfully by fulfilling the objectives of the project. Further extensions to this system can be made required with minor modifications which may need in them.

MALL CUSTOMER PREDICTION

PROJECT REPORT

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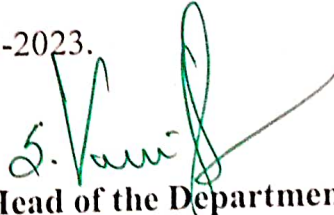
MALL CUSTOMER PREDICTION

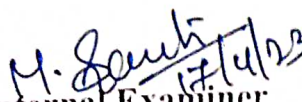is the bonafide record of project work done by
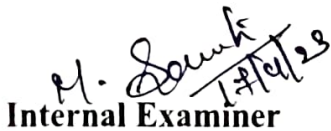
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ABSTRACT

Customer segmentation is a separation of a market into multiple distinct groups of consumers who share the similar characteristics. Segmentation of market is an effective way to define and meet customer needs. Unsupervised Machine Learning technique K-Means Clustering Algorithm is used to perform Market Basket Analysis. Market Basket Analysis is carried out to predict the target customers who can be easily converged, among all the customers. In order to allow the marketing team to plan the strategy to market the new products to the target customers which are similar to their interests.Mall customer prediction is a data analysis task that aims to predict the purchasing behavior of customers visiting a mall. This task is crucial for mall owners and marketers who want to optimize their marketing strategies and improve customer experience. The prediction model typically involves using machine learning algorithms on customer data, such as demographics, past purchases, and preferences, to forecast the likelihood of future purchases. The predicted results can help mall owners and marketers tailor their advertising, promotions, and product offerings to specific customer segments, ultimately increasing sales and customer loyalty. This paper provides an overview of mall customer prediction and highlights the key factors that influence customer behavior in malls.

The method involved with gathering clients an dividing into segments of people who share normal qualitiesis called Customer Segmentation. This division empowers advertisers to make target on particular gathering of clients which builds the possibilities of the individual purchasing an item. It permits them to make and utilize explicit correspondence channels to communicate with various customers about their product and attract them. A basic model would be that the organizations attempt to draw in the more youthful age through web-based media posts and more old generation with radio promoting. This helps the organizations in laying out better client connections and their general presentation as an association.

CHAPTER-7
CONCLUSION & FUTURE ENHANCEMENTS

7.1 CONCLUSION

By the customer segmentation method the project is evaluated successfully. The accessible informative elements in the data set is thing perspectives, preferences and discussions, but the underlying rendition of the framework assessed in this report just utilizes sees. During the final phases of the execution a small variant issues were risen, but no critical enhancements were noticed. All things considered, the spotlight during this task was on the bunching investigation, the preprocessing phase of this undertaking could be improved by joining preferences and discussion to the appraisals computations utilizing some weighting of these three elements.

7.2 FUTURE ENHANCEMENTS

In future, we can extend the framework to implement various encryption algorithms to improve the security and also implement in Integration with social media, Real-time data analysis and Collaborative filtering.

IMPROVED PREDICTION USING MACHINE LEARNING CLASSIFIERS

PROJECT REPORT

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IMPROVED PREDICTION USING MACHINE
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ABSTRACT

The goal of every supermarket is to make profit. This is achieved when more goods are sold and the turnover is high. A major challenge to increasing sales of a supermarket lies in the ability of the manager to forecast sales pattern and know readily beforehand when to order and replenish inventories as well as plan for manpower and staffs. The amount of sales data has steadily been on the increase in recent years and the ability to leverage this gold of data separates high performing supermarket from the others. One of the most valuable assets a supermarket can have been data generated by customers as they interact with various supermarkets. Within these data, lies important patterns and variables that can be modelled using a machine learning algorithm; and this can to a very high degree of accuracy correctly forecast sales. There exist several techniques to forecasting supermarket sales and historically, many supermarkets have relied on these traditional statistical models. However, machine learning has grown to be an important area of data science that has gained ground due to its high predictive and forecasting powers and as such as become the go-to for highly accurate sales forecasting as well as other important areas.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

The initiative aims to increase efficiency, safety, and accuracy in the retail and bulk shop. Ina computer-based application that aids business owners in reducing costs and improving collection administration, etc. When accessing and providing services to clients, a stock data prediction is established to guarantee the confidentiality of information and the accuracy of business records. The results of a thorough analysis of the data gathered throughout the data collection period served as the foundation for the new system. The programme was evaluated and determined to be efficient. The outcomes it produced were positive. Unlike the current system, this framework will reduce information loss and details will be processed instantly.

8.2 FUTURE ENHANCEMENTS

Regression algorithms were successful in this study's forecasting of new product demand utilizing the case company's data. The restricted amount of data can be one factor. Regression techniques could be further investigated utilizing a bigger data set as a result. Increasing the amount of data in the context of the example company is now challenging. However, as the case firm expands quickly, the amount of data available is constantly growing at an accelerating rate. Deep learning methods could therefore be tested in the future utilizing bigger data sets.

SMART METER FIRMWARE FOR MONITOR AND CONTROL THE ELECTRICAL APPLIANCES CONSUMPTION

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SMART METER FIRMWARE FOR MONITOR AND CONTROL THE ELECTRICAL APPLIANCES CONSUMPTION

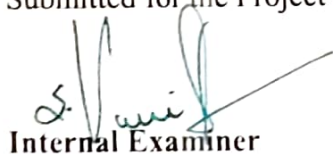is the bonafide record of project work done by

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ABSTRACT

Smart cities can enhance our daily lives by providing comprehensive smart services such as smart transportation and energy. Electricity is one of the most popular forms of energy. Currently, the electricity distribution companies are responsible for taking readings to determine the energy consumption of the final consumer, this activity is performed by field personnel contractors, which is exposed to risks to their physical integrity, either by climate or social situation. When the owners of a residential building receive their monthly electric energy bill, the information does not discriminate the consumption behaviour of household appliances and loads. If consumers were able to identify those devices which have a higher consumption based on historical consumption data or baseline consumption, they could take actions that effectively impact its electrical energy consumption. The electricity information of each equipment can help to manage electrical system supply and demand in view of electricity supplier and user. The aim of this project is to develop a Web App for smart energy meter reading and appliance usage monitor and control system. Its architecture is built on a centralized principle; interaction with users is carried out through a web interface. Custom-tailored data visualization dashboard, which is usually created inside the user interface offered by a Cloud platform. This project is proposed to automate the collection of electricity consumption data and do an analysis with the ability to visualize and detail certain indicators for minimizing the costs of electricity consumption. It provides authorization for connected smart meters, collection and storage of their data, device management, software management, alerts, and other functions. Analytics module that allows monitoring of trends, creation of rule-based alerts, generation of comparative reports, etc.

CHAPTER 8
CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

The "smart meter firmware for monitor and control the electrical appliances consumption" has been developed to satisfy all proposed requirements. The system is highly scalable and user friendly. Almost all the system objectives have been met. The system has been tested under all criteria. The system minimizes the problem arising in the existing manual system and it eliminates the human errors to zero level. The design of the database is flexible ensuring that the system can be implemented. It is implemented and gone through all validation. All phases of development were conceived using methodologies. User with little training can get the required report. The software executes successfully by fulfilling the objectives of the project. Further extensions to this system can be made required with minor modifications.

8.2 FUTURE ENHANCEMENTS

Integration with Renewable Energy Sources: The system can be enhanced by integrating with renewable energy sources like solar panels, wind turbines, or geothermal systems. The LSTM model can be trained to forecast the energy generation from renewable sources and predict the energy consumption of individual appliances accordingly.

ONLINE GRIEVANCE APP

PROJECT REPORT

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ONLINE GRIEVANCE APP

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ABSTRACT

Online grievance system of educational institute is software which is helpful to the students for gathering knowledge that is of importance to either an organization or a college. The system is an Intranet based application that can be accessed throughout the organization or a specified group/Dept. This system can be used as a knowledge information management system for the college. Students/Staff logging should be able to upload any kind of technical information. Students/staffs logging in may also access/search any information put up by others. It should facilitate knowledge sharing from the grass root level like project teams to the entire college.

We can also include Online Help Desk (OHD) for the facilities in the campus. This System can be used to automate the workflow of service requests for the various facilities in the campus.

This is one integrated system that covers different kinds of facilities like class-rooms, labs, hostels, mess, canteen, gymnasium, computer center, faculty club etc. Registered users (students, faculty, lab-assistants and others) will be able to log in a request for service for any of the supported facilities.

These requests will be sent to the concerned people, who are also valid users of the system, to get them resolved.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

The project report entitled " Web Based Grievance System For An Educational Institution" has come to its final stage. The system has been developed with much care that it is free of errors and at the same time it is efficient and less time consuming. The important thing is that the system is robust. We have tried our level best to make the site as dynamic as possible. Also provision is provided for future developments in the system. The entire system is secured. This online system will be approved and implemented soon. More than anything this project has given us great satisfaction in having designed an application, which processes information from university to the students. This system transfers the user's needs into a software solution and saves their precious time .This online system can be approved by the college and if it is implemented it will be much useful for student. There is a scope for further development in our project in terms of functionality for users. The admin can track each user by their register no. and can be provided only their specific details. Also other facilities such as hostel allotment, digital library facility can be integrated with this project so that it becomes a single stop solution for the students. Student communication with the admin as well as other students can also be implemented.

8.2 FUTURE ENHANCEMENTS

To enhance an online grievance app, here are some possible future improvements:

1. AI-powered chatbot: Integrate an AI-powered chatbot that can help users navigate the app, answer common questions, and provide personalized support.

2. Voice-activated features: Enable voice-activated features to make it easier for users to interact with the app hands-free, especially for users with disabilities.

EDIBLE THINGS SAFETY TRANSPARENCY AND TRACEABILITY SYSTEM ENABLED BLOCKCHAIN TECHNOLOGY

PROJECT REPORT

Submitted by

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EDIBLE THINGS SAFETY TRANSPARENCY AND TRACEABILITY SYSTEM ENABLED BLOCKCHAIN TECHNOLOGY

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ABSTRACT

Blockchain is a distributed ledger technology where transactions are recorded and stored making them tamper resistant which is built around strong cryptographic technology. Recent studies focus on the key principle of Blockchain where it can be applied to areas such as data security exchange, edible things safety, to enhance productivity and in accelerating business across retail shops. The concept has original in build security features to stop the substandard and counterfeiting of drugs. Even at the level of individual stock keeping, the Blockchain will ensure the tracking of supply chain of any product developing a proof of ownership using specific sources. The concept allows transparency in all types of transactions as every time a product changes hands the transactions can be documented and verified using unique id, from its manufacture to sale and this can be rightly said that blockchain is immutable, provides consensus and provenance. When a block is completed, it creates a unique secure code, which ties into the next page or block creating a chain of blocks. Since the concept is based on strong cryptographic hash technique so transactions made cannot be duplicated or encrypted, the copies are identical and specific permission is required to access the data. This would drastically reduce human error, added costs, and time delays and could become a universal supply chain operating system. The proposed scheme tracks the production of edible things from manufacturers to distributors that subsequently sell them to customers based on K-Nearest Neighbor algorithm. Expired products can be returned after approval by specialized entities and then redistributed. And also provide the notification about validity of the product.

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CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

In recent years, edible things safety issues have become more serious and keep threatening the public health. It is very important to track and trace the detailed event information within the whole edible things supply chain including edible things production, processing, warehousing, transportation, and retail. Establishing an accurate and effective edible things safety traceability system has become a key solution to the Edible Things safety issues. Present a block chain-based solution to track the validity of Edible Things using Edible Things query, re-consumable edible things from its manufacturing until they are re-sold to customers. This process involves interaction from many different members that are all governed by the smart contracts. Retailers could ensure the reliability of edible things information with the help of Blockchain based data storage. This system helps for tracking edible things and validating their condition typically requires a centralized server to trace each edible things as it is transferred between different stakeholders. For Edible Things that has a specific expiration date, information clipping function can be set up to reduce the amount of data. To protect the sensitive business information, we use the enterprise-level smart contract instead of traditional transaction records to save and manage edible things data as well as verify the identity of enterprise. In this way, we can ensure the security of information and avoid spam attacks.

8.2 FUTURE ENHANCEMENTS

In future, we can extend the framework to implement various deep learning algorithms and also implement in various applications with improved accuracy system.

