INVENTORY MANAGEMENT SYSTEM

A Major Project Report submitted in partial fulfillment of the requirements
for the degree of Master of Computer Applications

By
AKULA RAMESH
(17841F0001)

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Karimnagar, Telangana,India – 505 527
2017-2023

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INVENTORY MANAGEMENT SYSTEM

ABSTRACT

To that end, we will be developing a brand-new inventory management desktop application. The official name of this programme is "Inventory Management System." A company's methods for monitoring its stock and associated assets are sometimes referred to as its "Inventory Management System" (IMS). Stock and inventory reports, as well as maintenance and updates to stock based on sales data, may all be generated with the help of this system. To better organise the sales and stock management system, this project classifies its many components. We're using this solution to address issues with direct sales management and supply chain management. Quality control is essential for companies that deal with consumer products transactions, therefore having an effective Inventory Management System is crucial. A major retail establishment risks running out of supply on a necessary item without effective inventory management. The wholesaler will be reminded to record inventory levels via a reliable inventory management system. One of the most useful ways to keep tabs on stock levels automatically is via an inventory management system. Errors in stock-tracking are less likely to be a problem when using an automated system.

9.CONCLUSION

Ultimately, A lightweight desktop application, Inventory Management System is well suited for firms with less than 100 employees. Every staple needed to run a small business is there. As a group, we were able to develop a system that allows us to easily modify existing data as well as add new data and remove old data. The app also includes a basic report and information on making a purchase. This software is perfect for a startup or a small company with minimal resources. Despite its flaws, our team is certain that using this system would be beneficial to the company.

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CP-ABE-HP SCHEME FOR OUTSOURCED DATA
SHARING IN CLOUD

A Major Project Report submitted in partial fulfillment of the requirements
for the degree of Master of Computer Applications

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CP-ABE-HP SCHEME FOR OUTSOURCED DATA SHARING IN CLOUD

ABSTRACT

Cloud computing provides an easy and cost-effective way to share data with others. As the data is stored on remote servers in the cloud, the data's confidentiality is ensured. Various methods are utilised to improve access control on the data being shared in order to secure the important and sensitive information. Cypher text-policy attributes-based encryption (CP-ABE) may improve the usability and safety of these methods. While data confidentiality is a primary concern in traditional CP-ABE, user privacy has recently emerged as a critical problem. Data confidentiality and user privacy are both protected by CP-ABE's disguised access policy. Most current systems, however, are not very effective because to their high communication overhead and computational expense. In addition, the majority of these works do not think about the issue of privacy leaking during the authority verification phase or take authority verification into account. This research introduces a privacy-preserving CP-ABE system with efficient authority verification to address the issues outlined above. The size of its secret keys is also kept constant. Under the decisional n-BDHE issue and decisional linear assumption, the suggested approach provides selected security. The computational findings validate the advantages of the proposed method.

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8.CONCLUSION

We put forward a CP-ABE strategy in the canonical setting that protects user anonymity. Compared to other methods, the one provided here offers various benefits, such as private keys of constant size and brief ciphertexts. And just four pairing calculations are required for decryption. Selective security and privacy in an optimal order group are both attained by the suggested approach. To demonstrate this, we use a common model and demonstrate that the proposed scheme's security can be boiled down into the decisional n-BDHE along with the DL assumptions. The suggested approach also enables authority verification without compromising user confidentiality. However, this new system depends on a flimsy security model and only supports the "AND" policy. Future research should focus on how to build a robust, secure HP-CP-ABE system with a more adaptable access policy.

MONITORING ONLINE TEST THROUGH DATA VISUALIZATION

A Project Report submitted in partial fulfillment of the requirements
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in

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by

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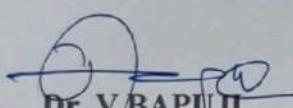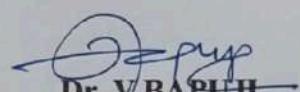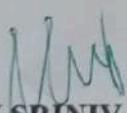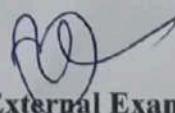
ABSTRACT

The main goal of this project is about the system to let tutors monitor several important aspects related to online tests, such as test quality. This project includes the logging of important data related to learner interaction with the system during the execution of online tests. This project is developed to implement online tests for different technical languages and exploits data visualization in the form of graphs to highlight information useful to let tutors review and improve the whole assessment process. This project includes online tests framing for different technologies. This project can used by students and teachers, it does require background knowledge and technical knowledge and accessing the internet, who wants to write online tests. The students must register to write online tests. In particular, by analyzing the data visualization charts, we have detected several previously unknown test strategies used by the learners.

CHAPTER-10

CONCLUSION

In order to take the online test, educated persons might utilise the "MONITORING ONLINE TEST THROUGH DATA VISUALISATION" initiative.Graphs and pie charts will be used to depict the outcomes of this project.The final reports are written based on the needs of the customer.The software was designed with the user in mind, and all the necessary support is included at various points.The Online Exam Data Visualisation project may be simply utilised in the process of decision making.

LIMITATIONS

Exams may be taken by both students and teachers in this scenario.
Users must first sign up in order to take the test.
The test takers will get their scores in the form of pie charts and bar graphs.

IMPROVEMENTS IN THE FUTURE

Future improvements to my project will make it possible for anybody with the right mix of aptitude, technical, and general knowledge to create it.

In the future, we want to expand our coverage to include even more informative articles for your perusal.

NORMALIZATION OF DUPLICATE RECORDS FROM
MULTIPLE SOURCES

A Project Report submitted in partial fulfilment of the requirements
for the award of the degree of
in

MASTER OF COMPUTER APPLICATIONS

by

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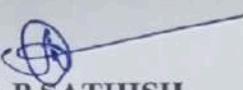
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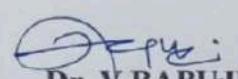
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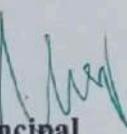
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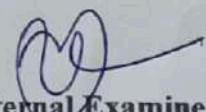
ABSTRACT

Data consolidation is a challenging issue in data integration. The usefulness of data increases when it is linked and fused with other data from numerous (Web) sources. The promise of Big Data hinges upon addressing several big data integration challenges, such as record linkage at scale, real-time data fusion, and integrating Deep Web. Although much work has been conducted on these problems, there is limited work on creating a uniform, standard record from a group of records corresponding to the same real-world entity. We refer to this task as record normalization. Such a record representation, coined normalized record, is important for both front-end and back-end applications. In this paper, we formalize the record normalization problem, present in-depth analysis of normalization granularity levels (e.g., record, field, and value-component) and of normalization forms (e.g., typical versus complete). We propose a comprehensive framework for computing the normalized record. The proposed framework includes a suit of record normalization methods, from naive ones, which use only the information gathered from records themselves, to complex strategies, which globally mine a group of duplicate records before selecting a value for an attribute of a normalized record. We conducted extensive empirical studies with all the proposed methods. We indicate the weaknesses and strengths of each of them and recommend the ones to be used in practice.

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8.CONCLUSION

In this paper, we examined the difficulty of normalising a set of data that all pertain to the same physical item. We displayed three granularities (record, field, and value component) and three levels of normalisation (standard, comprehensive). We provided a computational framework for each kind of normalisation that includes single and multiple procedures. The optimal normalised record or normalised field value was selected using one of four single-strategy techniques based on frequency, length, centroid, and characteristics. To implement a "multi-strategy." or many approaches at once, we used metasearch-based result merging models to aggregate the results of several different kinds of research. We looked at both the record normalisation and the field normalisation that are part of the standard normalisation. In order to produce considerably improved normalised field values, we first honed in on attention values in fields and then developed algorithms for extending acronyms and mining value components. After a prototype was created, we tested it using data collected in the actual world. The results of the studies validate the viability and efficacy of our approach. Our method outperforms the state-of-the-art by a wide margin. In the future, we plan to go on with our research along these lines. To get started, it's recommended to conduct additional experiments across various data sources. This is difficult at now since there aren't enough data to work with. The second phase is to investigate how to efficiently incorporate a human-in-the-loop component to the current system, since automated solutions alone will not be able to accomplish 100% accuracy. Third. you should make solutions that can be applied to numerical and other complex quantities.

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# SPREADING FUZZY RANDOM FORESTS WITH MAP REDUCE

A Project Report submitted in partial fulfillment of the requirements
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in

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by

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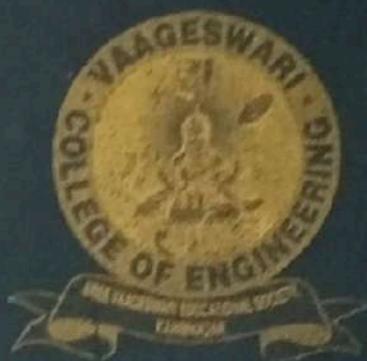
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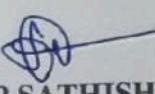
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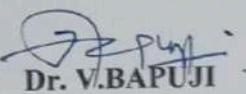
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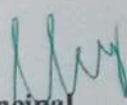
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ABSTRACT

Recent studies have shown that random forests are among the most efficient classifiers for the money. It has also been proposed that fuzzy random forests be used to leverage the adaptability of fuzzy decision trees when dealing with uncertain data. Regular implementations of classifiers aren't optimal when the number of training sets grows rapidly, as it does with Big Data, and fuzzy random forests are no exception to this rule. In this book, we propose using fuzzy random forests in a distributed setting by including a method for generating fuzzy partitions of continuous characteristics prior to engaging in decision tree learning. Combining the Map Reduce programming paradigm with the Apache Hadoop framework infrastructure are the backbone of the implementation. It is shown that this model may naturally include an efficient distribution approach for the computation, resulting in strong scalability metrics. In the present environment of more frequent data deluges, the unique distributed method makes fuzzy random forests capable of handling extraordinarily huge data sets, throughout the training and labeling phases respectively.

