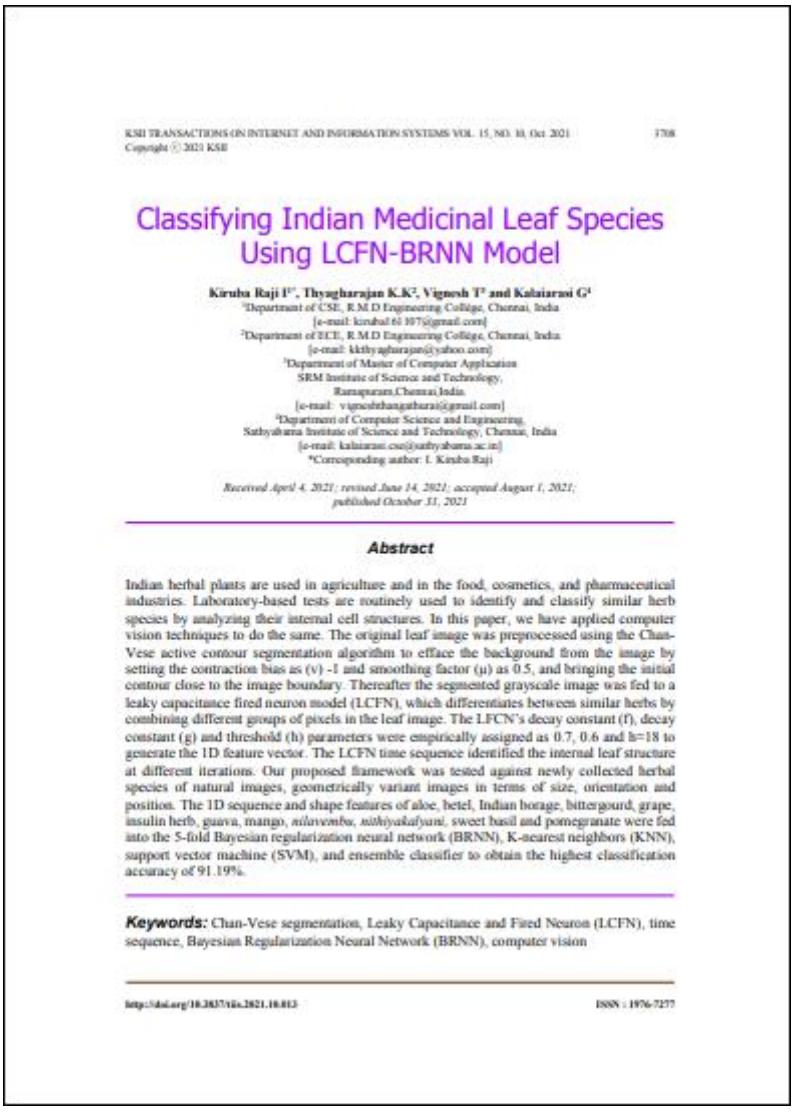
3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year



KSII TRANSACTIONS ON INTERNET AND INFORMATION SYSTEMS VOL. 15, NO. 10, Oct 2021 3708

Classifying Indian Medicinal Leaf Species Using LCFN-BRNN Model

Kiruba Raji I[1*], Thyagharajan K.K[2], Vignesh T[3] and Kalaiarasi G[4]

[1]Department of CSE, R.M.D Engineering College, Chennai, India
[e-mail: kirubal6107@gmail.com]
[2]Department of ECE, R.M.D Engineering College, Chennai, India
[e-mail: kkthyagharajan@yahoo.com]
[3]Department of Master of Computer Application
SRM Institute of Science and Technology,
Ramapuram,Chennai,India.
[e-mail: vigneshthangatharai@gmail.com]
[4]Department of Computer Science and Engineering
Sathyabama Institute of Science and Technology, Chennai, India
[e-mail: kalaiarasi.cse@sathyabama.ac.in]
*Corresponding author: I. Kiruba Raji

Received April 4, 2021; revised June 14, 2021; accepted August 1, 2021; published October 31, 2021