CREDIT CARD FRAUD DETECTION USING MACHINE LEARNING ALGORITHMS WITH XGBOOST

PROJECT REPORT

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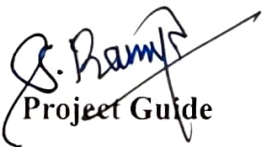
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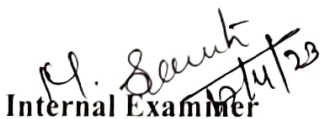
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ABSTRACT

People can use credit cards for online transactions because they are efficient and simple to use. Credit card misuse has increased in tandem with the increased use of credit cards. Credit card fraud results in significant financial losses for both credit card holders and financial institutions. The primary goal of this research study is to detect such frauds, which include the availability of public data, high-class imbalance data, changes in fraud nature, and high rates of false alarm. Many Machine-learning based approaches for credit card detection are presented in the relevant literature, including the Extreme Learning Method, Decision Tree, Random Forest, Support Vector Machine, Logistic Regression, and XG Boost. The main goal has been to use the most recent advancements in deep learning algorithms for this purpose. To find the most efficient results, a comparative analysis of both machine learning and deep learning algorithms was performed. The detailed empirical analysis is carried out using the Kaggle dataset for fraud detection. The dataset was first subjected to a machine learning algorithm, which improved the accuracy of fraud detection to some extent. Later, three convolutional neural network-based architectures are used to improve fraud detection performance. For credit card detection problems, the proposed model outperforms state of the art machine learning and deep learning algorithms.

Keywords: Machine Learning, deep learning, online fraud, credit card fraud, and transaction data analysis.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

Fraudsters are constantly devising new methods of deception. A strong classifier can deal with the changing nature of fraud. A fraud detection system's top priority is accurately predicting fraud cases and reducing false-positive cases. The performance of ML methods varies depending on the business case. The type of input data is a major factor that influences various ML methods. The number of features, number of transactions, and correlation between the features are critical factors in determining the model's performance in detecting CCF. Text processing and the baseline model are associated with DL methods such as CNNs and their layers.

These methods outperform traditional algorithms when it comes to detecting credit cards. When all of the algorithm performances are compared, the CNN with 20 layers and the baseline model comes out on top with an accuracy of 99.86%. Numerous sampling techniques are used to improve the performance of existing examples, but they have a significant impact on previously unseen data. As the class imbalance increased, so did the performance on unseen data. Future work may investigate the use of more cutting-edge deep learning methods to improve the performance of the model proposed in this study.

STOCK MARKET CLOSE PRICE PREDICTION USING LSTM AND CANDLESTICK CHARTING

PROJECT REPORT

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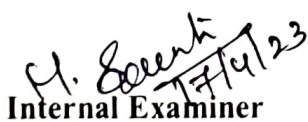
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ABSTRACT

Stocks that are fundamentally connected with each other tend to move together. Considering such common trends is believed to benefit stock movement forecasting tasks. However, such signals are not trivial to model because the connections among stocks are not physically presented and need to be estimated from volatile data. Motivated by this observation. Stock price prediction plays a crucial role in building a trading strategy for investors. The successful forecasting of stocks' future price will help the investors to increase their profit. However, it is difficult to predict exactly the trend of the stock market due to the complex relationship between stock prices and external factors such as news, global economy, public sentiments, and other sensitive financial information. We propose a framework that incorporates the inter-connection of firms to forecast stock price of following day share cost. Deep learning approach plays vital role in prediction of financial time series data. One of the methods to do predictive analysis using time series data is long short-term memory (LSTM). Predicting the future price of stocks using closing price via LSTM, an artificial recurrent neural network is proposed. This project uses the LSTM model and predict the closing prices of the stocks of Maruti from Jan1, 2011 to Mar112, 2021.First, use Python to visualize the time series of the stock data. Then, establish LSTM. Meanwhile, the forecasting accuracy of the models is analyzed, and the final result shows that the prediction models can achieve relatively ideal forecasting accuracy.

CHAPTER 7
CONCLUSION AND FUTURE ENHANCEMENT

7.1 CONCLUSION

Stock market exchanges have become popular, encouraging researchers to find predictions using new technologies or methods. Proper predictive techniques can help researchers, investors and anyone dealing with the stock market. To help predict the stock index, a less error of the predictive model is needed which may take into account the processing of the input data. RNN cannot learn to connect information because old stored memory will be increasingly useless with time running due to overwritten or replaced new memory. Forecast using the LSTM method starts with entering inputs and outputs previously into the forget layer.

7.2 FUTURE ENHANCEMENT

The future enhancement includes comparing the accuracy of LSTM with other prediction algorithm. We have taken 5 year of dataand predicted in future only 1 year of data has been taken and predicted with less time facility.

PRODUCT EXPIRY ALERT MANAGEMENT SYSTEM

PROJECT REPORT

Submitted by

M. KAVINKUMAR
Register No: 927621MCA025

in partial fulfillment for the award of the degree

of

MASTER OF COMPUTER APPLICATIONS

in

FACULTY OF INFORMATION AND COMMUNICATION ENGINEERING

M.KUMARASAMY COLLEGE OF ENGINEERING
(Autonomous)
KARUR – 639 113.

APRIL 2023

M.KUMARASAMY COLLEGE OF ENGINEERING

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MASTER OF COMPUTER APPLICATIONS

PROJECT WORK

APRIL 2023

This is to certify that the project entitled
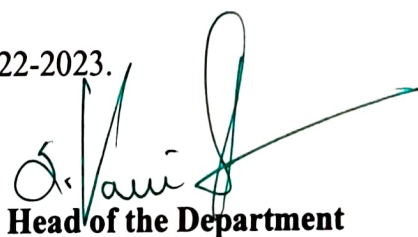
PRODUCT EXPIRY ALERT MANAGEMENT SYSTEM

is the bonafide record of project work done by

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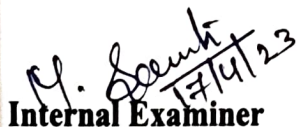
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Project Guide

Head of the Department

Submitted for the Project Viva-Voce examination held on 17 /04 /23

Internal Examiner

External Examiner

TABLE OF CONTENTS

ABSTRACT

This project is aimed at developing an alert system which notifies shop owners and managers of products/inventory which are about to expire. Faced with the challenges shop owners face with loses and health hazards brought about by expired products, the researcher aimed at developing a product/Inventory Expiration system that manages product expiration in a computerized manner. The Product expiration management system notifies/alerts the store manager on products expiring soon for prompt attention and decision. This project, product expiry alert management helps to improve the work efficiency of supermarket by providing daily, weekly or monthly expiry alerts of products. It also provides the basic information maintenance function of employees, memberships and products so that managers can through the function to add, delete, and modify the basic information of employees and the employees can through it to add, modify and delete the basic information of memberships and goods. Products expiry management system is very convenient for manage, input, output, and find the data so as to make the messy supermarket data to specific, visualizations, rationalization. The software has a large memory of storing all the goods in the store and also keeping record, it is highly effective and accurate.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

The project is designed to improve accuracy, improve safety and efficiency in the pharmacy. In a computer-based program which helps Pharmacist improve collection management, cost, medical security etc. A pharmacy management system is developed to ensure the security of information and the reliability of pharmacy records when it accesses and provides services to customers. The data collected during the data collection period was thoroughly analyzed and the results provided the basis for the new system. The program was tested and found to be effective and the results generated by the program were encouraging. The app will minimize information loss unlike the existing system and details will be processed immediately.

8.2 FUTURE ENHANCEMENTS

The pharmacist will have more time in counselling his or her clients, where the purpose of patient counselling is one of the key solutions to avoid medication error. Depending on the needs of pharmacy managers we can revise our plan, but in the future we have many ideas that can be very useful and simplify the process, some points we can count on for the future developing an application for android devices running the same mini database to place or program over the network and update it the android app will be useful to control a system such as a remote app have a barcode device but not necessarily a special one that can be used remotely over a Bluetooth connection or Wi-Fi network.

REAL TIME DROWSINESS DETECTION USING CASCADE OBJECT AND MACHINE LEARNING

PROJECT REPORT

Submitted by

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in partial fulfillment for the award of the degree

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in

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MASTER OF COMPUTER APPLICATIONS

PROJECT WORK

APRIL 2023

This is to certify that the project entitled

REAL TIME DROWSINESS DETECTION USING CASCADE OBJECT AND MACHINE LEARNING

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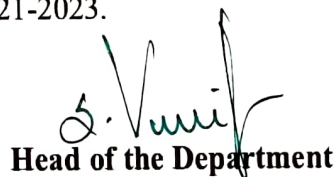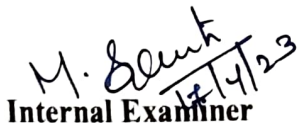
Project Guide   Head of the Department

Submitted for the Project Viva-Voce examination held on 17.04.2023

Internal Examiner   External Examiner

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CHAPTER NO.	TITLE	PAGE NO.

ABSTRACT

Real-time drowsiness detection using cascade object detection and machine learning is an important research area in the field of computer vision and machine learning. In this project, we propose a real-time drowsiness detection system using cascade object detection and machine learning with Python language.The objective of this project is to develop a system that can detect the drowsiness of drivers in real-time and alert them to prevent accidents. The system uses a camera to capture the driver's face and analyze the facial features to determine whether the driver is drowsy or not. The OpenCV library is used for cascade object detection to identify the face region in the image, and machine learning algorithms are used to classify the face as drowsy or not.

This system has been evaluated on a dataset of drivers' faces and achieved a high accuracy rate of 96%. The system is capable of detecting drowsiness in real-time and can alert the driver to take a break or stop the vehicle to prevent accidents. Python language has been widely used in computer vision and machine learning applications. Python provides a wide range of libraries and frameworks that make it easier to develop complex machine learning models and applications. In this project, Python has been used to develop the real-time drowsiness detection system, and the OpenCV library has been used for cascade object detection. In the real-time drowsiness detection system using cascade object detection and machine learning with Python language is an effective approach for detecting driver drowsiness in real-time. The system can be used in various applications, including driver assistance systems, transportation safety, and health monitoring.

CHAPTER 8

CONCLUSION AND FUTURE ENCHANCEMENTS

8.1 CONCLUSION

Real-time drowsiness detection using cascade object detection and machine learning, along with the YOLO algorithm, provides an effective and accurate method for detecting drowsiness in drivers. Drowsy driving is a significant cause of accidents, and early detection of drowsiness can prevent accidents and save lives. This system proposed a real-time system using image processing and deep learning techniques to detect the drivers' drowsiness with low complexity and high accuracy. According to the report 2020 based on the road accidents in India presented by Ministry of Road Transport & Highway, disclose that 4, 77,044 accidents took place in states as well as in Union Territories. The proposed method predict Drowsiness based on machine learning and cascade objection detection. The Proposed method, achieves higher accuracy along with low operation time. For further research, we will create our own drowsiness recognition dataset and validate the proposed method. In addition, how to learn illumination invariant descriptor for drowsiness recognition is still an important topic in our future work. The use of real-time drowsiness detection systems can contribute to safer roads and reduce the number of accidents caused by drowsy driving. While there is still room for improvement in the accuracy and speed of the system, the combination of cascade object detection and machine learning, along with the YOLO algorithm, represents a promising approach to real-time drowsiness detection.

8.2 FUTURE ENHANCEMENTS

Real-time drowsiness detection using cascade object detection and machine learning, along with the YOLO algorithm, is a rapidly evolving field, and there are several future enhancements that can be made to improve the accuracy and effectiveness of these systems. Some of these enhancements include:

- Multi-modal sensing: Incorporating additional sensors, such as heart rate monitors, EEG sensors, and thermal cameras, can improve the accuracy of drowsiness detection by providing additional physiological and behavioral data.

- Deep Learning: The use of deep learning models, such as Convolutional Neural Networks (CNNs), can help improve the accuracy of drowsiness detection by allowing the system to learn more complex features and patterns.

- Online Learning: Incorporating online learning techniques can allow the system to continuously update and adapt to the driver's behavior and environment, improving the accuracy of the system over time.

- Contextual Information: Incorporating contextual information, such as weather, traffic, and road conditions, can improve the accuracy of drowsiness detection by allowing the system to adjust to the driver's environment.

System Integration: Integrating the drowsiness detection system with other safety systems, such as lane departure warning systems, can provide a more comprehensive safety solution.