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9.CONCLUSION

The development of appropriate distributed algorithms that can harness the processing capacity of several computer units is essential for extracting value from large datasets. In this book, we offer a MapReduce version of a fuzzy random forest (FRF), and discuss how the FRF learning process may be accelerated by using this programming paradigm. We show that our MapReduce FRF implementation outperforms its non-fuzzy counterpart somewhat in terms of classification accuracy and is able to deal with noisy training sets by experimenting with popular big data benchmarks. Future research is likely to lead to enhanced fuzzy partitions with continuous features, and their use in cluster computing frameworks will likely increase as a result. will be considered from the perspective of load distribution.

PROFIT MAXIMIZATION FOR CLOUD BROKERS IN CLOUD COMPUTING

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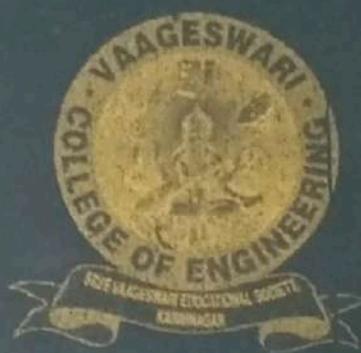
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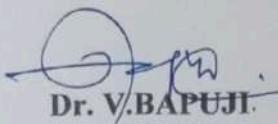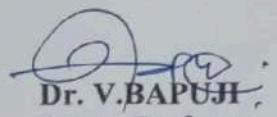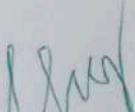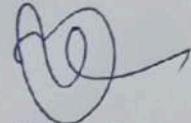
ABSTRACT

Along with the development of cloud computing, more and more applications are migrated into the cloud. An important feature of cloud computing is pay-as-you-go. However, most users always should pay more than their actual usage due to the one-hour billing cycle. In addition, most cloud service providers provide a certain discount for long-term users, but short-term users with small computing demands cannot enjoy this discount. To reduce the cost of cloud users, we introduce a new role, which is cloud broker. A cloud broker is an intermediary agent between cloud providers and cloud users. It rents a number of reserved VMs from cloud providers with a good price and offers them to users on an on-demand basis at a cheaper price than that provided by cloud providers. Besides, the cloud broker adopts a shorter billing cycle compared with cloud providers. By doing this, the cloud broker can reduce a great amount of cost for user. In addition to reduce the user cost, the cloud broker also could earn the difference in prices between on-demand and reserved VMs. In this paper, we focus on how to configure a cloud broker and how to price its VMs such that its profit can be maximized on the premise of saving costs for users. Profit of a cloud broker is affected by many factors such as the user demands, the purchase price and the sales price of VMs, the scale of the cloud broker, etc.. Moreover, these factors are affected mutually, which makes the analysis on profit more complicated. In this paper, we firstly give a synthetically analysis on all the affecting factors, and define an optimal multiserver configuration and VM pricing problem which is modeled as a profit maximization problem. Secondly, combining the partial derivative and bisection search method, we propose a heuristic method to solve the optimization problem. The near-optimal solutions can be used to guide the configuration and VM pricing of the cloud broker. Moreover, a series of comparisons are given which show that a cloud broker can save a considerable cost for users.

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9.CONCLUSION

In this article, we examine the issue of how cloud brokers might maximise their profits. A A cloud broker is a company that mediates between cloud service providers and their customers by acquiring long-term reserved instances from cloud providers and reselling them as on-demand virtual machines. discount from the cloud providers' standard rates and with more granular billing units (BTUs). Queueing theory is used to represent the virtual resource platform, and a profit maximisation issue is constructed by analysing various elements that impact profits and their relationships. For optimal results, we employ partial derivative and the bisection method. If we take the ratio of user cost reductions is calculated and the profit trend over time is analysed using a series of computations.

Given its prevalence in the real market, the linear price-demand price function is used here to calculate the broker's profit. However, the supply and demand curve may look quite different across various cloudmarkets.Therefore, we will continue to investigate increasingly advanced price-demand curves.

RESULTS ANALYSIS AND DISTRIBUTION OF MEMO

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This is to certify that the Major Project work entitled "**RESULTS ANALYSIS AND DISTRIBUTION OF MEMO**" is carried out by **BASA DIVYA SRI (19S41F0023)** in partial fulfillment for the award of degree of **Master of Computer Applications**, Jawaharlal Nehru Technological University, Hyderabad during the academic year 2019-2023.

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ABSTRACT

The primary goal of this project was to provide a tool to assist professors in clarifying their memoranda to students on a semester-by-semester basis. Keeping memoranda secure in transit. The application's primary function is to save and distribute memoranda and analysis of findings. The results are broken down by topic and total number of pupils who were given the green light. Students' names and the date they received the memos are recorded in the module for dissemination.

9.CONCLUSION

Our work is a web-based application written in Java. The application's primary function is to save and distribute memoranda and analysis of findings. The results are broken down by topic and total number of pupils who were given the green light. Students' names and the date they received the memos are recorded in the module for dissemination. The administrator will distribute the memos to the appropriate pupils after confirming their identities using a picture and one-time password (OTP) delivered to their mobile phones.

IDENTIFICATION OF PLANTS LEAFS DISEASES
USING MACHINE LEARNING ALGORITHMS

A Project Report submitted in partial fulfillment of the requirements
for the award of the degree of
in

MASTER OF COMPUTER APPLICATIONS

by

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2020-2022

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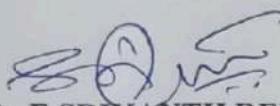
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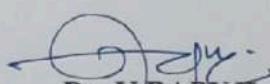
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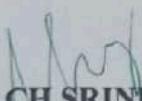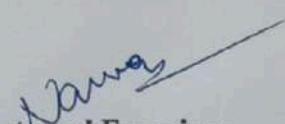
ABSTRACT

One of the main variables affecting agricultural yield loss in crop production and agriculture is the identification and detection of plant diseases. Plant disease research focuses on any observable characteristics in any section of the plant that allow us to distinguish between two plants, technically any spots or colour variations. One of the most important factors in the growth of agriculture is plant sustainability. Correctly identifying plant diseases is exceedingly challenging. It takes a lot of effort and skill to identify a disease, as well as extensive knowledge of plants and studies on the detection of certain diseases. Consequently, plant disease detection uses image processing. The methods of picture acquisition, image extraction, image segmentation, and image pre-processing are used for illness detection. Understanding the training data and incorporating it into models that should be helpful to people is the basic goal of machine learning. Therefore, plant diseases can be detected using machine learning. It has aided in making wise decisions and forecasting the vast amount of data generated. Classification factors include the colour of the leaves, the severity of the damage, and the location of the ill plant leaf. In this article, we looked at various machine learning algorithms to diagnose various plant leaf diseases and determine which had the highest accuracy.

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10.CONCLUSION

The recommended strategy is a valuable one that has the potential to improve performance. The K-mean technique performed poorly in both global clusters and clusters with varying data sizes and densities. As a result, if we use numerous SVM classes after clustering, we get more accurate results. The performance study shows that the hybrid algorithm is superior than the performance of the separate methods. This strategy has been shown to be effective in training and testing large datasets for illness prediction. Now in everyday life, this sort of method is really handy. This suggested technology will be particularly useful in the agricultural and medical areas as it would allow for the use of very low doses of pesticides on plants.

FUTURE WORK

• Improved segmentation approaches can be developed for the algorithm in the future. Therefore, there is room for development in the methods.

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ADAPTIVE BLOCK CHAIN -BASED FRAMEWORK
TRANSACTION VALIDATION FOR DATA ASSURANCE

A Major Project Report submitted in partial fulfillment of the requirements
for the degree of Master of Computer Applications

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TRANSACTION VALIDATION FOR DATA ASSURANCE

*A Major Project Report submitted in partial fulfillment of the requirements
for the degree of Master of Computer Applications*

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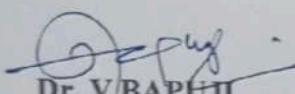
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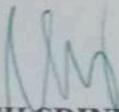
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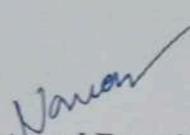
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ABSTRACT

A fundamental impediment to information sharing is a lack of trust. Data sharing is problematic for many people due to the high learning curve required to comprehend data trust frameworks. Data consumers have expressed concerns regarding the reliability and integrity of the supplied information. The concept of data trust encourages consumers to be open about how they use their data, which fosters data sharing. Using blockchain technology, many parties can agree on a single, immutable record. As a result, a system of unfettered and open government emerges. This document proposes a comprehensive architectural framework based on blockchain technology to support reliable data sharing. The platform examines the data sets that arrive and offers information about their origin and purpose. A complete evaluation system has been designed to analyze the reliability, acceptability, and consistency of data. In addition, we provide a method for computing the estimated trust value to determine the appropriate number of transaction validators. The data trust structure shown here will protect your data from the time it is acquired until it is used. As a result, both data makers and users can relax. The experimental results show that the suggested system can handle a large number of events with little to no delay increase.