Abstract

Indian herbal plants are used in agriculture and in the food, cosmetics, and pharmaceutical industries. Laboratory-based tests are routinely used to identify and classify similar herb species by analyzing their internal cell structures. In this paper, we have applied computer vision techniques to do the same. The original leaf image was preprocessed using the Chan-Vese active contour segmentation algorithm to efface the background from the image by setting the contraction bias as (v) -1 and smoothing factor (μ) as 0.5, and bringing the initial contour close to the image boundary. Thereafter the segmented grayscale image was fed to a leaky capacitance fired neuron model (LCFN), which differentiates between similar herbs by combining different groups of pixels in the leaf image. The LFCN's decay constant (f), decay constant (g) and threshold (h) parameters were empirically assigned as 0.7, 0.6 and h=18 to generate the 1D feature vector. The LCFN time sequence identified the internal leaf structure at different iterations. Our proposed framework was tested against newly collected herbal species of natural images, geometrically variant images in terms of size, orientation and position. The 1D sequence and shape features of aloe, betel, Indian borage, bittergourd, grape, insulin herb, guava, mango, *nilavembu, nithiyakalyani*, sweet basil and pomegranate were fed into the 5-fold Bayesian regularization neural network (BRNN), K-nearest neighbors (KNN), support vector machine (SVM), and ensemble classifier to obtain the highest classification accuracy of 91.19%.

Keywords: Chan-Vese segmentation, Leaky Capacitance and Fired Neuron (LCFN), time sequence, Bayesian Regularization Neural Network (BRNN), computer vision

http://doi.org/10.3837/tiis.2021.10.013 ISSN : 1976-7277

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

Int. J. Business Intelligence and Data Mining, Vol. 18, No. 1, 2021 1

AGS: a precise and efficient AI-based hybrid software effort estimation model

V. Vignaraj Ananth*

Department of Computer Science and Engineering,
Thiagarajar College of Engineering,
Madurai, Tamil Nadu 625 015, India
Email: vignaraj112@gmail.com
*Corresponding author

S. Srinivasan

Department of Computer Science and Engineering,
RMD Engineering College,
Kavarapettai, Tamil Nadu, India
Email: ssn.cse@rmd.ac.in

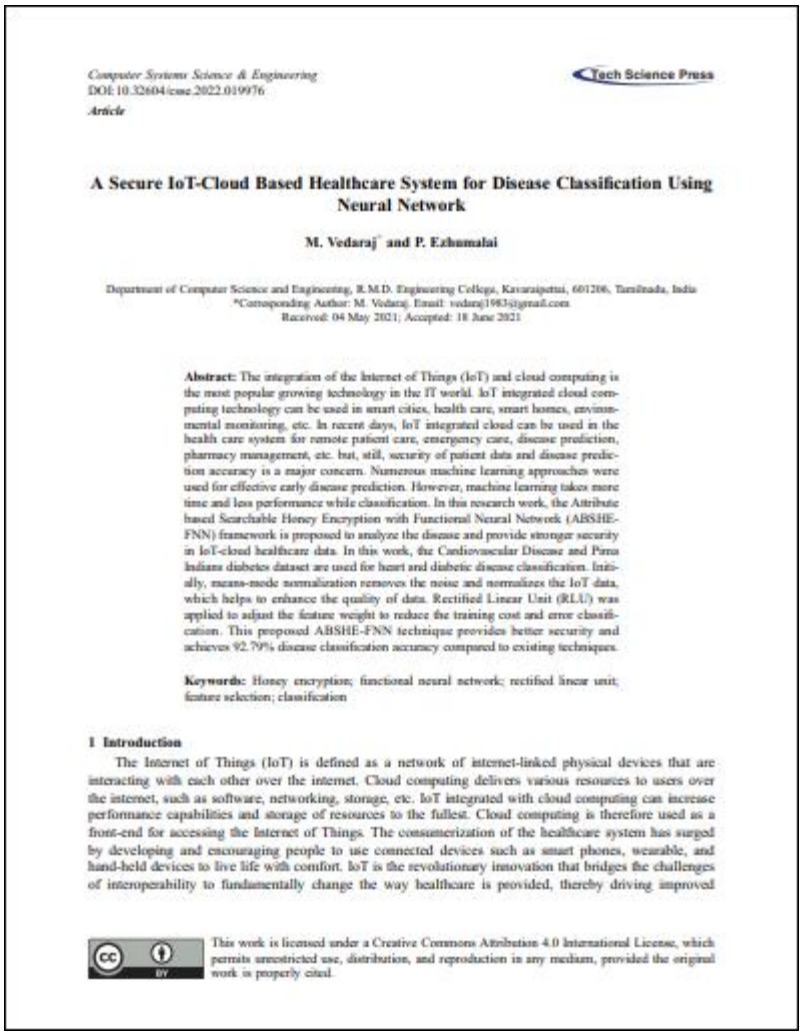
Abstract: To predict the amount of effort to develop software is a tedious process for software companies. Hence, predicting the software development effort remains a complex issue drawing in extensive research consideration. The success of software development process considerably depends on proper estimation of effort required to develop that software. Effective software effort estimation techniques enable project managers to schedule software life cycle activities properly. The main objective of this paper is to propose a novel approach in which an artificial intelligence (AI)-based technique, called AGS algorithm, is used to determine the software effort estimation. AGS is hybrid method combining three techniques, namely: adaptive neuro fuzzy inference system (ANFIS), genetic algorithm and satin bower bird optimisation (SBO) algorithm. The performance of the proposed method is assessed using a well standard dataset with real-time benchmark with many attributes. The major metrics used in the performance evaluation are correlation coefficient (CC), kilo lines of code (KLoC) and complexity of the software. The experimental result shows that the prediction accuracy of the proposed model is better than the existing algorithmic models.