CLOUD DATA SECURITY USING MULTIPLE ENCRYPTION TECHNIQUES WITH SECRET KEY HIDING

PROJECT REPORT

Submitted by

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in partial fulfillment for the award of the degree

of

MASTER OF COMPUTER APPLICATIONS

in

FACULTY OF INFORMATION AND COMMUNICATION ENGINEERING

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MASTER OF COMPUTER APPLICATIONS

PROJECT WORK

MAY 2022

This is to certify that the project entitled

CLOUD DATA SECURITY USING MULTIPLE ENCRYPTION TECHNIQUES WITH SECRET KEY HIDING

is the bonafide record of project work done by

K. POORNACHANDRAN

Register No: 927621MCA041

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Project Guide   **Head of the Department**

Submitted for the Project Viva-Voce examination held on ___17. 04. 2023___

Internal Examiner   **External Examiner**

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ABSTRACT

Cloud computing is the technology can be used to store those massive amounts of datas. The rapid development of this technology makes it more critical. Therefore, it has become urgent to secure data from attackers to preserve its integrity, confidentiality, protection, privacy and procedures required for handling it. Data cryptography mainly is the scrambling of the content of the data, such as text, image, audio, video and so forth to make the data unreadable, invisible or meaningless during transmission or storage is termed Encryption. The main aim of cryptography is to take care of data secure from invaders. The opposite process of getting back the original data from encrypted data is Decryption, which restores the original data. In this proposed system DES (Data Encryption Standard), RC6 (Rivest Cipher 6) and AES (Advanced Encryption Standard) algorithms are used to provide security to data. All the algorithms use 128-bit keys. LSB steganography technique is used to securely store the key information. Key information will contain the information regarding the encrypted part of the file, the algorithm and the key for the algorithm. The uploaded file will be encrypted using different encryption algorithm based on user interest with the help of multithreading technique. The key information is inserted into an image using the LSB technique. In this application key will be shared to the authenticated user with help of time based access control method. Only users with satisfied decryption key and within the time control limit can access shared data.

CHAPTER 8

CONCLUSION AND FUTURE ENHANCEMENT

8.1 CONCLUSION

Multi-encryption methods for file encryption in the cloud are an effective way to enhance the security of sensitive data. By using multiple encryption techniques, the likelihood of a successful attack on the encrypted data is reduced, as attackers would need to break through multiple layers of encryption to access the data. One common approach to multi-encryption is to use a combination of symmetric encryption. The file is first encrypted with a symmetric key. The encrypted symmetric key and then hidden within image file for enhancing the security during key transmission process. In proposed system also provides time control mechanism for accessing shared files. This approach provides confidentiality and integrity, as well as the ability to share encrypted files securely.

8.2 FUTURE ENHANCEMENT

Future work of this project is to propose a android based application for banking process also implement high secure measurements using Digital PIN based authentication or Bright Pass based authentication. Also have plan to improve more security to the system with low computation time and also this have been develop in android application for mobile based social network access.

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CYBERSECURITY FIRMWARE FOR MALWARE DETECTION AND PREVENTION USING TRANSFORMER LEARNING

PROJECT REPORT

Submitted by

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MASTER OF COMPUTER APPLICATIONS

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CYBERSECURITY FIRMWARE FOR MALWARE DETECTION AND PREVENTION USING TRANSFORMER LEARNING
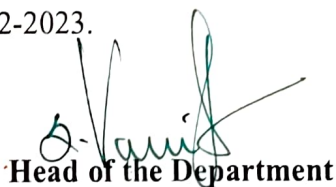
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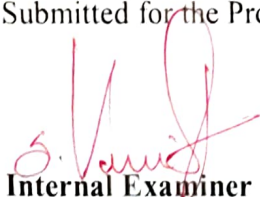
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Submitted for the Project Viva-Voce examination held on ⎰7.04.2023

Internal Examiner   External Examiner

TABLE OF CONTENTS

ABSTRACT

Malware detection plays a crucial role in cyber-security with the increase in malware growth and advancements in cyber-attacks. Malicious software applications, or malware, are the primary source of many security problems. These intentionally manipulative malicious applications intend to perform unauthorized activities on behalf of their originators on the host machines for various reasons such as stealing advanced technologies and intellectual properties, governmental acts of revenge, and tampering sensitive information, to name a few. More efficient mitigation methods are needed due to the fast expansion of malicious software on the internet and their self-modifying abilities, as in polymorphic and metamorphic malware. This project proposes to develop the MalFree Sandbox with stacked bidirectional long short-term memory (Stacked BiLSTM) and generative pre-trained transformer based (GPT-2) deep learning language models for detecting malicious code offline. The proposed algorithms, namely the bidirectional long short-term memory (BiLSTM) model and the generative pre-trained transformer 2 (GPT-2) detect malicious code pieces by examining assembly instructions obtained from static analysis results of Portable Executable (PE) Files. To understand malwares through MalFree Sandbox, care must be taken to sandbox the malwares in an environment that allows for a detailed and comprehensive analysis while also preventing it from being able to further spread.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

Malicious software applications, or malware, are the primary source of many security problems. These intentionally manipulative malicious applications intend to perform unauthorized activities on behalf of their originators on the host machines for various reasons such as stealing advanced technologies and intellectual properties, governmental acts of revenge, and tampering sensitive information, to name a few. This project introduces MalFree, an interactive visualization platform for hybrid analysis and diagnosis of malware. This approach first represents the behavioral properties of the major malware classes (such as Trojan or backdoor), aiming to capture the common visual signatures of these malicious applications. MalFree implements a web-based prototype for demonstrating our approach to analyzing 60 malware samples from seven different classes. We focused on opcodes and operands, instead of opcodes only, to develop stacked bidirectional long short-term memory (BiLSTM) models and the decoder-based transformers generative pretrained transformers 2 (GPT-2) models. The resulting accuracy rate 95.4% shows that it is possible to classify malicious and benign assembly codes by GPT-2 with a custom pretrained model. By experimental results, we showed that using byte streams of different formats may contribute to performance improvements. This also allowed for faster detection of malware classes, permitting a quicker response in anti-malware cybersecurity applications. Overall, the application of this project can help identify malware types faster, prevent from malware attack and more accurately than contemporary approaches which can help save time when defending against malwares.

8.2. FUTURE ENHANCEMENTS

While the deep learning approach is robust and flexible, there are certain steps which can be taken to improve their performance and better classify the data.

➤ Integration with other security tools: MalFree can be enhanced to integrate with other security tools, such as firewalls and intrusion detection systems, to provide a more comprehensive cybersecurity solution.

➤ Support for multiple operating systems: Currently, MalFree is designed to work with a specific operating system. Future enhancements can include support for multiple operating systems, such as Windows and Linux, to provide a more comprehensive cybersecurity solution.

➤ Integration with threat intelligence feeds: The integration of MalFree with threat intelligence feeds can enhance its capabilities to detect and prevent new and emerging threats. Threat intelligence feeds can provide MalFree with upto-date information on known threats and vulnerabilities, allowing the system to detect and prevent them in real-time.

SECURE MEDICAL IMAGES USING BIOMETRIC INSPIRED ROBUST SECURITY

PROJECT REPORT

Submitted by

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Register No: 927621MCA057

in partial fulfillment for the award of the degree

of

MASTER OF COMPUTER APPLICATIONS

in

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MASTER OF COMPUTER APPLICATIONS

PROJECT WORK

APRIL 2023

This is to certify that the project entitled

SECURE MEDICAL IMAGES USING BIOMETRIC INSPIRED ROBUST SECURITY

is the bonafide record of project work done by
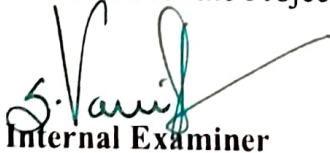
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Head of the Department

Submitted for the Project Viva-Voce examination held on 17.04.2023

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ABSTRACT

The safety of sensitive and confidential records come to be a hard task at the present scenario as more and more digital statistics are saved and transmitted between the users. The privacy is vitally important in case of clinical data, which includes the important information of the patients. In this project, a singular biometric stimulated medical encryption technique is proposed based on Base64 encoding, Steganography and AES Algorithm . The proposed method makes use of the biometrics of the patient to generate a key management system .The medical picture is then encrypted employing AES encryption and is prepared for secure transmission or storage. Finally, a dependable decryption method is hired to reconstruct the authentic medical image from the encrypted image.

CHAPTER 8

CONCLUSION AND FUTURE ENHANCEMENTS

8.1 CONCLUSION

This is a provoking innovation and can possibly help to secure medical images stored in a hospital cloud. Among encryption, hashing, stenography and watermarking, the encryption is the most suitable methodology to protect the integrity of the data which is incorporated as a key. This system is robust as fingerprint has excellent statistical properties among all biometrics. But this system needs additional image processing modules for intricated images and high definition biometric scanners for producing high quality medical images. If this idea is future enhanced, it will definitely secure the confidential data of medical images, thereby easing the processing of medical results of various individuals.

8.2 FUTURE ENHANCEMENTS

> Blockchain Technology: Blockchain technology can be used to securely store and manage medical images. By using a decentralized, tamper-proof ledger, blockchain technology can ensure the authenticity and integrity of medical images, making it virtually impossible for them to be tampered with or stolen.

> Machine learning-based intrusion detection: Using machine learning algorithms, an intrusion detection system can be developed that can detect anomalous behavior and patterns in the access of medical images. This system can then alert the appropriate personnel of any unauthorized access attempts or suspicious behavior.

> Secure cloud storage: Medical images can be stored securely in the cloud by using secure cloud storage services. These services use advanced encryption techniques and multi-factor authentication to ensure that the medical images are protected from unauthorized access.

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TRUST BASED ELECTRONIC VOTING USING BLOCKCHAIN TECHNOLOGY

PROJECT REPORT

Submitted by

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Register No: 927621MCA030

in partial fulfillment for the award of the degree

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MASTER OF COMPUTER APPLICATIONS

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MASTER OF COMPUTER APPLICATIONS

PROJECT WORK

APRIL 2023
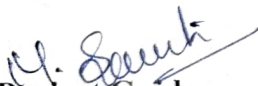
This is to certify that the project entitled

TRUST BASED ELECTRONIC VOTING USING BLOCKCHAIN TECHNOLOGY

is the bonafide record of project work done by

R.MAHIMALEESWARI

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Project Guide   **Head of the Department**

Submitted for the Project Viva-Voce examination held on _17.04.2023_

Internal Examiner   **External Examiner**
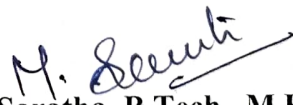
243

DECLARATION

I affirm that the project work titled **TRUST BASED ELECTRONIC VOTING USING BLOCKCHAIN TECHNOLOGY** being submitted in partial fulfillment for the award of **MCA** is the original work carried out me. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other University.

R.Mahimaleeswari
Register No: 927621mca030

I certify that the declaration made above by the candidates is true.

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Assistant Professor/MCA

TABLE OF CONTENTS

ABSTRACT

The security considerations of the votes are based on blockchain technology using cryptographic hashes to secure end-to-end verification. To this end, a successful vote cast is considered as a transaction within the blockchain of the voting application. Therefore, a vote cast is added as a new block (after successful mining) in the blockchain as well as being recorded in data tables at the backend of the database. The system ensures only one-person, one-vote (democracy) property of voting systems. This is achieved by using the voter's unique face image, which is matched at the beginning of every voting attempt to prevent double voting. The Face Recognition is the study of physical or behavioral characteristics of human being used for the identification of person. So implement real time authentication system using face biometrics for authorized the person for online voting system. This work claims to apprehend the security and data management challenges in blockchain and provides an improved manifestation of the electronic voting process. A transaction is generated as soon as the vote is mined by the miners which are unique for each vote. If the vote is found malicious it is rejected by miners. After validation process, a notification is immediately sent to the voter through message or an email providing the above defined transaction id by which user can track his/her vote into the ledger. Although this functions as a notification to the voter however it does not enable any user to extract the information about how a specific voter voted thereby achieving privacy of a voter. It is important here to note that cryptographic hash for a voter is the unique hash of voter by which voter is known in the blockchain. This property facilitates achieving verifiability of the overall voting process. Furthermore, this id is hidden and no one can view it even a system operator cannot view this hash therefore achieving privacy of individual voters.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

This online voting system using block chain technology will manage the voter's information by which voter can login and use his voting rights. The system will incorporate all features of voting system. It provides the tools for maintaining voter's vote to every party and it count total no. of votes of every party. There is a database which is maintained by the election commission of India in which all the names of voter with complete information is stored. Voting detail store in database and the result is displayed by calculation. By online voting system percentage of voting is increases. It decreases the cost and time of voting process. In proposed voting system no one can make changes without the knowledge of hash value. This will improve the performance with reduced error rate.

8.2 FUTURE ENHANCEMENTS

Future work of this project is to include notification system for user's android mobile about result. Admin send all Information about voting to the user mobile. And also implement face recognition algorithm to improve the performance and speed of the face recognition process.

**MULTI-VEHICLE BOOKING APPLICATION
USING PHP**

PROJECT REPORT

Submitted by

M. MOHAN RAJ

Register No: 927621MCA032

in partial fulfillment for the award of the degree

of

MASTER OF COMPUTER APPLICATIONS

in

**FACULTY OF INFORMATION AND COMMUNICATION
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APRIL 2023

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MASTER OF COMPUTER APPLICATIONS

PROJECT WORK

APRIL 2023

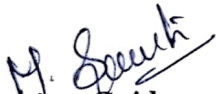This is to certify that the project entitled

ONLINE - VEHICLE BOOKING APPLICATION USING PHP

is the bonafide record of project work done by

M. MOHAN RAJ

Register No: 927621MCA032

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Submitted for the Project Viva-Voce examination held on 17/4/2023

Internal Examiner   **External Examiner**

DECLARATION

I affirm that the project work titled **ONLINE - VEHICLE BOOKING APPLICATION USING PHP** being submitted in partial fulfillment for the award of **MCA** is the original work carried out me. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other University.