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CHAPTER-8
CONCLUSION

This technique takes into account the provider's trustworthiness, the value of the suggestion, and the precision of the data. Data users should pay extra attention to ensuring that all publicly available data sets have undergone frequent quality reviews and updates. Smart contracts are used in the proposed architecture to offer data owners with an automatic, safe, and transparent method of establishing who has access to their data. Only the organizations who truly own the data have complete control over their data assets and can make independent judgments about who has access to which data. The auditability and provenance of blockchains enable data owners to track who has accessed their information and when, as well as who has made any changes. By reviewing the collected data, you can learn about potential dangers and acquire a comprehensive view of the system. It makes it easier to report suspicious requests and identify protocol violations. The findings of the study show that the system can handle a large volume of transactions involving the installation, removal, and restoration of trust parameters.

There will be incentives in the form of reward points.

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DETECTING SOCIAL MEDIA FAKES USING

MACHINE LEARNING AND NLP

A Major Project Report submitted in partial fulfillment of the requirements
for the degree of Master of Computer Applications

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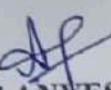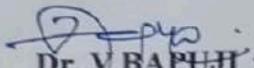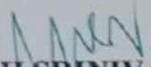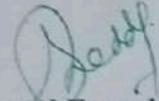
ABSTRACT

A sizable section of the populace uses social networking sites nowadays. The ease with which users can quickly create an account on social networking sites and engage in conversation with others at any time of day is a contributing factor to their increasing popularity. The benefits of utilizing social networking services exceed some privacy concerns. If we are to identify people who spread false information about security risks on social media, we need to classify their identities. It is easier to spot phony social media accounts when they are properly categorized. Previously, several categorization algorithms were used to identify fraudulent social media profiles. Making it simpler to identify phony social networking sites is vital, though. Our results suggest that applying ML and NLP algorithms could aid in the identification of fake profiles. We can use Support Vector Machines (SVMs) or Naive Bayes classifiers in our research.

1

CHAPTER-8
CONCLUSION

The findings of this study lend support to the notion that machine learning approaches could be used to NLP. These strategies make it easier to identify phony social media profiles. We were able to detect fraudulent profiles using Facebook's data mining. The data was cleaned up using natural language processing (NLP) techniques before being classified using machine learning techniques such as Support Vector Machines (SVM) and Naive Bayes. This research technique makes it much easier to find precise details in the report.

EFFICIENT AND SECURE RE-ENCRYPTION FOR

CLOUD DATA DUPLICATION

A Major Project Report submitted in partial fulfillment of the requirements
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ABSTRACT

These days, almost all of the best cloud storage services use data compression. Making adjustments is essential to keep up with the exponential rise of data. You can choose from a range of safe data deduplication options with the outsourced storage model, and these solutions can be tailored to meet different regulatory compliance requirements. After studying dynamic ownership systems for a long time, people have created some really good strategies for handling them. The fact that they securely and effectively re-encrypt data is the most important component. This study's main goal is to look into a re-encryption de-duplication storage system. The purpose of the stub-reserved attack was to undermine the recently published lightweight rekeying-aware encryption deduplication technique called REED. Additionally, we show how to safely eliminate extraneous data by generating random bits by combining the Bloom filter with the convergent all-or-nothing transform (CAONT). This method's effectiveness is demonstrated by the use of re-encryption. Our suggested solution can preserve data secrecy and defend against stub-reserved attacks due to the strength of the one-way hash function. The requirement for data owners to re-encrypt the entire package is likewise removed by the Confidentiality-As-A-Service Network Token (CAONT). Therefore, the system can save time and money by only re-encrypting a subset of the data. We've conducted thorough testing to show that our re-encryption method is secure and effective.

1

CHAPTER-8
CONCLUSION

The goal of HealthDep's creation was to reduce redundant data in cloud-based healthcare apps. This is a novel approach to deduplicating electronic medical records (EMRs) that is secure and secured. HealthDep is resistant to brute-force assaults since it runs on users' mobile devices rather than a centralized server. MLE credentials and delegation are protected at the patient's endpoints. Patients who see doctors in the same department are more likely to have multiple EMRs than patients who see doctors in other departments, based on empirical studies on EMRs in real-world healthcare systems. This data is being used by HealthDep to assist the server in locating and eliminating unneeded EMRs. HealthDep is an app designed to demonstrate its usefulness. Several testing have shown that HealthDep is faster and more secure than competing applications.

MODELING AND IDENTIFICATION OF HETEROGEOUS INFORMATIONS NETWORK-BASED CYBER THREAT INTELLIGENCE(HINTI)

A Major Project Report submitted in partial fulfillment of the requirements for the degree of Master of Computer Applications

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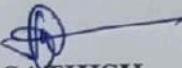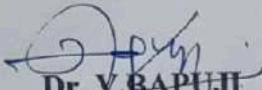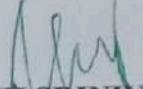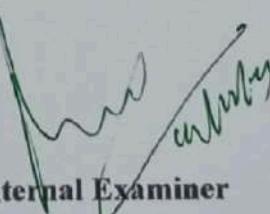
ABSTRACT

Cyberattacks are becoming more sophisticated, well-thought-out, and destructive, which makes them more difficult to identify. Open CTI sharing is increasing as businesses all over the world want to keep up with the rapidly changing cyber threat landscape and fortify their own cyber defenses. CTI modeling is complex due to the multiple connections that exist between CTI and other elements of the cyber threat ecosystem. It is challenging to do autonomous risk category analysis on infrastructure nodes, especially for early warning, because cyber hazard nodes in CTI lack names. In order to tackle these problems, we created HinCTI, a useful method for recognizing different types of cyber dangers and modeling cyber threat data. Initially, we create a threat intelligence metaschema to confirm the semantic consistency of our architecture. Typically, information about possible cyber hazards is stored in an HIN. It consists of multiple interconnected nodes with various types and functions. Next, all of the threat infrastructure's meta-paths and meta-graphs are combined to form the Threat Infrastructure Similarity (MIIS) measure. In addition, we demonstrate the use of a Heterogeneous Graph Convolutional Network (GCN) based on MIIS to the detection of threat categories linked to infrastructure nodes in the context of Cyber Threat Intelligence (CTI). Our suggested approach limits the risk of overfitting while classifying infrastructure-related hazards using a hierarchical regularization technique. This is the first attempt to develop Cyber Threat Intelligence (CTI) models based on Heterogeneous Information Networks (HIN). Additionally, we demonstrate the application of Heterogeneous Graph Convolutional Networks (GCN) for threat detection in infrastructure nodes. HinCTI used real-world data to conduct several investigations. The outcomes of these investigations demonstrate that our suggested approach is superior to the baseline techniques in use today for risk classification. Because to our work, security specialists now require less time and effort to learn. We also protect companies from online threats.

1

CHAPTER-8
CONCLUSION

A hybrid information network (HIN) architecture is occasionally used to identify potential problems while constructing Critical Technical Infrastructure (CTI). We obtain the phrase "Hazard Identification and Control Technology Integration" (HIN CTI) from this precise circumstance. If nodes with unclear-semantics cyber-threats are introduced, our meta-schema, meta-paths, and meta-graphs can be used to characterize how CTI acts on HIN. The authors demonstrate how to discover possible malware access points in a network's underlying architecture using a heterogeneous Graph Convolutional Network (GCN) and the Mutual Information-based Influence Score (MIIS). In order to avoid overfitting, we employ hierarchical regularization in our object recognition algorithm. The Hin CTI system employs our recommended approach, which provides more accurate risk classification utilizing real-world data than current state-of-the-art baseline systems. Additional data analysis is required to validate our technique and refine the HIN's node properties and connections. Disorganized reports can be transformed into a tree structure with nodes and linkages using natural language processing (NLP) and topic modeling. Improving data architecture will aid in the detection of hidden threats.

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EFFICIENT AND SECURE MOBILE CLOUD STORAGE

WITH USER PRIVACY PROTECTION

A Major Project Report submitted in partial fulfillment of the requirements
for the degree of Master of Computer Applications

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EFFICIENT AND SECURE MOBILE CLOUD STORAGE WITH USER PRIVACY PROTECTION

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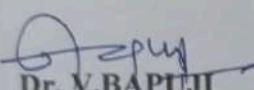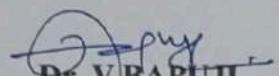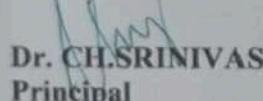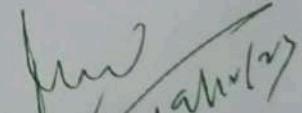
ABSTRACT

Using mobile cloud storage (MCS), users can access their cloud-hosted data from any mobile device that can connect to the internet. In this study, we propose a secure, dependable, and private method for mobile devices to store data safely on cloud platforms. Using secure and reliable input methods is a crucial aspect of the overall approach for preserving the privacy and security of user information. The primary purpose of this research is to investigate an unconscious selection and update (OSU) mechanism designed specifically for mobile cloud storage. Because the OSU approach employs additive encryption, each layer of the onion structure is the same width. The proposed technique claims to establish a secure and dependable method for changing and accessing protected information stored in the cloud while preserving their integrity.

Processing power is reduced when a compact protected vector is employed on the client side. In the instance of MCS, this study is more relevant and valuable than others. In an educational setting, challenges may develop when using a complicated data structure with a restricted number of pieces, performing client-side activities fast on the computer system, adhering to additive homomorphism constraints, and ensuring that communication latency remains constant. In the suggested method, "verification chunks" are employed to improve security and speed up the verification process. This is especially important for potentially risky cloud-based operations.

The suggested solution was more effective than traditional methods at keeping data safe in both local and remote situations. Before I can offer assistance, I must do a number of specified tasks. Because so many people use mobile phones, cloud computing has grown in popularity as a helpful way to store and manage data. There are numerous advantages to adopting the cloud, which allows consumers to easily and inexpensively migrate their data to an external storage system.