Keywords: software effort estimation; artificial intelligence; adaptive neuro fuzzy inference system; ANFIS; lines of code; LoC; genetic algorithm; GA; satin bower bird optimiser; SBO; correlation coefficient; CC; kilo lines of code; KLoC; software complexity.

Reference to this paper should be made as follows: Ananth, V.V. and Srinivasan, S. (2021) 'AGS: a precise and efficient AI-based hybrid software effort estimation model', *Int. J. Business Intelligence and Data Mining*, Vol. 18, No. 1, pp.1–16.

Biographical notes: V. Vignaraj Ananth is an Assistant Professor at the Computer Science and Engineering in Thiagarajar College of Engineering, Madurai, Tamil Nadu, India. His research interests in software effort estimation and mobile computing. He is pursuing his PhD in Information and Communication Engineering from Anna University, Chennai.

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year



Computer Systems Science & Engineering
DOI:10.32604/csse.2022.019976
Article

Tech Science Press

A Secure IoT-Cloud Based Healthcare System for Disease Classification Using Neural Network

M. Vedaraj* and P. Ezhumalai

Department of Computer Science and Engineering, R.M.D. Engineering College, Kavaraipettai, 601206, Tamilnadu, India
*Corresponding Author: M. Vedaraj. Email: vedaraj1983@gmail.com
Received: 04 May 2021; Accepted: 18 June 2021