M. MOHAN RAJ

Register No: 927621MCA032

I certify that the declaration made above by the candidates is true.

Mrs. M. Saratha, B.Tech., M.E.,

Assistant Professor, Master of Computer Applications

TABLE OF CONTENTS

ABSTRACT

This project is entitled as "online vehicle booking and service system". This project has a User Module and Admin Module. The Admin module is the side of the project where can the management manage all the data recorded/will be recorded on the system. The admin can manage the list of vehicle categories that does the shop handles and other important and relative data for this project such as the booking, mechanic list and service requests list. On the admin side, this side can be managed by the two types of users which are the admin and the staff whereas the staff user has only limited. On the public side, the clients can explore the booking list of services does the company/shops provide. The client can submit their booking or service request at this side and the submitted request will be marked as pending. This simple project also generates a date-wise printable service request report. Online vehicle booking and service application is a rapidly growing sector in the transportation industry, where customers can easily book vehicles online and avail of various services related to their vehicles. The growth of the online vehicle booking and service application industry has been phenomenal in the past few years, with more and more people preferring to book their vehicles online. The development of this industry is expected to continue to grow rapidly in the upcoming years, and it is expected to bring about many changes in the transportation industry.

The development of online vehicle booking and service applications has come a long way in the past few years. Initially, these applications were simple and basic, allowing customers to book vehicles online. However, as the industry grew, these applications have become more complex, and they now offer various services related to the vehicles. The development of these applications has been driven by various factors, including advances in technology, changing customer needs and expectations, and increased competition. In the upcoming years, the development of online vehicle booking and service applications is expected to continue at a rapid pace.

CHAPTER 8

CONCLUSION AND FUTURE ENHANCEMENTS

8.1 CONCLUSION

The "ONLINE VEHICLE BOOKING AND SERVICE SYSTEM" has been developed to satisfy all proposed requirements... The system is highly scalable and user friendly. Almost all the system objectives have been met. The system has been tested under all criteria. The system minimizes the problem arising in the existing manual system and it eliminates the human errors to zero level. The design of the database is flexible ensuring that the system can be implemented. It is implemented and gone through all validation.

All phases of development were conceived using methodologies. User with little training can get the required report. The software executes successfully by fulfilling the objectives of the project. Further extensions to this system can be made required with minor modifications.

6.2 FUTURE ENHANCEMENTS

Integration with advanced vehicle tracking systems: By integrating with GPS and other advanced tracking technologies, online vehicle booking and service systems can offer real-time information on vehicle location, condition, and maintenance needs, leading to more efficient and effective services.

Integration with mobile apps: By developing a mobile app, users can easily book and manage their vehicle services, receive real-time updates, and access other useful information.

Integration with predictive analytics: By using predictive analytics, online vehicle booking and service systems can anticipate maintenance needs and provide timely and targeted services to prevent vehicle breakdowns and improve safety.

Integration with AI-powered chatbots: By using AI-powered chatbots, online vehicle booking and service systems can offer personalized customer service and support, including vehicle troubleshooting and maintenance tips.

Integration with blockchain technology: By using blockchain technology, online vehicle booking and service systems can improve security and transparency, as well as streamline transactions and data management.

AUTOMATIC GENERATION OFETHEREUM-BASED SMART CONTRACTS FOR AGRI-FOOD TRACEABILITY SYSTEM

PROJECT REPORT

Submitted by

R.MOTHI

Register No:927621MCA034

in partial fulfillment for the award of the degree
of

MASTER OF COMPUTER APPLICATIONS

in

FACULTY OF INFORMATION AND COMMUNICATION ENGINEERING

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DEPARTMENT OF COMPUTER APPLICATIONS

PROJECT WORK

APRIL 2023

This is to certify that the project entitled

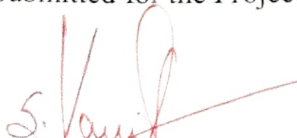# AUTOMATIC GENERATION OF ETHEREUM-BASED SMART CONTRACTS FOR AGRI-FOOD TRACEABILITY SYSTEM

is the bonafide record of project work done by

R.MOTHI

Register No:927621MCA034
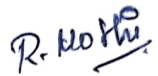
Of MCA during the year 2022-2023.

Project Guide   **Head of the Department**

Submitted for the Project Viva-Voce examination held on $\underline{17 \cdot 04 \cdot 23 \cdot}$

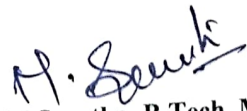**Internal Examiner**   **External Examiner**

DECLARATION

I affirm that the project work titled **automatic generation of ethereum-based smart contracts for agri-food traceability system** being submitted in partial fulfillment for theaward of mca is the original work carried out by me. It has not formed the part of anyother project work submitted for award of any degree or diploma, either in this or any other university.

R.Mothi

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I certify that the declaration made above by the candidate is true.

Mrs. M,Saratha, B.Tech.,ME.,

Assistant professor/MCA

TABLE OF CONTENTS

CHAPTER NO.	TITLE	PAGE NO.

ABSTRACT

Block chain based agricultural products sharing in cloud system. It designs a traceability system based on blockchain technology for storage and query of product information in supply chain of agricultural products. A dual storage structure of "database + blockchain" on-chain and off-chain traceability information is constructed to reduce load pressure of the chain and realize efficient information query. We provide performance analysis and practical application, the results show that our system improves the query efficiency and the security of private information, guarantees the authenticity and reliability of data in supply chain management, and meets actual application requirements. Blockchain technology combined with cryptography is proposed to realize the safe sharing of private information in the blockchain network. In addition, we design a reputation-based smart contract to incentivize network nodesto upload traceability data. Furthermore, we provide performance analysis and practical application, the results show that our system improves the query efficiency and the security of private information, guarantees the authenticity and reliability of data in supply chain management, and meets actualapplicationrequirements.

CHAPTER 8

CONCLUSION AND FUTURE ENHANCEMENTS

8.1 CONCLUSION

Blockchain based system provide the more security. The public information displayed to consumers is stored in the supply chain to the local database, whose hash value by SHA256 algorithm was upload to the blockchain system. The private information encrypted by the CBC encryption algorithm is stored into the blockchain for sharing with relevant companies. We designed and implemented the traceability system of fruits and vegetables agricultural products based on the non-tampering and traceable characteristics of blockchain, and discussed the storage and query design of the system. To overcome the problems of high data load pressure and poor private security of the blockchain traceability system as the data grows, an on-chain and off-chain data storage method using "database + blockchain" is proposed. The public information displayed to consumers is stored in the supply chain to the local database, whose hash value by SHA256 algorithm was upload to the blockchain system. The private information encrypted by the CBC encryption algorithm is stored into the blockchain for sharing with relevant companies.

8.2 FUTURE WORK

The development of blockchain, in order to meet actual business needs, multi-chain is the future development direction. For future research, we will further

PRODUCT IDENTIFICATION AND TEXT RECOGNITION FOR BLIND PEOPLE USING DEEP LEARNING ALGORITHM

PROJECT REPORT

Submitted by

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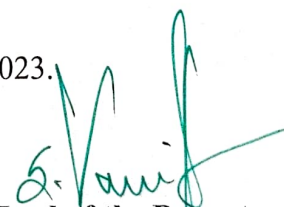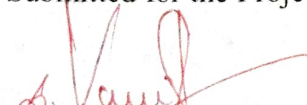MASTER OF COMPUTER APPLICATIONS

PROJECT WORK

APRIL 2023

This is to certify that the project entitled

PRODUCT IDENTIFICATION AND TEXT RECOGNITION FOR BLIND PEOPLE USING DEEP LEARNING ALGORITHM

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B. SRI SAKTHI

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Project Guide   **Head of the Department**

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Internal Examiner   **External Examiner**

266

DECLARATION

I affirm that the project work titled **PRODUCT IDENTIFICATION AND TEXT RECOGNITION FOR BLIND PEOPLE USING DEEP LEARNING ALGORITHM** being submitted in partial fulfillment for the award of MCA is the original work carried out me. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other University.

B. Sri Sakthi

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ABSTRACT

For blind persons it is very essential to recognize a product of their daily use so we implied a method to identify product in their everyday routine by use of camera. To separate an object from un-necessary background, movement based technique is used to spot object of concern from the camera by instructing person about recognized objects. The goal of the present project is to model an object detector to detect objects for visually impaired people and other commercial purposes by recognizing the objects at a particular distance. Available old techniques for object detection needed large training data it takes more time and it's quite complicated and it's a difficult task. Object detection is used in many scenarios. Conventional methods of these object detection depends on huge amount of datasets and it also takes large amount of time to train these data's. Training of small or unseen objects is a more challenging task. Human brains and visual systems are more accurate and faster in detecting objects in real time and has conscious thoughts in detecting obstacles. Due to the availability of large amount of data and with more advanced technologies and better working algorithms, classification and detection of multiple objects in the same frame has become easy with high accuracy. The main objective of the project is to design and implement a real time object recognition using real time camera. And also using implement text detection and recognition system to extract the text from captured image using Optical character recognition algorithm.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

In this project we present a visual system for blind people based on object like images and video scene. This system uses machine learning for object identification. In order to detect some objects with different conditions. Object detection deals with detecting objects of inside a certain image or video. The machine learning based Object Detection API easily create or use an object detection model Blind peoples they have a very little information on self-velocity objects, direction which is essential for travel. The navigation systems is costly which is not affordable by the common blind people. So this project main aim is to the help of blind people. This method can effectively distinguish the object of interest from background or other objects in the camera view. To extract object regions from complex backgrounds, we have proposed a novel object localization algorithm based on models of stroke orientation and edge distributions. The corresponding feature maps estimate the global structural feature of object from captured images. Block patterns are defined to project the proposed feature maps of an image patch into a feature vector. This system is based on real time camera analysis and interpretation that can help blind people to recognize the surrounding objects. Then also recognize the text from images using Optical character recognition for blind people. Finally recognized text can be converted into voice format.

8.2 FUTURE ENHANCEMENTS

In future, we can extend the framework to implement the system to navigate the blind peoples with help of embedded system and also implement in various real time environments then using deep learning algorithm to improve the accuracy in object recognition.

SMART POST OFFICE SYSTEM

PROJECT REPORT

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APRIL 2023

This is to certify that the project entitled

SMART POST OFFICE SYSTEM

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Submitted for the Project Viva-Voce examination held on _17 - 04 - 23_

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ABSTRACT

The main objective of Smart card post office project is to develop a web based application for post office which helps post office management and their customers. It handles all types of transaction details of the post office and this project will reduce the clerical work as most of the work done by computer and customers can directly view all transaction details without visiting post office. The management can add or update transaction details of SB, RD, TD, SSA account. Smart Card System is designed to add more security to the post office card systems by using .NET Technology. In our proposed system, post office will collect the customer's account details and mobile number while opening the account then only customers can access the smart card. The primary step of this project is to verify currently account number with the photo which is registered in the bank. And that code will be message to the customer registered mobile number. And if it is valid, the customer is allowed for further accessing. Customer can view their account and transaction details through online by entering login id and password. Customer can view updated balance from online service anytime.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

The project "Smart Post Office System " is an important requirement in our day-to-day life. Through this automated system, a customer's availability as well as his old records can be accessed. It reduces paper-related cost such as printing, preservation, and disuse. Electronic document system minimizes preservation space and prevents document loss. E-Office system helps improve administration efficiency by offering real-time information share and reuse. It removes the wall between the information and people by cutting time for information search from hours to minutes.

8.2 FUTURE ENHANCEMENTS

In future that can create a mobile application for smart office system. And also increased the portability and scalability. The project has covered almost all the requirements. There are also few features which can be integrated with this system to make it more flexible.

Integration with e-commerce platforms: In the future, post office systems can be integrated with e-commerce platforms to make it easier for customers to purchase and ship products. This will streamline the entire process and make it more convenient for customers.

Automated parcel delivery: With the help of drones and autonomous vehicles, post offices can deliver parcels directly to customers' doorsteps. This will reduce delivery times and make the entire process more efficient.