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CONCLUSION

To improve keyword searches and information exchange, this study suggests the cipher text-policy attribute-based technique (CPAB-KSDS). The CPAB-KSDS approach was built, and its compliance with the CCA's security requirements in a random oracle environment was proven. Results from performance and property analyses prove the design's worth and usefulness. There has been open and difficult research into an attribute-based encryption that facilitates keyword searches and data exchange without the PKG throughout the sharing phase [36]. We found that this problem can be fixed. Several new difficulties have emerged as a result of our investigation, including the need to create an oracle-free CPAB-KSDS system and improve the quality of keyword searches.

AN EFFICIENT SINGLE INSTANCE SCHEME WITH USER AUTHENTICATION TO CLOUD DATA

A Major Project Report submitted in partial fulfillment of the requirements for the degree of Master of Computer Applications

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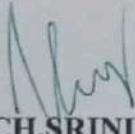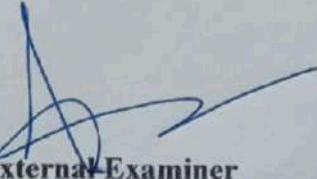
ABSTRACT

One of the fundamental ideas of cloud computing is the ability to store data in an online environment and grant authorized users access to it. Secure data duplication in cloud storage is becoming more common as it involves the reproduction of a smaller amount of protected data. As a result, there is no need for additional storage space or additional talking time. Several secure data duplication methods address critical issues such data security, tag consistency, access control, and resistance to brute-force attacks. Nonetheless, our analysis shows that none of these systems can satisfy all four of these characteristics at the same time. This article will look at a well-known approach for getting around this limitation by using compression. Furthermore, our approach provides specific and concise norms for providing power. The data owner may authorize the cloud service provider to do data cleansing activities, which are primarily focused on decreasing duplicate entries while protecting user security and privacy. Our secure deduplication technology is well known for ensuring the integrity of all identifiers, maintaining data security, and effectively combating brute-force assaults. A thorough study of the safety issues associated with the method was undertaken prior to arriving at this outcome. Extensive simulations show that our proposed system outperforms alternative approaches, proving the efficacy of our strategy. The service offers cost-effective computing, networking, and data storage solutions, as well as a number of other benefits.

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CHAPTER-8

CONCLUSION

The study's novel and very efficient auditing technique is termed "From the Cloud to the Fog." Despite not meeting the stated auditing requirements, our system's computational and communication capabilities outperform those of Tian et al.'s solutions. According to the findings of this study, computers are capable of efficiently addressing and resolving a wide range of difficulties. Fog-to-cloud computing is becoming more popular as a way to facilitate data storage in this manner.

EVALUATION OF USER RELIABILITY THROUGH SOCIAL RATING AND RECOMMENDATION SYSTEMS

A Major Project Report submitted in partial fulfillment of the requirements
for the degree of Master of Computer Applications

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ABSTRACT

Because of their ability to improve many aspects of life, social networks have become an integral part of our daily lives. The significance of evaluations in the context of education, particularly on social media platforms, should not be overlooked. These elements' absence would considerably complicate the fabric of existence. Individuals must develop trust in the data obtained from social media platforms in order to use it reliably. The security and integrity of these systems must be preserved in order to prevent them from unwanted access and improper use. Because of the presence of incorrect evaluations, the reputation system's integrity is severely jeopardized. Trust management is a critical component in preventing authorized users from exploiting networks. Each user is assigned a confidence score, which serves as a criteria for prioritizing the information that is presented to them. Because of the inherent complexity of distinguishing between benign and hostile operations, automating trust management in Secure Routing Systems (SRS) offers a significant challenge. The existing literature provides several assertions; however, no agreement on the best effective methodology has been found. This study proposes a mechanism for lowering the occurrence of incorrect evaluations and ratings. The proposed system combines the use of proof theory, fuzzy logic, and a trust management framework based on multicriteria multiexpert decision making. The study also investigates the concepts of content-dependent and temporal crown consensus. When compared to established methodologies, the findings indicate that the methodology we developed has a considerably higher level of efficacy in preventing sockpuppet attacks.

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CONCLUSION

Implementing an automated system that evaluates user credibility based on their online behavior is one potential answer to the difficulty of retaining trust in virtual communities. By taking this method, one hopes to avoid the difficulties that come from the fundamentally subjective nature of trust evaluations and the identification of harmful behavior. Given the fundamentally subjective and ambiguous character of social network research, the use of fuzzy theory was essential in order to grasp the data. A multi-criteria multi-evaluator (MCME-DM) method that delivers the highest accurate confidence intervals was created using evidence theory. We demonstrate that the inclusion of multiple factors considerably simplifies the process of spotting bogus reviews by conducting extensive tests using the YELP and Amazon databases. Our strategy was also compared to the most recent developments in research at the time. When compared to the others, our technique performed better on both the 20% and 100% sample sizes.

FUTURE ENHANCEMENT:

Our future research will focus on the privacy concerns raised by the implementation of these technologies. In doing so, we shall take into account significant regulatory frameworks such as the European Union's General Data Protection Regulation (GDPR). We propose to examine the repercussions of continually attacking concepts in order to improve the security of these systems. Conversely, supporters of D-S aggregation argue that the approach's use of data from questionable sources does not result in illogical results [61, 62]. Errors in data collecting have gotten easier to detect in recent years. The application of principles from D-S theory, especially specific formulations of mass functions, has been a creative technique that has considerably improved this advancement. According to reports, the evolved combination rule (ECR) was reviewed in this case. Following that, the concept's practical ramifications will be examined.

PRIVACY-AWARE PERSONAL DATA STORAGE (P-PDS): SAFEGUARDING YOUR PRIVACY FROM THIRD-PARTY APPLICATIONS

*A Major Project Report submitted in partial fulfillment of the requirements
for the degree of Master of Computer Applications*

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ABSTRACT

In recent years, PDS has shifted its focus from servicing a broad spectrum of consumers to meeting the particular needs of each individual user. This invention has resulted in substantial changes in how people perceive and manage their personal information. Individuals have the option of selectively disclosing their data to external entities while preserving ownership, maintaining its confidentiality, or archiving it in a repository to allow proper analytical tools to use it. The protection of data security and the fulfillment of users' privacy needs have emerged as the two most pressing challenges in the field of Personal Data Systems (PDS) research. On the contrary, the goal of this initiative is to build a Privacy-Enhancing Data Sharing (PDS) system that safeguards users' privacy while evaluating third-party requests for access to user data. As indicated by the preliminary results provided in [1,] the P-PDS under consideration employs a semisupervised learning process to produce one that can effectively determine whether an access request has been granted or rejected. This research suggests a significant change of the learning process within the P PDS to boost its efficacy. Training duration will be reduced, and conflicting access requests will be handled more carefully as a result of the suggested changes. The evaluations were carried out by a group of 360 evaluators, each of whom worked independently. In order to authentically portray the topic matter, the dataset was painstakingly vetted. The results indicate that the proposed methodology is viable.

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CONCLUSION

In this article, we provide an overview of a data storage method that offers consumers control over who has access to their information and how that information is used by others. Methods of active and passive learning are utilized within the system, and the confidentiality of user information is maintained at all times. A collection of genuine data as well as tests conducted by a group of three hundred and sixty raters were utilized in order to provide support for the findings that were presented in the research article. The findings provide evidence that the method that was proposed is effective. There are many different ways that one can accomplish their objective. The fundamental objective of this investigation is to determine whether or not P-PDS can be scaled up within the framework of the Internet of Things. The principal purposes of this investigation are to conduct an examination of admissions applications and to determine the relative significance of various environmental and individual factors. We think that if we combine P-PDS with remote computing and data storage, we can provide better protection for personal information.

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

A Major Project Report submitted in partial fulfillment of the requirements
for the degree of Master of Computer Application

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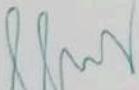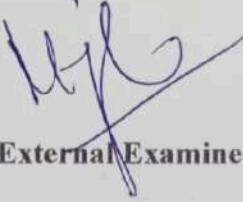
ABSTRACT

User reviews are a significant tool for e-commerce businesses since they have the ability to affect consumers' emotions, product preferences, and behaviors. The information displayed here may include user comments and points of view on a variety of issues. Numerous research have connected a more trustworthy relationship to shared worldviews. In this research, we argue that using online markets to seek and accept advice and opinions from strangers is a sign of consumer maturity. To determine the degree of similarity and trustworthiness among users, an approach based on sentiment similarity analysis of E-commerce system assessments is provided. Two people can trust each other in a direct relationship; in an indirect relationship, a third party acts as a middleman. We provide an entity-sentence word matching approach for determining entity commonality. The strength of a couple's attachment to one another can indicate their level of trust in one another. The trust spread is calculated using the transitivity property. We demonstrate how the proposed trust representation model, in conjunction with the shortest path, can be used to estimate the trust level. A huge dataset of e-commerce website evaluations is gathered to measure the value of the models and algorithms. The findings imply that sentiment similarity analysis can increase consumer trust in online markets.

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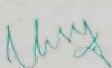
CHAPTER-8
CONCLUSION

Determine how people's trust in online markets has evolved over time. In evaluating each individual, neither explicit nor tacit trust is taken into account. Rating categories are formed based on the spectrum of emotions elicited in the observer. The most accurate portrayals of occurrences in the ratings can be determined by mining entity-sentiment word pairs. By comparing the responses of various individuals to similar events, you may be able to choose whom to trust.