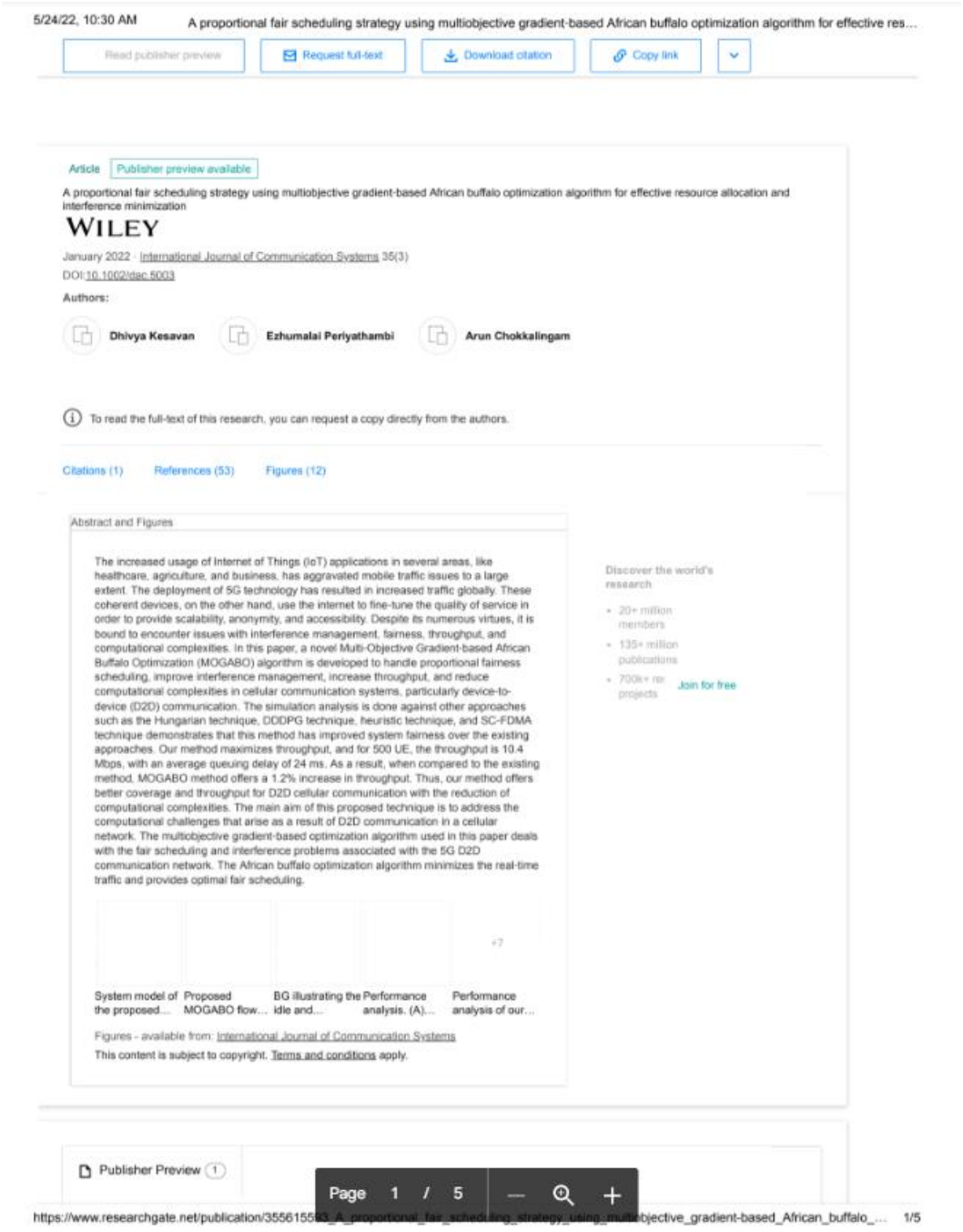
Abstract: The integration of the Internet of Things (IoT) and cloud computing is the most popular growing technology in the IT world. IoT integrated cloud computing technology can be used in smart cities, health care, smart homes, environmental monitoring, etc. In recent days, IoT integrated cloud can be used in the health care system for remote patient care, emergency care, disease prediction, pharmacy management, etc. but, still, security of patient data and disease prediction accuracy is a major concern. Numerous machine learning approaches were used for effective early disease prediction. However, machine learning takes more time and less performance while classification. In this research work, the Attribute based Searchable Honey Encryption with Functional Neural Network (ABSHE-FNN) framework is proposed to analyze the disease and provide stronger security in IoT-cloud healthcare data. In this work, the Cardiovascular Disease and Pima Indians diabetes dataset are used for heart and diabetic disease classification. Initially, means-mode normalization removes the noise and normalizes the IoT data, which helps to enhance the quality of data. Rectified Linear Unit (RLU) was applied to adjust the feature weight to reduce the training cost and error classification. This proposed ABSHE-FNN technique provides better security and achieves 92.79% disease classification accuracy compared to existing techniques.

Keywords: Honey encryption; functional neural network; rectified linear unit; feature selection; classification

1 Introduction

The Internet of Things (IoT) is defined as a network of internet-linked physical devices that are interacting with each other over the internet. Cloud computing delivers various resources to users over the internet, such as software, networking, storage, etc. IoT integrated with cloud computing can increase performance capabilities and storage of resources to the fullest. Cloud computing is therefore used as a front-end for accessing the Internet of Things. The consumerization of the healthcare system has surged by developing and encouraging people to use connected devices such as smart phones, wearable, and hand-held devices to live life with comfort. IoT is the revolutionary innovation that bridges the challenges of interoperability to fundamentally change the way healthcare is provided, thereby driving improved

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year



5/24/22, 10:30 AM A proportional fair scheduling strategy using multiobjective gradient-based African buffalo optimization algorithm for effective res...