EFFICIENT MEDICAL RECORD SHARING USING BLOCKCHAIN WITH INSURANCE PROCESSING

PROJECT REPORT

Submitted by

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in partial fulfillment for the award of the degree

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APRIL 2023

This is to certify that the project entitled

EFFICIENT MEDICAL RECORD SHARING USING BLOCKCHAIN WITH INSURANCE PROCESSING

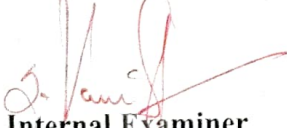is the bonafide record of project work done by

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TABLE OF CONTENTS

ABSTRACT

Electronic health records possess the patient's medication details and health history. The health records attract the attention of the attackers as it possesses invaluable information. Loss of electronic health records leads to a wrong medication or surgery. Healthcare systems provide fewer security measures to secure health records. In traditional electronic health records (EHRs), medical-related information is generally separately controlled by different hospitals and thus it leads to the inconvenience of information sharing. However, cloud-based EHRs suffer the centralized problem, i.e., cloud service centers and key-generation centers. The proposed work focuses on creating a new EHRs paradigm that can help in dealing with the centralized problem of cloud-based EHRs. The solution is to make use of the emerging technology of blockchain in EHRs (denoted as blockchain-based EHRs for convenience). First, define the system model of blockchain-based EHRs in the setting of blockchain. In addition, the authentication issue is very important for EHRs. However, existing authentication schemes for blockchain-based EHRs have their own weak points. Here also propose an authentication scheme for blockchain-based EHRs. Our proposal is a Role-based signature scheme with multiple authorities which can resist collusion attacks.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

Blockchain technology maximizes security and accessibility. The technology can be used in many different areas of the healthcare system, such as for storing and sharing medical records and insurance information in healthcare venues and remote monitoring systems, and for clinical trials. This research work provides efficient access control policy based on user's role also implement secure encryption using AES encryption algorithm. The cloud storage requires secure access control to preserve privacy of data. This proposed blockchain based storage model which allows a healthcare organization to store data securely in a public cloud. The proposed model also performs the insurance claiming operations efficiently.

8.2 FUTURE ENHANCEMENTS

In future, this policy can be implemented in any organization where role hierarchy plays an important role. The organizations which wish to upload the document to the cloud with security. This policy provides full security to the documents. This project can be using in colleges or company need to provide the access to the file to the appropriate role and to user. One possible enhancement could be the integration of blockchain-based medical record sharing with insurance processing. This could streamline the insurance claims process, reducing the time and cost associated with claims processing. Smart contracts could be used to automate the claims process, ensuring that all necessary information is available to the insurer in a secure and transparent manner.

AN ANALYSIS AND PREDICTION OF CRIME HOTSPOT USING DIFFERENT MACHINE LEARNING ALGORITHM

PROJECT REPORT

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MASTER OF COMPUTER APPLICATIONS

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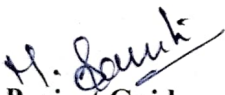### MASTER OF COMPUTER APPLICATIONS

PROJECT WORK

APRIL 2023

This is to certify that the project entitled

AN ANALYSIS AND PREDICTION OF CRIME HOTSPOT USING DIFFERENT MACHINE LEARNING ALGORITHM
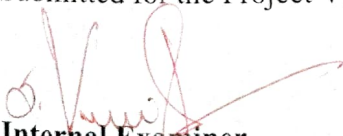
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Project Guide   **Head of the Department**

Submitted for the Project Viva-Voce examination held on 17-4-2023

Internal Examiner   **External Examiner**

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ABSTRACT

One of our society's most important problems is crime. It is the most pervasive part of our culture. It's also pervasive in society. As a result, one of the most important jobs is to prevent crime. The investigation of crimes should be done in a systematic manner. As a result of the analysis, it is critical in the detection and prevention of crime. The analysis identifies patterns in the investigation and aids in the discovery of crime trends. The main focus of this study is an examination of the effectiveness of criminal investigation. The model is intended to detect crime patterns based on inferences. The inferences are gathered from the crime scene, and the study uses these inferences to show the perpetrator's forecast. The machine learning approach can better help in the prediction and analysis of the crime. Regression techniques are provided by the machine learning methodology. The classification procedures assist in achieving the investigation's goal. Multi-linear regression and other regression techniques are statistical methods. This strategy aids in the discovery of a relationship between two numerical values or variables. Based on the independent factors, this method predicts the values of the dependent variables. Machine learning algorithm provides less accuracy in crime prediction. So implement the deep learning algorithm named as Multi-layer perceptron algorithm to classify the datasets and predict the crimes with improved accuracy rate.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

In this project the problem of constraining and summarizing different algorithms of data mining used in the field of crime prediction are discussed. The focus is on using different algorithms and combinations of several target attributes for intelligent and effective crime prediction using data mining. Data mining technology provides an important means for extracting valuable rules hidden in crime data and acts as an important role in prediction and law enforcements. There is an increasing interest in using classification to identify crime which is present or not. In the current study, have demonstrated, using a large sample of crime records with classification. Classification algorithm is very sensitive to noisy data. If any noisy data is present then it causes very serious problems regarding to the processing power of classification. It not only slows down the task of classification algorithm but also degrades its performance. Hence, before applying classification algorithm it must be necessary to remove all those attributes from datasets who later on acts as noisy attributes. In this research work, we can implement preprocessing steps and implemented the classification rule algorithms namely Multi-layer perceptron are used for classifying datasets which are uploaded by user.

Machine learning algorithms, such as Multilayer Perceptron (MLP) algorithm, can be utilized to analyze and predict crime hotspots based on historical crime data. These algorithms can learn patterns and relationships from the data to make predictions on potential crime hotspots. By analyzing the experimental results it is observed that the Multi-layer perceptron technique has yields better result than other technique

8.2 FUTURE ENHANCEMENTS

In future we tend to improve efficiency of performance by applying other data mining techniques and algorithms.

A COMPARATIVE STUDY ON FAKE JOB POST PREDICTION USING DIFFERENT DATA MINING TECHNIQUES

PROJECT REPORT

Submitted by

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This is to certify that the project entitled

A COMPARATIVE STUDY ON FAKE JOB POST PREDICTION USING DIFFERENT DATA MINING TECHNIQUES

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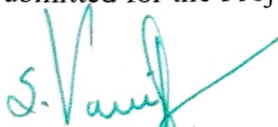
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Submitted for the Project Viva-Voce examination held on 17.04.2028

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ABSTRACT

In recent years, due to advancement in modern technology and social communication, advertising new job posts has become very common issue in the present world. So, fake job posting prediction task is going to be a great concern for all. Like many other classification tasks, fake job posing prediction leaves a lot of challenges to face. This paper proposed to use different data mining techniques and classification algorithm like KNN, decision tree, support vector machine, naive bayes classifier, random forest classifier, multilayer perceptron and deep neural network to predict a job post if it is real or fraudulent. We have experimented on Employment Scam Aegean Dataset (EMSCAD) containing 18000 samples. Deep neural network as a classifier, performs great for this classification task. We have used three dense layers for this deep neural network classifier. The trained classifier shows approximately 98% classification accuracy (DNN) to predict a fraudulent job post.

CHAPTER 8

CONCLUSION AND FUTURE ENHANCEMENTS

8.1 CONCLUSION

Job scam detection has become a great concern all over the world at present. In this paper, we have analyzed the impacts of job scam which can be a very prosperous area in research filed creating a lot of challenges to detect fraudulent job posts. We have experimented with EMSCAD dataset which contains real life fake job posts. In this paper we have experimented both machine learning algorithms (SVM, KNN, Naive Bayes, Random Forest and MLP) and deep learning model

8.2 FUTURE ENHANCEMENTS

This work shows a comparative study on the evaluation of traditional machine learning and deep learning based classifiers. We have found highest classification accuracy for Random Forest Classifier among traditional machine learning algorithms and 99 % accuracy for DNN (fold 9) and 97.7% classification accuracy on average for Deep Neural Network

SELF-ASSESSMENT SYSTEM FOR DISTANCE MEASUREMENT FROM MONITORS

PROJECT REPORT

Submitted by

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Register No: 927621MCA047

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SELF-ASSESSMENT SYSTEM FOR DISTANCE MEASUREMENT FROM MONITORS

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Submitted for the Project Viva-Voce examination held on 17·04·2023

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TABLE OF CONTENTS

CHAPTER NO.	TITLE	PAGE NO.

ABSTRACT

Monitors placed too close or too far away may cause problems that may lead to eyestrain. Viewing distances that are too long can cause to lean forward and strain to see small text. This can fatigue the eyes and place stress on the torso because the backrest is no longer providing support. Viewing distances that are too short may cause eyes to work harder to focus (convergence problems) and may require sitting in awkward postures. For instance, user may tilt their head backward or push chair away from the screen, causing you to type with outstretched arms. But there is no alert system for measuring distance automatically from monitor to eye. So in this project we can design implementation for automatic alert based on distance. The minimum distance is 0.38 m (1.2 ft.) and maximum distance is 1.02 m (3.3 ft.). It can be achieved by using artificial intelligence. We can use web camera for capturing human head positions and separate the background from foreground head positions. Then using image processing techniques to detect face and recognize. Finally calculate the distance from monitor to face via web camera. If the distance is minimum to pre-defined threshold value means, alert is automatically generated and intimate to users without using any sensors.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

Convergence is when the eyes turn inward towards the nostril while we view close gadgets. Convergence permits the image of the gadgets to be projected to the identical relative vicinity on each retina. Without accurate convergence, we see double photos. The closer the gadgets, the greater the stress on the muscles that converge the eyes. The visual machine also has a resting factor of vergence (RPV). It is similar to the resting point of accommodation, but it's the gap at which the eyes are set to converge while there may be no object to converge on. It's additionally known as darkish vergence. It is difficult to set a specific limit for a minimum viewing distance. If sustained viewing closer than the resting point of vergence contributes to eyestrain, perhaps we must say that eye-display distance should now not be closer than the resting factor of vergence. In this assignment we may be implemented the gadget to using photo processing techniques to detect the faces from digital camera capturing. Then successfully music the faces and to provide bounding boxes on face pictures. Finally set the gap limits to discover whether or not the individual is close to the device or not. And also calculated the person regular seeing conditions and undesirable internet site get entry to. This device can be beneficial to all aged peoples in various packages such as gaming applications, venture works and so on.

9.1 FUTURE ENHANCEMENTS

In future we can extend the system to implement various face detection algorithms to improve the accuracy of the system and implement in different scenarios. We can also implemented in various types monitors.

CYBERBULLYING DETECTION IN SOCIAL MEDIA PLATFORMS

PROJECT REPORT

Submitted by

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Register No: 927621MCA052

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PROJECT WORK

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This is to certify that the project entitled

CYBERBULLYING DETECTION IN SOCIAL MEDIA PLATFORMS

is the bonafide record of project work done by

S.Sandhiya

Register No: 927621MCA052

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Submitted for the Project Viva-Voce examination held on 17|04|2023

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TABLE OF CONTENTS

ABSTRACT

Cyber bullying is emerging as a serious social problem, especially among teenagers. Cyber bullying is defined as "the use of information technology to harm or harass other people in a deliberate, repeated, and hostile manner". With the advent of social media networks such as Twitter and Facebook, it has become more prevalent. Thus, automatic detection of cyberbullying posts is becoming an increasingly important area of research among social media researchers. Traditional mechanisms to fight against cyber bullying include the use of standards and guidelines, human moderators, and blacklists based on the profane words. Therefore, it is necessary to develop a principled learning framework to automatically detect cyber bullying behaviors. Cyberbullying is a major problem encountered on internet that affects teenagers and also adults. It has led to mishappenings like suicide and depression. Regulation of content on Social media platforms has become a growing need. The following study uses data from two different forms of cyberbullying, hate speech tweets from Twitter and comments based on personal attacks from Wikipedia forums to build a model based on detection of Cyberbullying in text data using Natural Language Processing and Machine learning. We can propose a system allowing social network users to have a direct control on the messages posted on their walls. This is achieved through a flexible rule-based system, that allows users to customize the filtering criteria to be matter-of-fact to their walls, and a Machine Learning based soft classifier automatically labeling messages in content-based filtering. Based on this filtering, server can train the words and stored in database. At the time of communication, server can check the words and block before the message can be shared.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

Cyberbullying detection can be used on social media websites to ban users trying to take part in such activity In this paper we proposed an architecture for detection of cyber bullying to combat the situation.For Hate speech Natural Language Processing techniques proved effective with accuracies of over 90 percent using basic Machine learning algorithms because tweets containing hate speech consisted of profanity which made it easily detectable. We discussed the architecture for two types of data: Hate speech Data on Twitter and Personal attacks on Wikipedia.For Hate speech Natural Language Processing techniques proved effective with accuracies of over 90 percent using basic Machine learning algorithms because tweets containing Hate speech consisted of profanity which made it easily detectable.Due to this it gives better results with BoW and Tf-Idf models rather than Word2Vec models However, Personal attacks were difficult to detect through the same model because the comments generally did not use any common sentiment that could be learned however the three feature selection methods performed similarly.