There are separate sections devoted to the evaluation of mental and emotional functions. These two factors can aid in the exploration of emotions and direct trust. In this paper, a weighted trust graph model is built to determine the distribution of trust. Implementing the aforementioned principles may result in enhanced self-confidence and autonomy. Individuals who were previously skeptical of one another can develop a better capacity for trust when an impartial third party provides support. To evaluate the reliability of a network, an O(V2) time-consuming augmented shortest path method can be used. The network is made up of V nodes in total. The growing number of digital trading platform users complicates the goal of algorithm performance enhancement.

It is vital to tell a tale to get the trust of a customer. There are specific tactics that may jeopardize the confidence built through user acquaintance. This correlation warrants further investigation. Because not all customers express their ideas about a product in writing, the accessible information is not always copious. Many research have been conducted to determine the type and length of consumer expectations regarding e-commerce. Despite the scarcity of evaluations, customers' levels of trust in individuals can vary depending on their specific needs. The identification of trust beneficiaries will become more important as regulatory control develops. More research is needed to establish the best way to incorporate new data into instruments used to assess customers' impressions of product names, categories, and other factors. Additional research is required to evaluate the degree of resemblance between previous user trends.

ENSURING PHOTO PRIVACY ON SOCIAL MEDIA:
BUILDING TRUST MODEL

A Major Project Report submitted in partial fulfillment of the requirements
for the degree of Master of Computer Applications

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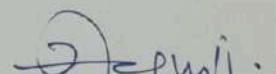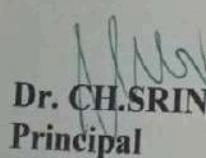
ABSTRACT

In order to maintain relationships with acquaintances and coworkers, individuals engage in the practice of sharing photographs on their social media platforms. The visual representation contains a considerable amount of data, which presents an opportunity for malicious actors to obtain sensitive confidential information regarding the individuals depicted. In recent times, a considerable amount of academic discourse has surrounded efficacious approaches to resolving the problem of privacy infringement brought about by the dissemination of images. Publishers have an obligation to consider the privacy concerns of all pertinent individuals prior to disseminating an image to a wide audience. This research provides users with a secure method for disseminating photographs that multiple individuals share. The primary objective is to obfuscate the subject matter of the photograph, thus reassuring potential subjects whose privacy may have been significantly infringed upon due to its distribution and assuring them that there is no cause for apprehension regarding potential exposure. The level of trust an individual has in the person managing the image influences the extent to which that individual is inclined to disclose private information to another individual. The infringement upon privacy diminishes the reader's inclination to place trust in the publication. The author specifies a strict time limit for the completion of the procedure required to render photographs anonymous. Our proposed method employs a greedy algorithmic strategy to modify the threshold value. Its objective is to strike a balance between safeguarding user privacy and fostering collaboration. The outcomes of the simulation demonstrate that the trust-based photo sharing system reduces the likelihood of data leakage. Furthermore, the proposed approach for manipulating the threshold effectively provokes the desired response from the user.

1

CHAPTER-8
CONCLUSION

When multiple persons utilize online social networks (OSN) to access the same photo, an individual's right to private information may be put in jeopardy. The current research investigates a system that enables photo sharing and makes use of trust ratings to establish the appropriate level of privacy protection. There is a time limit on how long the service provider will store images. The confidence level of the user will determine how the service will calculate the potential threat to an individual's privacy posed by the sharing of photographs. Before erasing a user's account, the service provider investigates the privacy violation to determine if it meets the publisher's requirements. Publish the image, even though doing so may cause people to be concerned about their privacy and may be harmful to the magazine's reputation. The increased possibility of the newspaper maintaining the privacy of its readers is a direct result of the newspaper's implementation of a trust-based system. On the other side, anonymization gets rid of all of the data that is accessible. By utilizing our platform, publishers and service providers may improve both their users' privacy and their overall experience. A comparison is made between the suggested photo-sharing mechanism and the threshold-adjustment approach by using both simulated and real-world network data as the basis for the comparison. According to the findings of the study, one way to address concerns pertaining to individuals' right to privacy is to employ anonymization strategies. Publishers want to determine a customizable threshold value that strikes a compromise between user privacy and publication considerations for photos. This research investigates the process of knowledge sharing between two different people. One-to-many scenarios are an absolute necessity in situations in which users often trade photos with a number of other recipients. Given that the publisher aims to impose a restriction in order to achieve the greatest possible increase in immediate revenue, the strategy that has been suggested would appear to be a financially viable choice. The current barrier prevents the benefits of disclosure from being realized because a breach of one's privacy is linked to a loss of trust. The precision of the calibration could be improved with additional investigation.

EFFICIENT MESSAGE AUTHENTICATION FOR
PRIVACY PRESERVING INTERNET OF THINGS

A Major Project Report submitted in partial fulfillment of the requirements
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DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

CERTIFICATE

This is to certify that the Major Project work entitled **"EFFICIENT MESSAGE AUTHENTICATION FOR PRIVACY PRESERVING INTERNET OF THINGS"** is carried out by **MUPPU SANDHYARANI (21S41F0037)** in partial fulfillment for the award of degree of **Master of Computer Applications**, Jawaharlal Nehru Technological University, Hyderabad during the academic year 2021-2023.

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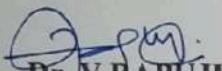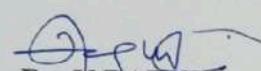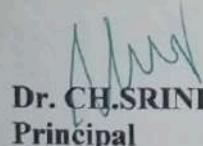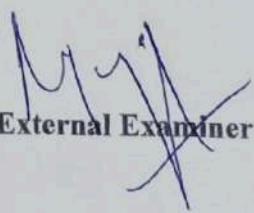
ABSTRACT

What potential changes might the Internet see in the future years? The proliferation of Internet of Things (IoT) devices has resulted in a significant increase in the amount of data produced. The implementation of this knowledge has the potential to improve people's quality of life by utilizing machine learning algorithms and big data analytics approaches. Machine-to-machine (M2M) connections must be upgraded and efficiently leveraged for the Internet of Things (IoT) to be successfully adopted. Given the increasing risk of invasions, it is necessary to engage in extensive discourse on data security and privacy issues. Nonetheless, because of the large number of IoT devices and their limited resources, developing efficient and flexible security methods for Internet of Things (IoT) systems presents tremendous challenges. This article introduces novel techniques to analyzing the security of Internet of Things (IoT) networks. The proposed methodology prioritizes user identification protection while attempting to strike a good balance between efficiency and security. The unique methodology outperforms its predecessors in terms of efficiency and adaptability. This is due to its adaptability in supporting numerous cryptographic configurations for Internet of Things (IoT) devices, allowing it to be used in both offline and online settings.

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CHAPTER-8
CONCLUSION

In spite of its constraints, the study made an effort to locate locations where private conversations might be supported by evidence. In addition, the research team that we have assembled has been successful in developing a remedy for the aforementioned problem that is both economical and effective in its application. An novel message-checking system has been created in order to enable the integration of various security measures into devices that are connected to the Internet of Things (IoT) and to improve the protection of user data. Because of this, it is possible to develop an interconnected system that is made up of intelligent objects that are able to communicate with one another via the Internet of Things (IoT). The utilization of both offline and real-time computations led to the production of superior results as well as an implementation that covered more ground.

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

A Major Project Report submitted in partial fulfillment of the requirements for the degree of Master of Computer Applications

By

NAKATI SUSMITHA

(21R41F0039)

Under the Guidance of
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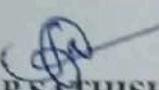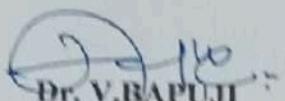
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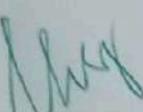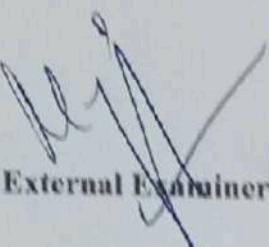
ABSTRACT

Ensuring the safeguarding of individuals' welfare and personal data within the modern digital landscape requires a paramount focus on security and privacy. The exclusive means of guaranteeing that trustworthy servers have limited access to a user's sensitive information is through the provision of a key. In recent years, there has been a proliferation of dynamic ID-based authenticated key agreement (DIDAKA) systems aimed at enhancing the security of future client-server communications. Nevertheless, extensive scholarly research has revealed a notable inadequacy within the existing DIDAKA technique. Xie et al. have proposed a novel anonymous DIDAKA method in an effort to address limitations identified in prior methodologies. Despite the existing consensus, there are three discrete methodologies for gaining access to their system. In view of the security concerns that have been raised, this study suggests the use of a DIDAKA protocol alongside other preventive measures.

CHAPTER-8
CONCLUSION

With the introduction of identity-based authenticated key agreement protocols, security in the field of user-to-service communication has evolved dramatically. Following a more thorough analysis, it is clear that they do not meet the necessary security standards. The goal of this research is to uncover the flaws in a previously described approach for dynamic ID-based verified key agreement and to offer a more reliable and resilient alternative. A formal security verification process as well as a comprehensive automated formal security proof were used to assure the security of the proposed system. A comparative analysis was conducted to assess the advantages of the communication plan we proposed in comparison to the methods employed by other businesses.