Read publisher preview | Request full-text | Download citation | Copy link

Article Publisher preview available

A proportional fair scheduling strategy using multiobjective gradient-based African buffalo optimization algorithm for effective resource allocation and interference minimization

WILEY

January 2022 · International Journal of Communication Systems 35(3)

DOI:10.1002/dac.5003

Authors:

Dhivya Kesavan | Ezhumalai Periyathambi | Arun Chokkalingam

To read the full-text of this research, you can request a copy directly from the authors.

Citations (1) References (53) Figures (12)

Abstract and Figures

The increased usage of Internet of Things (IoT) applications in several areas, like healthcare, agriculture, and business, has aggravated mobile traffic issues to a large extent. The deployment of 5G technology has resulted in increased traffic globally. These coherent devices, on the other hand, use the internet to fine-tune the quality of service in order to provide scalability, anonymity, and accessibility. Despite its numerous virtues, it is bound to encounter issues with interference management, fairness, throughput, and computational complexities. In this paper, a novel Multi-Objective Gradient-based African Buffalo Optimization (MOGABO) algorithm is developed to handle proportional fairness scheduling, improve interference management, increase throughput, and reduce computational complexities in cellular communication systems, particularly device-to-device (D2D) communication. The simulation analysis is done against other approaches such as the Hungarian technique, DDDPG technique, heuristic technique, and SC-FDMA technique demonstrates that this method has improved system fairness over the existing approaches. Our method maximizes throughput, and for 500 UE, the throughput is 10.4 Mbps, with an average queuing delay of 24 ms. As a result, when compared to the existing method, MOGABO method offers a 1.2% increase in throughput. Thus, our method offers better coverage and throughput for D2D cellular communication with the reduction of computational complexities. The main aim of this proposed technique is to address the computational challenges that arise as a result of D2D communication in a cellular network. The multiobjective gradient-based optimization algorithm used in this paper deals with the fair scheduling and interference problems associated with the 5G D2D communication network. The African buffalo optimization algorithm minimizes the real-time traffic and provides optimal fair scheduling.

Discover the world's research

- 20+ million members
- 135+ million publications
- 700k+ research projects

Join for free

System model of the proposed... | Proposed MOGABO flow... | BG illustrating the idle and... | Performance analysis. (A)... | Performance analysis of our...

Figures - available from: International Journal of Communication Systems

This content is subject to copyright. Terms and conditions apply.

Publisher Preview (1)

Page 1 / 5

https://www.researchgate.net/publication/355615583_A_proportional_fair_scheduling_strategy_using_multiobjective_gradient-based_African_buffalo_... 1/5

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

Biomedical Signal Processing and Control 73 (2022) 103440

Contents lists available at ScienceDirect

Biomedical Signal Processing and Control

journal homepage: www.elsevier.com/locate/bspc

An approach for brain tumor detection using optimal feature selection and optimized deep belief network

T. Sathies Kumar [a,*], C. Arun [b], P. Ezhumalai [c]

[a] Department of Electronics and Instrumentation Engineering, Sri Sairam Engineering College, Chennai-44, India
[b] Department of Electronics and Communication Engineering, RMK College of Engineering and Technology, Puduvoyal, India
[c] Department of Computer Science and Engineering, RMD Engineering College, Kavaraipettai-601206, India

ARTICLE INFO

Keywords:
Brain tumor detection
Optimal feature selection
Optimized deep belief network
Group search-based multi-verse optimization
Benchmark datasets