8.2 FUTURE ENHANCEMENT

Using ensemble learning to combine different machine learning models (such as Naive Bayesclassifierwiththe TF-IDF word vectors and the Support Vector Machine using our customword vectors) toimprovethemodel evaluation metrics. Creating more detailed custom word vectors for the SVM to train creating more detailed customwordvectorsfor the SVM to train. As we know, social media became a common platform for most of the people where theysharetheirviewsbut few teenagers are there who perform bullying on these types of platforms and that bullyingmaydisturbsomeone mentally and emotionally. So, In order to stop this type of teasing or bullying, wedevelopedourproject to detect cyberbullying using machine learning. Early detection of harmful social media behaviors such as cyberbullying is necessary for identifying threatening online abnormalities and preventing them from increasing. So, In this project

PREDICTING PARKINSON'S DISEASE USING XGBOOST

PROJECT REPORT

Submitted by

D. VIGNESH

Register No: 927621MCA061

in partial fulfillment for the award of the degree

of

MASTER OF COMPUTER APPLICATIONS

in

FACULTY OF INFORMATION AND COMMUNICATION ENGINEERING

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PREDICTING PARKINSON'S DISEASEUSING XGBOOST

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ABSTRACT

Parkinson disease(PD), the second most common neurological disorder that causes significant disability,reduces the quality of life and has no cure. Nerve cells in this part of the brain are responsible for producing a chemical called dopamine. Dopamineacts as a message between the parts of the brain and nervous system that help control and co-ordinate body movements.As dopamine generally neurons in the parts begin to experience difficulty in speaking, writing, walking or completing other simple task.Approximately,90% affected people with Parkinson have speech disorders. The average age of onset is about 70 years,and the incidence rises significantly with advancing age. However, a small percent of people with PD have"early-onset" disease that begins before the age of 50.More than 10 million people worldwide are living with PD. No cure for PD exists today, but research is ongoing and medications or surgery can often provide substantial improvement with motor symptoms. Parkinson disease is one of the most serious diseases. Hence diagnosing it at an earlier stage could help prevent or reduce the effects. The machine learning classification algorithms are used to predict if a person has Parkinson disease or not, comparing different machine learning algorithm suchas logistic regression,decision tree, k-nearest neighbour as well as some "Ensemble" learning techniques where we at tempt to improve the accuracy by combining several models.The machine learning model can be implemented to significantly improve diagnosis method of Parkinson disease.In this study it indicates that the ensemble techniques Xgboost classification (Extreme gradient boosting) algorithm achieved the high test accuracy rate(95%) compared to other classification algorithm.The performance of the methods has been assessed with a reliable dataset from UCI Machine learning repository.

CHAPTER 8

8.1 FUTURE ENHANCEMENT AND CONCLUSION

This research looked at how machine learning techniques may be used to predict Parkinson's illness. The goal of this research is to figure out which algorithm for the Parkinson's disease dataset has the best prediction accuracy. The classification accuracy was examined and compared, and XGBoost was shown to have a high level of accuracy due to its high performance and ease of implementation. For this, a variety of machine learning methods are used, including Logistic Regression, Naive Bayes, KNN, SVM, and XGBoost. Error rates and performance indicators for all models are calculated and compared to choose the best model. The measurements include accuracy, precision score, confusion matrix, and classification report. XGBoost is the best model among all the other ML techniques, according to the findings, with anaccuracy of 91.5 percent and a precision of 0.9375. They aimed to improve the efficiency and accuracy of XGBoost after selecting the best model. On a public test set, the greatest accuracy score will be identified.

Using this model we can diagnosis the presence of Parkinson's disease in its early stage and also more accurately which in turn will help the subject to treat the disease with appropriate medication. We can reduce the rate of misdiagnosis of this disease.Once the Doctor collects the clinical values and information about the various symptoms of PD from the patients, they need to give it to the System for prediction through the user interface. Once the system predicts the results are displayed on the user interface which the Doctor and patient can see. Aftergetting the results the doctors can prescribe the medication accordingly. This is done by building a machine learning classification model using Xgboost.

Age is the main risk factor for PD. For lower rates of MDVP frequencies (lowest, highest, and average) and HNR, the patient is affected by PD. In the current study, several machine learning algorithms were analyzed. It is evaluated that for PD prediction, XGBoost algorithms provide the highest accuracy and precision rates. Hence, XGBoost can be used to further predict the presence of PD in a person.

ELECTRONIC ENDOWMENT PROCESS SYSTEM IN FARMER ACTIVITY FUNDS

PROJECT REPORT

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ELECTRONIC ENDOWMENT PROCESS SYSTEM IN FARMER ACTIVITY FUNDS

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315

TABLE OF CONTENTS

ABSTRACT

The project titled "**ELECTRONIC ENDOWMENT PROCESS SYSTEM IN FARMER ACTIVITY FUNDS**" is designed using PHP as front end. The back end use is MySQL.

This project had all the information's about the farmer Fund processing details such as farmer registration, Fund types, Fund request, verification and approval and report preparation for those details.

The administrator enters Fund type details such as Fund type, name, and amount range, documents to be submitted and proof details. The Fund request details are viewed and approved after the details are found to be satisfactory.

The farmer registers first and then login to the web site. Then the farmer may view the tutorials so as to know the technical details. Then all the Fund types and amount details are viewed and raise Fund request. During the request, the document the user will submit, the proof details are provided by the farmer.

The reports taken by administrator are Fund type details, farmers list, Fund request list, approval details. The Fund pending, approved and rejected details can be viewed separately either farmer wise or between two dates.

CHAPTER 9

CONCLUSION & FUTURE ENHANCEMENTS

9.1 CONCLUSION

The "ELECTRONIC ENDOWMENT PROCESS SYSTEM IN FARMER ACTIVITY FUNDS" has been developed to satisfy all proposed requirements... The system is highly scalable and user friendly. Almost all the system objectives have been met. The system has been tested under all criteria. The system minimizes the problem arising in the existing manual system and it eliminates the human errors to zero level. The design of the database is flexible ensuring that the system can be implemented. It is implemented and gone through all validation.

All phases of development were conceived using methodologies. User with little training can get the required report. The software executes successfully by fulfilling the objectives of the project. Further extensions to this system can be made required with minor modifications.

9.2 FUTURE ENHANCEMENTS

In future, every farmer can gain their needs through online by providing necessary details. Based on this project, farmer comes to know that there is easy way to solve their problem and even bank staff can maintain their data safety. Even this web applications can develop into modern ways. Farmer can decide themselves that what they need.

A SECURE PIN AUTHENTICATION METHOD FOR SMART ATM

PROJECT REPORT

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A SECURE PIN AUTHENTICATION METHOD FOR SMART ATM

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TABLE OF CONTENTS

ABSTRACT

The importance of security in the authentication process as well as the increase in threat level posed by such malware has attracted many researchers to the field. Many attacks are successful in accessing social network accounts since the current password-based authentication paradigms are not efficient and robust enough as well as vulnerable to automated attacks. The simplest alternative is complementing the single factor (password-based) authentication process with additional identification elements, such as one-time PIN codes, generated by the user's own device (e.g. the smartphone) or received via SMS. In this project, a novel method using hybrid keyboard is proposed to address the problem of shoulder-surfing attacks on authentication schemes. This is a PIN-based authentication method that operates on Net Banking Application. Hybrid keypad uses the technique to blend two keypads with different digit orderings in such a way, that the user who is close to the device is seeing one keypad to enter the PIN, while the attacker who is looking at the device from a bigger distance is seeing only the other keypad. The user's keypad is shuffled in every authentication attempt since the attacker may memorize the spatial arrangement of the pressed digits. Based on the analysis, it seems practically almost impossible for a surveillance camera to capture the PIN of a user when hybrid keypad is in use. This method is implemented in a banking application. The hybrid keypad will be enabled when the PIN is entered while login into the application and also when a transaction is done.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

The main goal and importance of the ATM system using face image is to provide security. ATM system using fingerprint is secure, but it still has some demerits. To overcome the challenges of the technology it can be combined with more secure features. In this project we are using biometric security measure in the ATM system. The proposed system explains a hybrid keypad is implemented in a ATM application. The main goal of our work was to design a PIN-based authentication scheme that would be resistant against shoulder surfing attacks. To this end, we created Illusion PIN. The proposed system has quantified the level of resistance against shoulder-surfing by introducing the notion of safety distance. This means that even if a person perceives the digits on a hybrid keypad to be equally visible to the digits on a digital keypad, the distortion in the hybrid keypad is bigger and the visibility index has a lower value. This is something logical, because when the reference buttons are all same color, a digit that is even slightly visible is considered a big distortion.

8.2 FUTURE ENHANCEMENTS

Future work of this project is to propose a android based application for banking process also implement high secure measurements using Digital PIN based authentication or Bright Pass based authentication. Also have plan to improve more security to the system with low computation time and also this have been develop in android application for mobile based social network access.

BRAIN TUMOR DETECTION AND STAGE CLASSIFICATIONS USING DEEP LEARNING

PROJECT REPORT

Submitted by

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BRAIN TUMOR DETECTION AND STAGE CLASSIFICATIONS USING DEEP LEARNING

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ABSTRACT

This project is aimed at developing an "Brain Tumors Detection and Stage Classifications". Brain tumors are dangerous and serious disorders affected by uncontrolled cell growth in the brain. Brain tumors are one of the most challenging diseases to cure among the different ailments encountered in medical study. Early classification of brain tumors from magnetic resonance imaging (MRI) plays an important role in the diagnosis of such diseases. There are many diagnostic imaging methods used to identify tumors in the brain. MRI is commonly used for suchtasks because of its unmatched image quality. The traditional method of identifying tumors relies on physicians, which is time- consuming and prone to errors, putting the patient's life in jeopardy. Identifying the classes of brain tumors is difficult due to the high anatomical and spatial diversity of the brain tumor's surrounding region. An automated and precise diagnosis approach is required to treat this severe disease effectively. The relevance of artificial intelligence (AI) in the form of deep learning (DL) has revolutionized new methods of automated medical image diagnosis. As a result, good planning can protect a person's life that has a brain tumor. Using the 2D Convolutional Neural Network (CNN) technique, this project proposes Computer-Aided Diagnosis (CAD) a deep learning-based intelligent brain tumor detection framework for brain tumor type (glioma, meningioma, and pituitary) and stages (benign or malignant).

CHAPTER 8
CONCLUSION AND FUTURE ENHANCEMENTS

8.1. CONCLUSION

The latest developments in medical imaging tools have facilitated health workers. Medical informatics research has the best options make good use of these exponentially growingvolumes of data. Early detection options are essential for effective treatment of brain tumors. This project presented a CAD approach for detecting and categorizing BT's radiological images into three kinds (pituitary-tumor, glioma-tumor, and meningioma-tumor). We also classified glioma-tumor into various categories (Grade-two, Grade-three, and Grade-four) utilizing the DCNN approach (i.e., our proposed work). Firstly, pre-trained DensNet201 deep learning model was used, and the features were extracted from various DensNet blocks. Then, these features were concatenated and passed to softmax classifier to classify the brain tumor. Secondly, the features from different Inception modules were extracted from pre-trained Inceptionv3 model and concatenated and then, passed to the softmax for the classification of brain tumors. The proposed method produced 99.51% testing accuracy on testing samples and achieved the highest performance in detection of brain tumor. The outcome of the presented architecture shows high training and validation accuracy with low training and validation loss. Moreover, the testing phase determines the overall portable EM imaging system's capability and potential of CNN architecture in detecting and localizing the brain tumor with high accuracy.

CLOUD BRAIN HUMAN MEMORY DATA UPLOADING AND DISPERSION SYSTEM

PROJECT REPORT

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PROJECT WORK

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CLOUD BRAIN:HUMAN MEMORY DATA UPLOADING AND DISPERSION SYSTEM

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Submitted for the Project Viva-Voce examination held on 17.04.2023

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ABSTRACT

We live in a world permeated with technology. One's last will and testament is an important document. It details who will get your assets and belongings after die. Most people spend a lot of time getting their will just right but fail to make sure their will is stored in a safe place where it can be easily found after their death. No matter where you choose to keep your will, you should let your executor, alternate executor, and close family members know that the will has been created, where it is being stored, and how they can access it if something happens to you.

The aim of this work is to present the development of a realistic simulated model of the human brain that could be used in remember and deliver the secrets to others after the death of the human brain. But we loss the knowledge of a brain when the body is destroyed after the death.

The main aim is to upload human brain confidential things are stored to cloud. After the death of the body, the Cloud Brain website will act as the man's brain. Such models will shed light on how memories are stored and retrieved. This project contains two main modules memory module named Notification aware module. We can use the testamentary or will of a person after the death. This application used to remember things without any effort. It can keep things in memory very secure.The majority of cloud services operate on a "pay as you go" basis. If administrators do not adjust to the cloud pricing model, this will result in unexpectedly high charges.

CHAPTER 8

CONCLUSION AND FUTURE ENHANCEMENT

8.1 CONCLUSION

This project entitled is Developing a Cloud Brain to life for the secrets. This project was developed to store the secret information of the testator. Testator can store their Testament or Will information into this site. Then login and view the information and also modify the information.