THE POTENTIAL VULNERABILITY OF FEDERATED
MACHINE LEARNING TO DATA POISONING ATTACKS

*A Major Project Report submitted in partial fulfillment of the requirements
for the degree of Master of Computer Applications*

By

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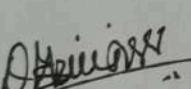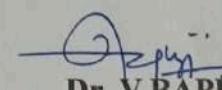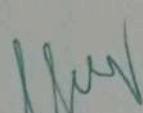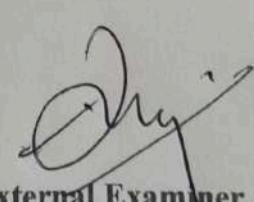
ABSTRACT

Through federated machine learning, smartphones and other Internet of Things (IoT) devices with little computational capability can contribute to a centralized system. Not only may sensitive data be kept hidden by using secure communication methods, but revenues can also be increased. Malicious actors that compromise the network's architecture and attack several nodes may jeopardize the security and efficacy of machine learning models. The issues that may occur from using shared machine learning in IoT systems are actively being researched. The goal of this study is to look into a popular multimodal joint learning system. The suggested technique takes a holistic view of multimodal learning to solve the inherent statistical problems of federated learning. The ideal poison attack strategy for federated multitask learning bilevel programming is dependent on the random selection of nodes to be both sources and targets. The AT2FL optimization approach is being used in this study to solve the issues of collaborative learning. AT2FL's capacity to infer implicit gradients for tainted data is one of the possible benefits of distributed machine learning. To the best of our knowledge, no following study has been conducted on data poisoning attacks on networked machine learning systems. Those who change the communication techniques of the target nodes in federated multitask learning may be in violation of the rules.

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CHAPTER-8
CONCLUSION

This study aims to illustrate the efficacy of shared machine learning by investigating a previous incidence of a data poisoning assault. This paper presents a formal equation that combines bilevel data poisoning assaults into the framework of comprehensive data poisoning attacks, with a particular emphasis on their integration with the communication protocol. This claim is based on three different incidences of physical violence. The current study created an AT2FL architecture as a potential solution to challenges faced in federated systems, such as excessive data transfer costs. The framework can also be used to identify the most effective preventive interventions. Numerous detailed examinations have shown that AT2FL-based assault techniques have the potential to diminish the efficacy of present applications. Researchers have shown the viability of indirect conclusions as a result of the information exchange process in federated learning. When there is a strong link between two entities, the aforementioned effect is amplified. More research is needed to overcome the challenges raised by data pollution, namely in the disciplines of vertical (feature-based) transfer learning and distributed transfer learning.

SUPERVISED LEARNING FOR MULTIPLE STREAMS
OF TRAFFIC SENSING

A Major Project Report submitted in partial fulfillment of the requirements
for the degree of Master of Computer Applications

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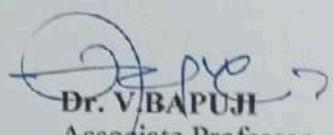
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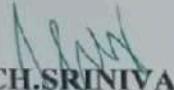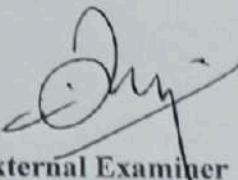
ABSTRACT

The risk of nocturnal collisions on muddy and wet roads is increased during the rainy season when there is insufficient street lighting. A couple minor issues are worth bringing out. Most people concur that Current View Drive is the greatest option out there right now. Adjacent facilities must continue to operate in an impeccable environment in order for them to do their jobs. People's attempts to increase their visual acuity have been assessed visually. There's something interesting about the answer. One noteworthy accomplishment in the computer vision sector. This investigation makes use of meteorological data and a weather classification system. Throughout the course, we examined a range of methods for predicting and forecasting the weather. First, we'll try to find a quick solution to the issue. There are eight members of the group. Before the identities of the cars are disclosed, traffic images are made available to the public. To verify the efficacy of the recently created teacher development strategies, a total of five inspections were carried out. The image is well-known in its etymological and professional contexts, according to attribute research. This rating emphasizes the image's overall adaptability and clarity. The proposed approach makes it possible for cutting-edge innovation to be successfully incorporated into the well-known automotive industry. The light progressively gets brighter during the night. It is very dangerous to drive when under a lot of emotional or psychological stress. Because feature extraction can examine high-dimensional images, it is a valuable tool in the field of pattern recognition. Recalling complex information becomes much more difficult when multidimensional (MN) grids are combined with three-dimensional (3D) visuals. Assessing easily accessible visual data might assist in figuring out how difficult a certain traffic situation is.

CHAPTER-8
CONCLUSION

As a creative technique, the use of highway images as traffic signals is gaining favor. The variability in visual systems' ability to distinguish between different types of weather events emphasizes the importance of image-based weather verification. The classification of optical properties is required for the appropriate application of visual development treatment. This study compared the performance of five tracking learning algorithms using eight global characteristics taken from an image of a regularly traveled route. The color, design, and scale of the image are the key themes of investigation. These developments improve the precision and effectiveness of feature identification and classification. There are eight cases where poor image quality is clearly inefficient in conveying critical meteorological information. The preceding sections neglected elements and issues of critical relevance. Subsequent revisions will include more visual aids to improve the legibility of the instructions. They distinguish themselves by the inventiveness and creativity of machine learning when applied to integrated learning approaches. The importance of machine learning arises from its wide range of applications. Investigating the rise in popularity of cinema stills would be an intriguing project.

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ONLINE RRVIEW FRAUD DETECTION: SUPERVISED AND SEMI-SUPERVISED LEARNING

A Major Project Report submitted in partial fulfilment of the requirements for the degree of Master of Computer Applications

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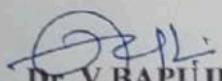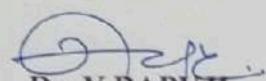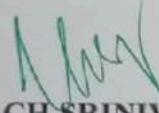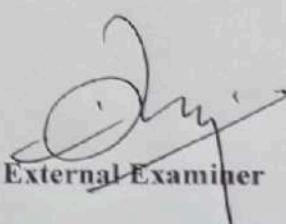
ABSTRACT

Online tests are currently having a large impact on the business and industrial sectors. Computer users' mental and emotional emotions have a significant impact on their conduct. Certain businesses or individuals may manipulate commodity prices for personal financial gain. The purpose of this research is to see how effective competent and partially supervised text mining algorithms are at detecting fake online reviews. The study focuses specifically on a dataset of hotel evaluations.

1

CHAPTER-8
CONCLUSION

The goal of this study was to assess the efficacy of supervised and semi-supervised text mining approaches in detecting fake internet reviews. Integrating data from several investigations resulted in a more comprehensive portrayal. To discriminate between entities, a number of approaches were studied. Jiten's output increased consistently, eliminating the need for continual supervision. Based on the data analysis results, it is possible to conclude that the supervised Naive Bayes classifier provided the most precise forecast. This methodology provides precise dataset labeling, especially when semi-supervised models can function efficiently despite inaccurate annotations.

Our evaluation procedure was restricted to reviews supplied by genuine customers of the products or services under consideration. Future categorization algorithms may incorporate human language and behavior as determinants to improve precision. Extensive data preparation has the potential to improve tokenization accuracy. More information is required to assess the method's efficacy. The scope of this study is limited to examinations administered in the English language. This is possible in languages other than Bangla.

AI AND DATA-POWERED HYBRID TOURIST
RECOMMENDATION SYSTEM

A Major Project Report submitted in partial fulfillment of the requirements
for the degree of Master of Computer Applications

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AI AND DATA-POWERED HYBRID TOURIST RECOMMENDATION SYSTEM

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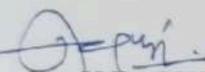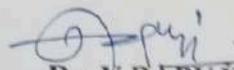
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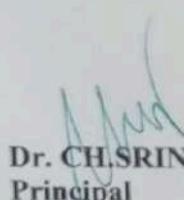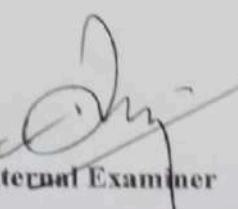
ABSTRACT

With the development of online travel agencies (OTAs) and other internet tools, theresearch procedure for a wide range of travel-related issues, such as lodgings, dining establishments, historical places, cultural festivities, and housing choices, has been dramatically simplified. The greater availability of information has considerably reduced the work required to gather relevant information prior to finalizing travel arrangements. The plethora of possibilities provided by current search engines and travel websites may confront users with challenges, resulting in difficult judgments and lengthy wait times. It is encouraged that guests use all available support options to make the most of their time. The purpose of this study is to investigate the role of direction in the tourism sector. The study's findings can be applied to the construction of a tourist recommender system, both conceptually and structurally. It is vital for the project to ensure that each passenger gets their own set of plans. In order to develop and arrange a timetable that corresponds to personal preferences and time limits, it is necessary to use the services of anexperienced professional. The primary goal is to include big data, AI, and strategy analysis tools into a recommender system. This technique is expected to enhancethe number of tourists visiting Morocco's Daraa-Tafilalet region.

CHAPTER-8
CONCLUSION

During the latter half of the twentieth century, recommendation systems were created with the purpose of assisting humans in analyzing the large volumes of data available to them and promoting better informed decision-making. Based on a thorough review of the literature, this article proposes a novel technique for increasing the functionality of tourism recommender systems. After a visitor selects the most important activity clusters for them, our system will generate a memorable itinerary using operational research approaches.A few other cutting-edge technologies, such as machine learning and the Internet of Things (IoT), will be used to accomplish the proposed strategy.The primary purpose of our hybrid design is to allow consumers to plan their own travels while also giving recommendations to better the overall experience.