ABSTRACT

Nowadays, a Magnetic Resonance Image (MRI) scan acts as an efficient tool for efficiently detecting the abnormal tissues present in the brain. It is a complex process for radiologists to diagnose as well as classify the tumor from several images. This paper develops an intelligent method for the accurate detection of brain tumors. Initially, the pre-processing is performed for the input MRI image using the skull stripping and the entropy-based trilateral filtering methods. Further, fuzzy centroid-based region growing is adopted for segmenting the tumor from the image. Once the tumor is segmented, feature extraction is done using four sets of well-performing features like Gray-Level Co-occurrence Matrix (GLCM), Gray Level Run-length Matrix (GLRM), statistical features, and shape features. The optimal feature selection is performed by the hybrid *meta*-heuristic algorithm termed Group Search-based Multi-Verse optimization (GS-MVO). Finally, the optimally selected features are given to a deep learning algorithm called Deep Belief Network (DBN). The weight is optimized by the same GS-MVO that classifies the final image as normal or abnormal. The simulation outcomes are performed by the standard benchmark database which proves that the developed technique obtains a high classification accuracy. From the analysis, the accuracy of the proposed GS-MVO-DBN is 9.09% superior to SVM, 7.14% superior to NN, 3.45% superior to DBN, 17.65% superior to CNN, 15.38% superior to NN-CNN, and 1.69% superior to COR-CSO-CNN-NN. The proposed GS-MVO-DBN is very effective in accurately detecting brain tumors. In the future, it is encouraged to work on challenging parts of the tumor region like edema, necrosis, and active regions with the help of the fusion process of multi-modality MRI images and effective pre-processing techniques incorporated with innovative deep learning methods.

1. Introduction

A brain tumor is very common in adults as well as children. The tumor can be treated with analysis, classification, and initial recognition [9]. There are several types of brain tumors such as Meningioma, Gliomas, Pituitary tumors, Malignant, Medulloblastoma, and Lymphomas. The basic reasons for these diseases are cancer-related morbidity and ailment. The therapy modality is based on tumor category, type of pathology, and tumor degree at the investigation time. The brain is composed of nerve cells and tissues that regulate the major functions of the human anatomy, such as the operation of muscles and senses, as well as breathing [11]. A cell has the ability with its functionality, where few cells focus to minimize their abilities and few are maybe normal cells, and a few end their growth, and some may be abnormal. This huge cluster of irregular cells gives rise to the tissue known as atumor. Therefore, brain tumors are irregular propagation and they are independent of brain cells [10,12].

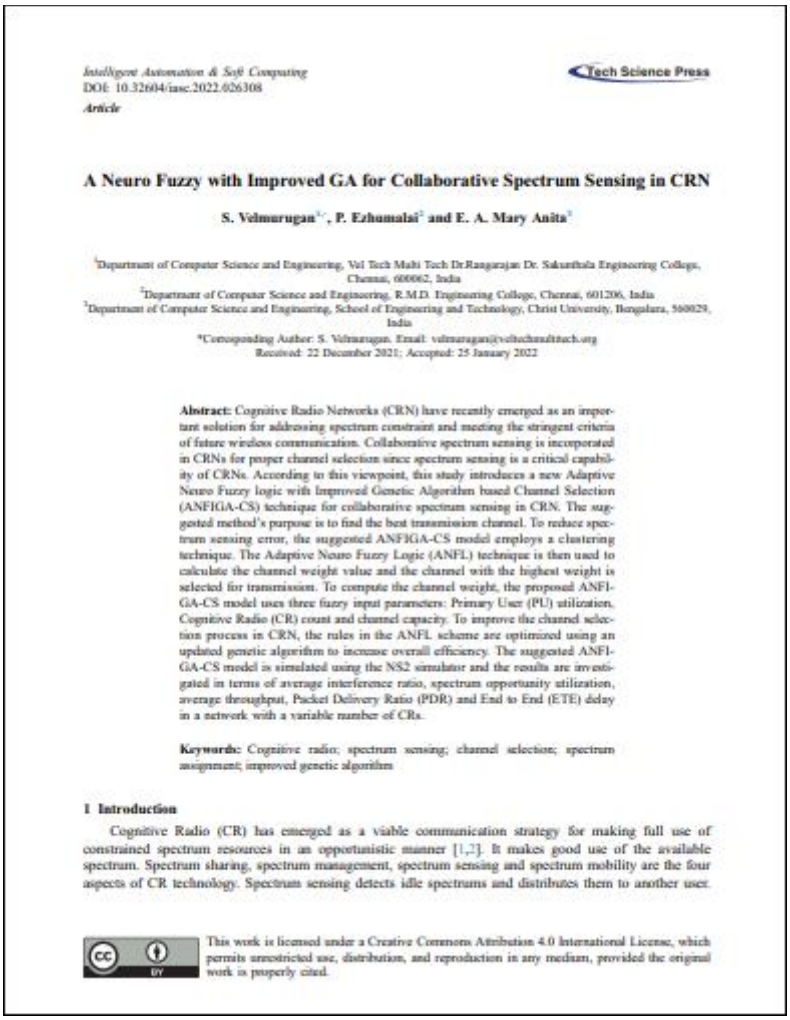
Currently, classifying the non-tumor and tumor MRI [14] in a completely automatic manner [13] is very familiar in research and clinical studies. These techniques are introduced earlier [16] to detect the tumor region [15]. The neurologist, who uses CAD, faces several issues like brain tumor identification, classification, and analysis. Neurologists are helped by the CAD systems in numerous ways. [17]. Hence, radiologists believe that computerized methods enhanced the diagnosis depending on the automated machine learning methods [18]. The traditional techniques of detecting the brain tumor consist of fuzzy clustering, machine learning [20], level set detection [19], and region is growing.