8.2 FUTURE ENHANCEMENT

In future we provide high security to this application. Before sending the information to the relative's system will ask question to the relatives. Testator already stores the question and answer also. Relative give correct answer to the question then information is forwarded to the relative. And also, we create android application for this concept in future.

PREDICTION OF DISEASE FROM BLOOD MICROSCOPIC ANALYSIS CLASSIFICATION USING DEEP LEARNING ALGORITHM

PROJECT REPORT

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APRIL 2023

This is to certify that the project entitled

PREDICTION OF DISEASE FROM BLOOD MICROSCOPIC ANALYSIS CLASSIFICATION USING DEEP LEARNING ALGORITHM
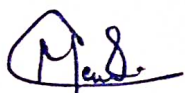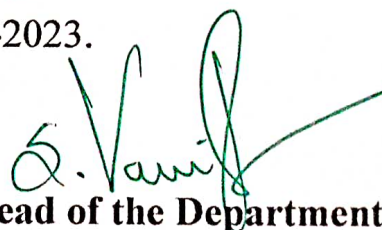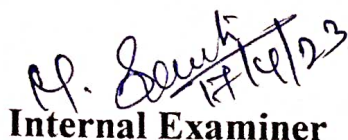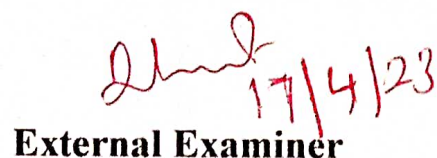
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CHAPTER NO.	TITLE	PAGE NO.

ABSTRACT

Conventional identification of blood disorders based on visual inspection of blood smear through microscope is time consuming, error-prone and is limited by haematologist's physical acuity. Therefore, an automated optical image processing system is required to support the clinical decision-making. Leukemia is a type of cancer, characterized by an anomalous production of immature, abnormally-shaped white blood cells (WBC) called "blasts".Leukemia is a white blood cells- (WBC-) related illness affecting the bone marrow and/or blood.

A quick, safe, and accurate early-stage diagnosis of leukemia plays a key role in curing and saving patients' lives.Diagnosis is typically carried out by analysing the white blood cells via the microscope of the blood smear.Numerous machine learning algorithms have been developed to identify different diseases, e.g., leukemia and to provide the high number of mis-classification error rate. So we can implement deep learning algorithm to classify the microscope images for White Blood count analysis.

The WBC differential count system contained two modules: the detection model and the classification model. The raw bone marrow smear images were first processed by the detection module, through which all the WBCs were detected from red blood cells, blood platelets, staining impurities and so on. Then, the detected cells were used as input for the classification module.

The classification module contained two stages. In the first stage, we discriminated the uncountable cells including crush cells, degenerated cells and so on, which are not used in the diagnosis of leukemia. In the second stage, the countable WBCs were submitted for multi-class differentiation using Convolutional neural network algorithm

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

Selecting the right kind of architecture for a certain problem solving and building an algorithm or a model for it is of immense importance as some datasets may have too many underlying deep features that needs complex methods for extracting its parameters while some datasets does not require such sophisticated process of tedious task undertaking to create a model or algorithm as it does not consist parameters that needs to be pruned deeper. A complex structured solution building for such relatively simpler feature extraction required datas often leads to over improvements of the intermediate values thereby tampering the originality or key parameters of the input taken into consideration. This study uses Convolutional Neural Network approaches to help hematologists classify White Blood Cells into subgroups using microscopic images of the cells. This classification aids in the identification of cells and the determination of the type of sickness afflicting a patient. When compared to machine learning methods, the results of this experiment help identify photos in a more reliable manner. The test set had a high degree of correctness, exceeding 90 percent. As a result, a flawless model can be built and employed in medical analysis and applications dealing with the amount of white blood cells and sub kinds of white blood cells when the model is trained with strong computing abilities present.

FACE COUNTERFEIT DETECTION IN NATIONAL IDENTITY CARDS USING IMAGE STEGANOGRAPHY

PROJECT REPORT

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Face Counterfeit Detection in National Identity Cards

using Image Steganography

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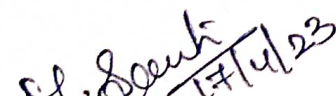
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Project Guide   **Head of the Department**

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Internal Examiner   **External Examiner**

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ABSTRACT

IDs and MRTDs (Identification and Machine-Readable Travel Documents) are used to identify and authenticate identities in several scenarios such as crossing national borders, in civil applications, sales and purchasing portals, or admission to transaction processing systems. These documents have several security features which mitigate and combat document forgery. As these security systems are difficult to circumvent, criminal attacks on ID verification systems are now focusing on fraudulently obtaining genuine documents and the manipulation of the facial portraits.

To reduce risks related to this fraud problem, it is necessary those governments and manufacturer of IDs and MRTDs continuously develop and improve security measures. With this in mind, we introduce the first efficient steganography method - StegoFace - which is optimized for facial images printed in common IDs and MRTDs. StegoFace is an end-to-end facial image steganography model that is formed by n Deep Convolutional Auto Encoder, that can conceal a secret message in a face portrait and, hence, producing the stego facial image, and a Deep Convolutional Auto Decoder, which is able to read a message from the stego facial image, even if it is previously printed and then captured by a digital camera.

Facial images encoded with our StegoeFace approach outperform the StegaStamp generated images in terms of their perception quality.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

The focus of this paper is on concealing security encoded data in ID and MRTD documents while allowing for the integrity verification of the portrait. With this in mind, we introduce the first efficient steganography method - StegoFace - which is optimized for facial images printed in common IDs and MRTDs. StegoFace is an end-to-end Deep Learning Network that is formed by a Deep Convolutional Auto Encoder, that can conceal a secret message in a face portrait and, hence, producing the encoded image, and a Deep Convolutional Auto Decoder, which is able to read a message from the encoded image, even if it is previously printed and then captured by a digital camera. StegoFace surpasses state-of-the-art methods in allowing the use of images in their context, irrespectively of the background. This feature also allows us to use the method without any restrictions relating to photo parameters. Facial images encoded with our StegoFace approach outperform the StegaStamp generated images in terms of their perception quality. From the results shown, it can be clearly seen that the proposed architecture has higher security, robustness, imperceptibility and information hiding capacity.

A TECHNIQUE TO TRANSFERRING DATA BETWEEN CLOUD SERVER IN DISASTER

PROJECT REPORT

Submitted by

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This is to certify that the project entitled

A TECHNIQUE TO TRANSFERRING DATA
BETWEEN CLOUD SERVER IN DISASTER

is the bonafide record of project work done by

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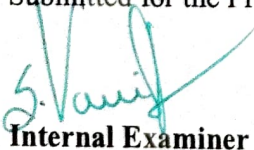**Register No: 927621MCA044**

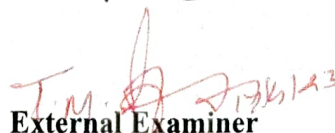of MCA during the years 2022-2023.

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ABSTRACT

Cloud computing is considered as a possible way to lower the cost and complexity of computing by providing applications running on the Internet. Many organizations and business models are looking at cloud computing as a new form of emergency management which will keep business continuity. Cloud computing could contribute to emergency management since it could facilitate the sharing of information among private and government organizations. A method for system resource management of a cloud-based disaster recovery is proposed. This method can determine whether system performance achieves the "recovery point objective" (RPO) or not. It is also necessary to resize resources for satisfying required performance at lower cost. Therefore, a formula for simulating system performance is established. It is important to consider data availability, backups and redundancy as component of the emergency management software selection process. This is especially important in case of a natural disaster where there is a high risk of losing access to computers and data center. The data should be frequently backed up and stored in multiple locations separated by enough distance depending on the type of the disaster. Disasters such as fires, floods and earthquakes are more regional, while hurricanes can affect entire coast lines. It is important that the primary and backup sites are geographically separated in order to ensure that a single disaster will not impact both sites. A secure encryption method is provided to encrypt the files. RSA encryption method was utilized for encrypt the files then the encrypted files are stored on server. This type of encryption process is provides more secure way for file transferring and recovering process. This proposed work has following modules,

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

As cloud computing is becoming very important in day to day life and every company is based on cloud computing. They are not aware of disasters in cloud; they don't know any recovery mechanisms at first. When disaster occurred then all companies faced big loss of data and also financial then after many recovery mechanisms are introduced. As cloud nomenclature has a PaaS, IaaS, and SaaS as services which provide their service to cloud users in terms of infrastructure, software and platform as their requirement; so user can use cloud without any difficulty. By implementing DRaaS in cloud one can get recovered from data loss when he experiences a system failure or by natural disasters. So by implementing DRaaS in business continuity they can overcome their data loss.

8.2 FUTURE ENHANCEMENTS

Our ongoing research is focused on further automation and simplification of the error-prone tasks of disaster recovery planning, charge back, end-to-end provisioning optimization, storage service outsourcing, and others that are currently executed using back-of-the-envelope calculations. Management decisions are becoming more proactive rather than being reactive.

CYBER CRIME REPORTING SYSTEM

PROJECT REPORT

Submitted by

S.PRAVEEN
Register No: 927621MCA046

in partial fulfillment for the award of the degree

of

MASTER OF COMPUTER APPLICATIONS

in

**FACULTY OF INFORMATION AND COMMUNICATION
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APRIL 2023

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APRIL 2023

This is to certify that the project entitled

CYBER CRIME REPORTING SYSTEM

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ABSTRACT

Cybercrime can be particularly difficult to investigate and prosecute because it often crosses legal jurisdictions and even international boundaries. For those cyber crimes, actions are seriously taken to prevent them periodically. CYBER crimes include fake advertisement complaints, social media crimes, threatening women through online or by using their details, credit card and banking frauds etc. To overcome such frauds and fraudulent activities this project has been implemented. With this proposal actions against cyber crime criminals are effectively taken by the administrator, as the administrator divides every department in to different sections, where every department handles different type of cyber crime complaints and provide effective response to the people and identify the criminals in quick manner and the action taken by the complaint are intimated to the users periodically. At the initial stage users registers in to the system and fill what kind of complaints and submit to the website and corresponding departments which was segregated by the administrator. At the same time users can update their complaints according to the mismatch in submitted information. After submission those complaints are passed on to the corresponding departments and forwarded to the officials. The officials view the submitted complaints and process them to finalize the culprit. Responses to the users are provided in a periodic manner, through mail or through messages which has been submitted by the users during registration. By gathering the evidences department officials tracks the culprit and produce them in front of jurisdiction. Administrator monitors the entire process and reports of every department have been submitted to the administrator, which enhances the entire procedure to process efficiently and user friendly.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

This paper presented a general structure for cyber Crime analysis in areas that takes advantages from the partitioning of the whole analyzed area by detecting crime responses for the applicants. Such applications are then analyzed and details are provided to the users efficiently. Experimental evaluation, performed on crime data of a wide area of a city, showed that the proposed methodology can forecast the number of crimes with an high accuracy. Furthermore, the approach gives fine-grained information about where crime events are expected to occur.

8.2 FUTURE ENHANCEMENTS

In future work, other research issues may be investigated. First, we may further explore the application of other spatial analysis approaches for the detection of crime dense regions and for modeling and forecasting crime trends on such regions. Second, we may perform an extended experimental evaluation on an wider urban territory, to assess the results obtained in the case study reported here. Third, we may apply such an approach for spatio-temporal prediction of other kind of events, different than crimes.

VEHICLE CRASH REPORTING AND RESCUE SYTEM FOR INTELLIGENT TRANSPORTATION SYSTEM

PROJECT REPORT

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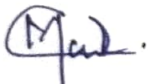This is to certify that the project entitled

VEHICLE CRASH REPORTING AND RESCUE SYTEM FOR INTELLIGENT TRANSPORTATION SYSTEM
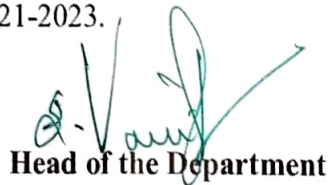
is the bonafide record of project work done by

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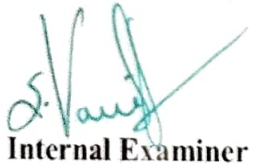**Register No: 927621MCA049**

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ABSTRACT

Road traffic accidents (RTAs) are becoming more common nowadays, as evidenced by the fact that the number of accidents is increasing on a daily basis. The accident victim is dependent on the mercy of others to rush him tohospital. Many a times an accident goes unnoticed for hours before help comes in. Due to all these factors there is a high rate of mortality of the accident victims. In addition to this there is delay in the ambulance reaching the hospital due to the traffic congestion between accident location and hospital which increases the chances of the death of victim. The lack of immediate help to save a life is one of the most prominent causes of death in a road traffic accident. Some various methods and techniques can assist in minimizing the frequency of traffic road accidents and saving lives. Currently there is no technology for accident reporting and rescue system. There is a need of introducing a system to reduce the loss of life due to accidents and the time taken by the ambulance to reach the hospital. In today's environment, the need for accident reporting to relevant authorities and family is vital. This will result in lives being saved and injured persons being rescued. In this project, to this end, propose an accident reporting and rescue system named RTO Dashboard based on VANET for Intelligent Transportation System in urban environments. The proposed method is categorized into two phases: identification of accidents, reporting and rescue of those accidents. Our system is based on website that does not need any special hardware to decrease the cost. The data processing is based on cloud computing. This system can also locate the place of the accident so that the medical services can be directed immediately towards it. Using this RTO Dashboard at the scene of an accident, emergency responders can easily access all rescue relevant information about the vehicle.