ENCRYPTED DUPLICATION: SAFE AND SPACE-SAVING METADATA MANAGEMENT

*A Major Project Report submitted in partial fulfillment of the requirements
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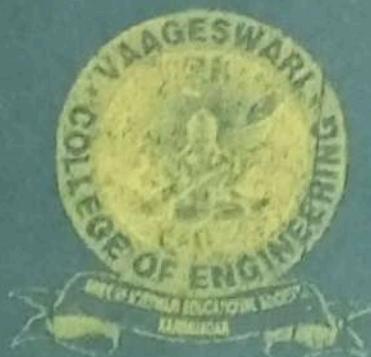
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2021-2023

ENCRYPTED DUPLICATION: SAFE AND SPACE-SAVING METADATA MANAGEMENT

A Major Project Report submitted in partial fulfillment of the requirements for the degree of Master of Computer Applications

By

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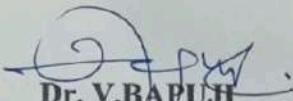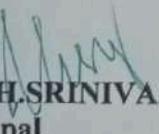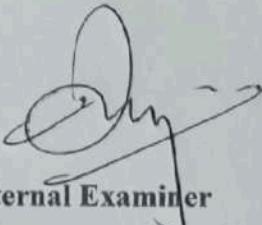
ABSTRACT

Encryption and deduplication can both be used as security techniques to prevent unauthorized access to data stored in deduplicated files. The use of more IDs, on the other hand, raises the expense of data maintenance. Metadata reduction is a simple and effective method for maintaining data integrity without the need for duplication. One such application is the monitoring of information. By introducing an additional set of metadata items, the level of indirection is increased by a factor of two. This feature allows for the monitoring of certain data points. It has been discovered that practical information is acquired in easily understandable chunks that can be efficiently stored. Metadedup's optimal performance is reached when a group of processors works together to process a given set of keys. This method ensures the safety and durability of the belongings you choose to keep, reducing potential dangers and obstacles. Metadedup conducted a rigorous assessment procedure to determine the suitability of the data management and storage solution under consideration. Metadedup has demonstrated its worth by lowering the amount of data that requires regular backups and speeding up file development and delivery.

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CHAPTER-8
CONCLUSION

Metadedup was created to improve the efficiency of indirect data deduplication. The use of encrypted de-duplication is a technique aimed at protecting data secrecy while also improving the efficiency of storing metadata. Metadedup is a solution that ensures that users' data remains accessible in the case of a server outage. By intelligently selecting critical storage sites, our system ensures user anonymity in all scenarios, including extended server attacks. The purpose of this research is to determine the positive and negative effects of Metadedup's data management system on operational efficiency. The metadeduplication technique minimizes the amount of data that must be saved, hence reducing network latency.

IDENTIFICATION OF CYBER BULLYING INSTANCES ON SOCIAL MEDIA PLATFORMS USING MACHINE LEARNING

A Major Project Report submitted in partial fulfillment of the requirements for the degree of Master of Computer Applications

By

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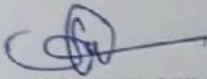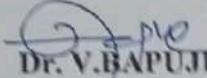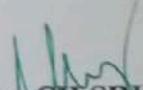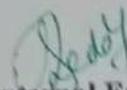
ABSTRACT

The epidemic of cyberbullying is a serious worry that affects people of all ages, including teenagers and adults. Significant and catastrophic catastrophes have happened, resulting in the untimely loss of many lives. The incidence of content filtering techniques used on numerous social networking platforms has increased noticeably. The primary goal of this research is to evaluate and explore hostile comments and tweets posted on Wikipedia-related discussion boards and social media platforms. This work describes a computer methodology for detecting instances of written cyberbullying that employs advanced methodologies such as natural language processing and machine learning. To test their performance, three feature extraction methodologies and four algorithms are evaluated individually. Using this method, a considerable proportion of Wikipedia articles, specifically over 80%, as well as a significant portion of Twitter postings, roughly 60%, exhibit a level of accomplishment

CHAPTER-8
CONCLUSION

Cyberbullying must be stopped immediately due to its ability to evoke depression symptoms and, in severe cases, develop thoughts of self-harm. As a result, the ability to detect instances of online exploitation is critical. Cyberattacks are becoming more common as a result of the extensive use of user data processing tools and the rapid development of data volume. Individuals who engage in cyberbullying on social media platforms may change their conduct as a result of public chastisement. The study produced findings that aided in the development of a method for detecting and minimizing instances of cyberbullying. The use of Twitter and Wikipedia as research sources for cyberbullying and cyberabuse was a matter of concern. Derogatory tweets typically contain hostile language. Natural language processing systems using basic machine learning algorithms can recognize this speech pattern in around 90% of situations. In terms of performance, the TF-IDF and BOW models outperform Word2Vec techniques. Individual abuse cases presented issues within the same model, mostly due to a lack of discernable emotional indications. Nonetheless, it is worth noting that all three procedures used for trait selection were equally effective. The results of applying Word2Vec models using Multi Layered Perceptions for both datasets were very comparable.

CLOUD-BASED UPLOADING AND DELETION OF COUNTING BLOOM FILTER DATA

A Major Project Report submitted in partial fulfillment of the requirements
for the degree of Master of Computer Applications

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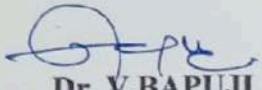
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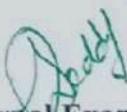
ABSTRACT

Because cloud computing is becoming more popular, an increasing number of people are opting to store their data in the cloud. You can save money by sending products rather than storing them locally. Moving data between cloud platforms has become more crucial for people and businesses looking to transfer cloud service providers due to differences in accessibility, speed, cost, security, and reliability. As a result, data owners must be able to safely move data between clouds while also ensuring that the data has been completely erased from the originating cloud. This essay demonstrates a novel approach to utilize a counting Bloom filter to solve an existing problem. The suggested strategy ensures that the data deletion and transmission processes run smoothly and fast. Even if there is no trusted third party, public confirmation is possible for the established method to work. We provide an example of a virtual application to demonstrate that our concept works in practice and can be trusted.

CHAPTER-8
CONCLUSION

Conclusions

The person in charge of managing the database fails to adequately carry out the appropriate rules for moving or erasing data stored in a cloud-based setting. To address this issue, a secure data transfer system was developed that used the CBF (Coded Bloom Filter) algorithm to identify and remove unwanted content separately. We respectfully urge that cloud B verify the accuracy of the information provided. Furthermore, Content-Based Filtering (CBF) must be used to mitigate the data loss that occurs in Cloud A. The individual will be able to use this proof if they have the information. Because of this issue, cloud A now confronts a bigger task in deceiving the data owner. Our methodology's effectiveness is based on its foundation in extensive security research and modeling.

Future work

Our proposed methodology, which is equivalent to existing approaches, simplifies data transmission among cloud-based computing platforms. Lessees, whether individuals or businesses, now have a broader choice of options for distributing their data across numerous cloud sites in the present data storage environment. If a concerted effort is done across various cloud platforms, the individual entrusted with the job of managing the data may be subject to fraud. More research is needed to find the most secure approach for sending data between three or more cloud services.

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SAFE FEDERATED CLOUD LEARNING:
PREVENTING PORTABLE DIAGNOSTIC POISONING

A Major Project Report submitted in partial fulfillment of the requirements
for the degree of Master of Computer Applications

By

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Under the Guidance of
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ABSTRACT

Federated learning is an approach that is frequently used in medical research and can be used to develop a model that includes several healthcare institutions, which are commonly referred to as Data Islands (DIs). It was discovered that extensive distributed denial-of-service (DDoS) attacks weakened the joint learning system, making it less useful. Some decision-making systems (DIs) may use skewed data, resulting in the construction of incorrect default models. When federated learning was initially tried, it was difficult to ensure that data inputs (DIs) were safe and to create a user-friendly federated model. The Secure Federated Learning Mechanism with Multiple Keys can effectively and safely stop data poisoning. The SFPA method ensures the safety of group learning by employing random trees. In this system, a multi-key secure computing mechanism is employed to protect sensitive data and prevent unauthorized access. Implementing a scheme that involves creating secure copies at the local level has been suggested as a viable way to reduce the frequency of DIA poisoning occurrences. A careful examination of the security mechanisms and real-world use on a public cloud architecture demonstrate that SFPA is robust, dependable, and resistant to DI-level poisoning.

CHAPTER-8
CONCLUSION

The fundamental goal of this project is to create a novel way for adding random forests into federated learning. Enhancing the robustness of random forests against data injection (DI)-level poisoning assaults constitutes the secondary objective. Portable studies will perform more efficiently and reliably if this process is followed. Individuals may experience less concern about the potential hazards associated with data contamination if the accessibility of the federated design is protected using the Secure Federated Privacy-Preserving Aggregation (SFPA) approach. Because of its dispersed learning and random forest approaches, this environment is suitable for execution. Authentic datasets and the federated learning architecture were used to evaluate the Secure Federated Proximal Algorithm (SFPA) for performance and security. During the investigation, actual statistics were used.