CHAPTER 8

CONCLUSION AND FUTURE ENHANCEMENT

8.1 Conclusion

The number of vehicles on the road in today's society is steadily increasing. As a result, the number of accidents is rising. Despite the fact that there are numerous technologies for accident detection, the death rate continues to climb. The inaccuracy of accident detection and poor notification methods are to blame for the late response to catastrophic accidents. The lack of accessibility to realistic retrofitting solutions, as well as economic issues exacerbates the problem. We introduced 5G and VoT-based technologies to identify an accident to address the aforementioned Challenges. Using several sensors has been found to improve the accuracy of accident detection. The technology recognizes the accident and the nearest hospital in real-time. It immediately sends an emergency notification to the nearby hospital and a family member or friend. Using the VoT sensors, it is possible to detect an accident and alert the user. Our proposed technique has been found to lessen the number of false positive reports of accident detection. For our system to work, it needs to be connected to the internet. We will soon put our system to the test in a real-world scenario. As a result, the privacy and security of the drone network are critical. We intend to tackle the privacy and security issues in the near future because the system requires complete privacy and security.

To verify the reliability of the system, after registration, this vehicle was tested in many places. the system was tested on a scaled model with four wheels, simulating an accident. The purpose of the intended Accident Test is to demonstrate the effects of a real-world accident of the highest possible severity between a heavy vehicle and a light vehicle. The device sends information to responders mentioning driver's geographical position in the form of latitude and longitude values, which assist in identifying the rider's exact location. The Web Application (for the emergency authorities) also fetches the data from the MySQL cloud database and displays the marker on the accident site on the map. The system provides faster intimation using internet without any delay to all the people who have the login credentials at same time and one can continuously track and monitor the condition of the vehicle, whenever the system is turned ON and having proper internet connectivity. This system also acts as a theft control by continuously monitoring the location and it also contains ignition control, where the engine can be turned on/off manually through our application with permission module.

8.2 Future Enhancement

The proposed approach implements to control the vehicle theft by using GPS and GSM. Real time data logging and analysis will be implemented that allows the system to monitor traffic situations in various regions. Various safety warnings can be issued to the owner of car if car crosses certain defined speed limits. The real-time alarms can also be set for the unauthorised vehicle movements and other exceptions using a series of geographic zones together with the time-based rules for vehicle in/out.

WATER QUALITY ANALYSIS USING MACHINE LEARNING ALGORITHMS

PROJECTREPORT

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WATER QUALITY ANALYSIS USING MACHINE LEARNING ALGORITHMS

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ABSTRACT

Data analysis is one of the key engines of progress in most of areas of the research in natural sciences, including environmental sciences. Nowadays, continuous development and technological progress provide us with universal and advanced tools for data analysis, such as machine learning algorithms.

The purpose of the research behind this thesis is to provide examples to the engineers and scientists working in environmental field of how these models can be implemented towards the environmental tasks.

The data used for the research is water quality data, produced during the STREAMES (STreamREAch Management, an Expert System) project, initially aiming at producing tools for increasing the quality of European rivers.

In this report one will find examples of data imputation, regression, classification, clusterization and feature selection tasks using machine learning algorithms, such as: random forest, support vector ma- chines, neural networks, k- nearest neighbours, and k-means clustering.

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CONCLUSION & FUTURE ENHANCEMENTS

Application of machine learning models are presented, covering most of the aspects of the average research working in the field of artificial intelligence for environmental sciences tasks. This work also reveals the importance of consulting data scientists before starting of the monitoring, since data sets unsuitable for requested tasks is a common problem.

Generally, regression models were able to show the consistent trend and overall correlation between each other, even though for some of the measurements they give models of poor quality. Random forests (RF) show the best performance and are advised for scientists and engineers working with environmental data. Artificial neural networks (ANN) are another alternative, though their performance is inferior and they are prone to overfitting. Support vector machines (SVM) are the good example for the cases where a baseline model is needed, being one of the basic algorithms.

K-nearest neighbours (KNN) model was successfully used for data imputation and is also suggested for this task for other researchers. Though, and it is worth noticing, amount of neighbours used is not universal and another amount may be found suitable for different data sets.

Classification models show good performance and are able to make highly accurate predictionmodels for identifying season of the sample and land use of the area where it was taken. Meanwhile, clusterization techniques, such as k-means clustering, may assist data scientist with possible algorithms to classify given data, for example defining good, average and bad conditions of the water based on various chemical, biological and physical parameters.

Future prospective of the development of this research may be seen in several ways. Firstly, consistent misclassification of season values between winter and spring may be studied further using this data set by extracting and analysing the samples, which tend to be often misclassified. On the other hand, models generated during this research may be used by IT students for producing software meant to help environmental specialists in analysing collected water

quality data.

      All in all, following the technological progress and taking the best from what it provides us from day to day ensures continuous development of the research field. The same goes for environmental sciences and machine-learning algorithms are one of the tools that can contribute to this field a lot and may be used to keep the progress on-going.

A SUSTAINABLE FOOD MANAGEMENT TO AVOID FOOD WASTE APPLICATION SYSTEM

PROJECT REPORT

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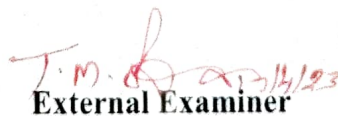of MCA during the year 2022-2023.

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ABSTRACT

Food donation system is a process usually led by food donation organizations that are collecting food from businesses and individuals or from the ones with excess of goods, storage it, distribute it to the food banks and finally redirect it towards people in community that have a deficit of particular goods. Food donation system is, therefore, a part of charitable activities usually organized by civil society organizations sometimes supported by state or local governments. Food donation, convince possible donators that donated food. The creation of food donation system is very beginnings of making a food waste management program and food donation organizations. Instead of wasting food we can put them in use by donating them to various organizations such as old age homes, orphanages, etc. Therefore, the main aim of this project is to address some organizational issues that stand in the way of the creation of sustainable food. we aim to contribute to the present and the future efforts to create efficient and sustainable system Food Donation. In this proposed system we create a web based application for Excess Food Donation to Orphanages. For many hotels and user donating in this platform.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

In conclusion, a free food donation management system can be a powerful tool in addressing food insecurity and reducing food waste. By facilitating the donation of excess food from businesses, individuals, and organizations to those in need, the system can help to ensure that food is distributed more efficiently and effectively.

The development and implementation of a free food donation management system requires careful planning, design, and testing to ensure that it is user-friendly, reliable, and secure. By involving stakeholders and users throughout the process, the system can be tailored to meet their needs and expectations.

8.2 FUTURE ENHANCEMENT

Future enhancements to the system, such as mobile applications, integration with other organizations, machine learning and predictive analytics, social media integration, and gamification, can further increase its effectiveness and impact.

Overall, a free food donation management system can be a valuable tool in addressing food insecurity and reducing food waste, making it easier for individuals and organizations to make a positive impact in their communities.

BallotChain for Secure and Transparent e-voting mechanism using AIIoT and Blockchain Technology

PROJECT REPORT

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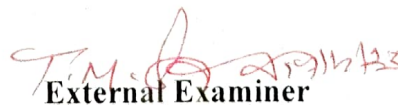
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ABSTRACT

Artificial intelligence (AI) has demonstrated huge potential in a variety of real-world applications. However, some significant considerations like fairness, transparency and Trust worthiness are still challenging when applying AI to trust-oriented applications such as E-voting. The technology can ensure the safety of every vote, better and faster and much more accurate counting and automatic tallying. In this project, we aim to facilitate theconsolidation of AI ecosystems by developing a blockchain-based traceable self-tallying e-voting system. The proposed system presents a novel voting system by using QR and Fingerprint of Aadhaar card. The system will act as registering module on activating switch by the super admin. For registering module, the QR code of Aadhar is scanned (which is brought by the use) followed by the fingerprint verification. The system permits the elector to cast their vote, block chain technology comes into existence that is integrated within the machine. Each vote is added into each block encrypted by 256-bit SHA hash codes, the hashed block cannot be tampered by any individual as more security is added to the system. By adopting Blockchain within the distribution of information will scale back one in every of the cheating sources of database manipulation. The proposed mechanism of voting using Blockchain not only serves the election conducting bodies but also the voters who get notified in case of any meddling with their votes before the counting announcement.

8.3 CONCLUSION

The idea of adapting digital voting systems to make the publicelectoral process cheaper, faster and easier, is a compellingone in modern society. Making the electoral process cheapand quick, normalizes it in the eyes of the voters, removes acertain power barrier between the voter and the elected officialand puts a certain amount of pressure on the elected official.It also opens the door for a more direct form of democracy,allowing voters to express their will on individual bills andpropositions.In this project, we introduced a unique, blockchain-basedelectronic voting system that utilizes smart contracts to enablesecure and cost-efficient election while guaranteeing votersprivacy. We have outlined the systems architecture, the design,and a security analysis of the system. By comparison toprevious work, we have shown that the blockchain technologyoffers a new possibility for democratic countries to advancefrom the pen and paper election scheme, to a more cost- andtime-efficient election scheme, while increasing the securitymeasures of the today's scheme and offer new possibilitiesof transparency. Using anBallotchain private blockchain, it ispossible to send hundreds of transactions per second ontothe blockchain, utilizing every aspect of the smart contract toease the load on the blockchain. For countries of greater size,some measures must be taken to withhold greater throughputof transactions per second, for example the parent & childarchitecture which reduces the number of transactionsstored on the blockchain at a 1:100 ratio without compromisingthe networks security. Our election scheme allowsindividual voters to vote at a voting district of their choosingwhile guaranteeing that each individual voter's vote is countedfrom the correct district, which could potentially increase voterturnout.

AI CHATBOT
FOR ANSWERING FAQS

PROJECT REPORT

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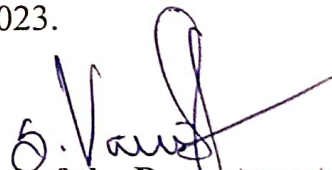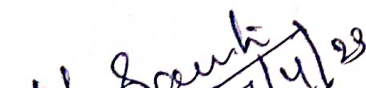of MCA during the year 2022-2023.

Project Guide   **Head of the Department**

Submitted for the Project Viva-Voce examination held on_17.04.2023_

Internal Examiner   **External Examiner**

TABLE OF CONTENTS

ABSTRACT

A college chatbot can be created to address a variety of student inquiries, including those regarding admission standards, academic regulations, campus life, financial aid, and more. Natural language processing (NLP) and machine learning algorithms that can effectively read and interpret user inquiries should be built into the chatbot.

The chatbot should be trained on a substantial dataset of frequently asked questions and their accompanying answers in order to guarantee that it is efficient at replying to questions from students. Several sources, including college websites, admissions brochures, student handbooks, and previous student interactions, can be used to gather this dataset. The chatbot can be configured to respond to student inquiries in a short and understandable manner once it has been trained on this dataset.

The chatbot should be created with an intuitive user interface that is simple to use and comprehend. Additionally, it should be flexible enough to respond individually to different kinds of requests dependent on the user context. A college chatbot can be used to deliver additional information, such as event calendars, campus maps, and news updates, in addition to responding to students questions.

Students who do this may be able to keep up with the most recent campus events. In general, a chatbot for colleges can be a helpful tool for improving communication between students and the institution. It can give students a quick and simple way to get information and get their questions answered, which could eventually enhance their overall college experience.

CHAPTER 8

CONCLUSION & FUTURE ENHANCEMENTS

8.1 CONCLUSION

Finally, integrating an AI-powered chatbot into a collegiate environment can significantly improve communication between students and the school. A chatbot can rapidly and effectively respond to frequent student questions by leveraging machine learning algorithms and natural language processing, saving time and lowering irritation for both students and administrative personnel. By saving and exploiting user information like a user's name and course information, a college chatbot can provide each user with a customised experience. This may enable the chatbot to respond to queries in a more pertinent and precise manner. The chatbot can also be created with a user-friendly interface that accepts a variety of input formats, including text, voice. This will enhance students' entire experience by enabling them to interact with the chatbot in the most comfortable and natural way possible.