SAFELY STORING AND DELIVERING INFORMATION
FROM INTERNET OF THINGS DEVICES

A Major Project Report submitted in partial fulfillment of the requirements
for the degree of Master of Computer Applications

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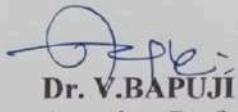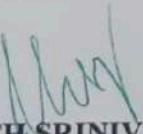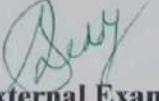
ABSTRACT

When it comes to the transmission, storage, and processing of data from Internet of Things (IoT) devices, cloud computing is becoming increasingly popular. Although there are various advantages to implementing a cloud-based architecture, it also includes a significant susceptibility to data invasions and privacy concerns. Because of its centralized structure, the requirement for an external third-party auditor is a significant component of cloud-based architecture. The inclusion of a Trusted Third Party (TPA) in the unified system exposes a vulnerability that could lead to the system failing completely owing to a single point of failure. The use of private storage has grown dramatically with the introduction of blockchain technology. Because of its compliance with Third-Party Auditing (TPA) rules and lack of single points of failure, a decentralized storage system outperforms a centralized control architecture. The cost of data storage decreases in lockstep with the advancement of computer processing speed. This study demonstrates the incorporation of fine-grained access control and end-to-end encryption into a blockchain-based infrastructure designed expressly for data storage and sharing. Because of its attribute-based access control (A-BAC) implementation, the IoTChain idea makes use of the Ethereum blockchain as the transparent access control layer. The IoTChain platform enables smart contract execution by integrating the IPFS file system with the Ethereum blockchain. Modern encryption techniques, in addition to the Diffie-Hellman key exchange protocol, which integrates elliptic curve cryptography, have been adopted to assure the security of communications between data owners and individuals. Proof-of-work (PoW) and proof-of-authority (PoA) processes share the goal of simultaneously enhancing system performance and lowering transaction costs. We validate our methods by using the Ethereum experimental network Rinkeby. The findings indicate that the methodology we created performs well and can be used to data gathered from the Internet of Things.

CHAPTER-8
CONCLUSION

Individuals are becoming increasingly conscious of the importance of properly handling, explaining, and protecting data. Many external factors can cause data loading delays in commonly used storage systems. Natural calamities, single-point-of-failure systems, and political control are all examples of this. A new and different point of view has been given by employing blockchain technology to examine data from the Internet of Things. One method to clarify this concept is to use the Internet of Things Chain Model. The Internet of Things (IoT) enables a wide range of devices to securely store and transmit data to a wide range of people. Decentralized systems can reduce expenses and improve reaction times. With the rise of the Internet of Things (IoT), academics are looking into a variety of data storage and movement challenges. Some of the technologies employed in this study include the IPFS distributed file system, the Ethereum blockchain, the Advanced Encryption Standard (AES), and a gas-efficient consensus method. There are no hard and fast guidelines for constructing a safe container. When blockchain technology was combined with a complicated strategy, it successfully safeguarded Internet of Things (IoT) data from the previously mentioned offline threats. Because to our research, the Ethereum blockchain can now store secrets, determine the origin of an item, and validate identities. When these technologies are employed, it is easier to implement data rights and limits. A detailed testing technique is utilized to determine the data management system's resilience, adaptability, and longevity. The current industry proof-of-authority (POA) system is expected to be replaced by a proof-of-work (POW) mechanism based on simulation results. People who make this step should use 20-25% less gas as a result. Furthermore, research have demonstrated that AES-128 provides greater safety and security than rival algorithms while also being simpler to use. Experiments conducted as part of our study demonstrated that this strategy works and can be trusted. At the moment, our system lacks the tools to make it simple to add, remove, or modify A-BAC rules or user attributes. More emphasis will be placed on ether (ETH), the Ethereum platform's main cryptocurrency, and how it may be used to regulate and benefit from data generated by Internet of Things (IoT) devices. More research on this topic is expected to be conducted in the future.

DETECTION OF CYBER BULLYING ON TWITTER USING HYBRID DEEP LEARNING ALGORITHM(DEA RNN)

A Major Project Report submitted in partial fulfillment of the requirements for the degree of Master of Computer Applications

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ABSTRACT

Cyberbullying (CB) is an all-encompassing and more common behavior that has been observed in a variety of online groups. Users of various ages use social networking services. This highlights the essential need of eliminating cyberbullying on the internet. This paper describes the creation of a hybrid DEA-RNN deep learning model for the detection of Twitter CBs. The DEA-RNN model, which is a unified framework, includes the Dolphin Echolocation Algorithm (DEA) and Elman-style Recurrent Neural Networks (RNNs) to overcome these challenges. Using a dataset of 10,000 tweets, the DEA-RNN method was compared to various other cutting-edge algorithms, including RNN, SVM, Multinomial Naive Bayes (MNB), and Random Forests (RF). Based on the results of the trials, DEA-RNN looks to be the most favorable option. When compared to earlier methods, the algorithm performed better at recognizing content-based (CB) information on Twitter. In the third case, the DEA-RNN performed admirably, with an average F1-score of 89.25%, recall of 88.98%, accuracy of 89.52%, and specificity of 90.94%.

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CHAPTER-8
CONCLUSION

The researchers' tweet categorization method works excellently. The goal was to improve models for detecting subject-matter theft. On a Twitter dataset comprising CB words, the accuracy of the DEA RNN was improved by combining DEA optimization with an Elman-type RNN. This combination was compared against the Bi-LSTM, RNN, SVM, RF, and MNB algorithms. In the examination, DEA-RNN surpasses DEA in terms of sensitivity, precision, recall, and F-measure. The implementation of the Differential Evolution Algorithm (DEA), as shown in the graph, can improve the efficiency of RNNs. While the hybrid model outperforms the other models in terms of performance, its compatibility with DEA-RNN features decreases as the amount of data increases. More research is needed to determine the prevalence of cyberbullying on sites like Facebook, YouTube, Flickr, and Instagram. As a result, Twitter was the sole source of information available. More research is needed to see whether cyberbullying can be recognized using more thorough data. Furthermore, our investigation has been restricted to communications. There is no study on Twitter usage. Subsequent updates will take this into account. The detection of cyberbullying occurrences can be accomplished by analyzing tweet content. A growing amount of study on this topic is being undertaken using graphics, audio, and video. Real-time search and filtration for specialized CB talks is widely accepted.

ATTRIBUTE -BASED CLOUD DATA SHARING FOR ENHANCED SECURITY AND PRIVACY

A Major Project Report submitted in partial fulfillment of the requirements
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Karimnagar, Telangana,India – 505 527

DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

CERTIFICATE

This is to certify that the Major Project work entitled "ATTRIBUTE – BASED CLOUD DATA SHARING FOR ENHANCED SECURITY AND PRIVACY" is carried out by SARDAR INDRAJEETH KOUR (21S41F0058) in partial fulfillment for the award of degree of **Master of Computer Applications**, Jawaharlal Nehru Technological University, Hyderabad during the academic year 2021-2023.

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ABSTRACT

It is simple and economical to use cloud computing to transfer data between places. When you use cloud storage, your information's privacy is not completely safeguarded. There are several approaches that can be used to prevent unauthorized access to private or sensitive data, hence improving overall information sharing security. Cipher Text-Policy Attribute-Based Encryption (CP-ABE) deployment in the future may result in improved security and usability. Data privacy concerns have always been important in Ciphertext-Policy Attribute-Based Encryption (CP-ABE), but user privacy is becoming increasingly important as well. The CP-ABE system employs misleading techniques to conceal the fact that it restricts access in order to safeguard users' privacy, data, and security. In any case, the inefficiency of our current technologies is owing to the excessively high cost of transmission and processing. A number of these studies also fail to consider the potential privacy implications that may arise from the power verification procedure. As a result of this research, a CP-ABE system that is rapid, energy-efficient, and secure has been developed. This action is being done in response to the aforementioned concerns. Furthermore, the primary metrics that are classified do not change. While the proposed method does not completely solve the decisional n-BDHE problem or the decisional linear assumption, it does provide some confidence. The results of the computations support the idea that the recommended technique would be advantageous.

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CONCLUSION

In this paper, we show how to use Ciphertext-Policy Attribute-Based Encryption (CP-ABE) to improve on traditional approaches. To construct abbreviated cipher messages, the suggested method leverages private keys of preset lengths. To determine the intended meaning of a message, one needs be familiar with four unique methods of building it. The use of prime order assures the confidentiality of private information. The offered technique's baseline model is shown to have safety qualities by using only the decisional n-BDHE and DL assumptions. Furthermore, the proposed solution simplifies the process of authorization verification without requiring the user to reveal their personal identification.

The proposed methodology is deemed unsatisfactory because it is based on the concept of logical conjunction (AND). To improve and advance Hierarchical Predicate-Conditioned Attribute-Based Encryption (HP-CP-ABE), more research is needed.

CLOUD-BASED DATA SECURITY WITH EFFICIENT REVOCABLE MULTI-AUTHORITY ATTRIBUTE ENCRYPTION

A Major Project Report submitted in partial fulfillment of the requirements for the degree of Master of Computer Applications

By

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ABSTRACT

Cloud service providers use attribute-based encryption (ABE) to restrict access to data and protect user privacy. However, only a single attribute authority has the power to dole out attributes to users. This means the information can only be transmitted within the attribute authority's sphere of control. MA-ABE is more effective than SA-ABE. It not only protects data and satisfies the need for granular access control, but also grants access to a wide variety of attribute authorities. Conversely, modern MA-ABE systems prohibit the use of low-power devices due to the high cost of bilinear matching techniques. Attribute elimination is another area where the MA-ABE approach falls short. Several ineffective treatments have been explored so far in this field. This research demonstrates how elliptic curves can be incorporated into RMA-ABE to enhance the security of the system. Despite the difficulty of computationally solving the decisional Diffie-Hellman problem, the security analysis demonstrates that the proposed system is secure against an adaptive selected plaintext attack. The proposed method for computing and storing data is more cost-effective than existing methods.

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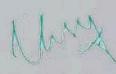
CHAPTER-8

CONCLUSION

This article goes over RMA-ABE technology in detail. This is a novel method of storing data in the cloud. The difficult bilinear matching process can be avoided when elliptic curve cryptography is used. The link between an entity and its iteration is broken when the iteration identifier is deleted. Concerns about national security make keeping the response secret even more critical. To prevent people from committing fraud, unique identifiers (UIDs) are linked to hidden attribute keys. Having said that, the technology under consideration may make data management and storage more cost-effective.