In the earlier days, machine learning methods perform mining as

* Corresponding author.
E-mail addresses: sathiesk@gmail.com (T. Sathies Kumar), carunece@gmail.com (C. Arun), ezhumalai.es@gmail.com (P. Ezhumalai).

https://doi.org/10.1016/j.bspc.2021.103440
Received 3 August 2021; Received in revised form 11 November 2021; Accepted 29 November 2021
Available online 9 December 2021

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year



Intelligent Automation & Soft Computing
DOI: 10.32604/iasc.2022.026308
Article

Tech Science Press

A Neuro Fuzzy with Improved GA for Collaborative Spectrum Sensing in CRN

S. Velmurugan[1,*], P. Ezhumalai[2] and E. A. Mary Anita[3]

[1]Department of Computer Science and Engineering, Vel Tech Multi Tech Dr.Rangarajan Dr. Sakunthala Engineering College, Chennai, 600062, India
[2]Department of Computer Science and Engineering, R.M.D. Engineering College, Chennai, 601206, India
[3]Department of Computer Science and Engineering, School of Engineering and Technology, Christ University, Bengaluru, 560029, India
*Corresponding Author: S. Velmurugan. Email: velmurugan@veltechmultitech.org
Received: 22 December 2021; Accepted: 25 January 2022

Abstract: Cognitive Radio Networks (CRN) have recently emerged as an important solution for addressing spectrum constraint and meeting the stringent criteria of future wireless communication. Collaborative spectrum sensing is incorporated in CRNs for proper channel selection since spectrum sensing is a critical capability of CRNs. According to this viewpoint, this study introduces a new Adaptive Neuro Fuzzy logic with Improved Genetic Algorithm based Channel Selection (ANFIGIA-CS) technique for collaborative spectrum sensing in CRN. The suggested method's purpose is to find the best transmission channel. To reduce spectrum sensing error, the suggested ANFIGA-CS model employs a clustering technique. The Adaptive Neuro Fuzzy Logic (ANFL) technique is then used to calculate the channel weight value and the channel with the highest weight is selected for transmission. To compute the channel weight, the proposed ANFIGA-CS model uses three fuzzy input parameters: Primary User (PU) utilization, Cognitive Radio (CR) count and channel capacity. To improve the channel selection process in CRN, the rules in the ANFL scheme are optimized using an updated genetic algorithm to increase overall efficiency. The suggested ANFIGA-CS model is simulated using the NS2 simulator and the results are investigated in terms of average interference ratio, spectrum opportunity utilization, average throughput, Packet Delivery Ratio (PDR) and End to End (ETE) delay in a network with a variable number of CRs.

Keywords: Cognitive radio; spectrum sensing; channel selection; spectrum assignment; improved genetic algorithm

1 Introduction

Cognitive Radio (CR) has emerged as a viable communication strategy for making full use of constrained spectrum resources in an opportunistic manner [1,2]. It makes good use of the available spectrum. Spectrum sharing, spectrum management, spectrum sensing and spectrum mobility are the four aspects of CR technology. Spectrum sensing detects idle spectrums and distributes them to another user.

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

Scopus Preview

Document details - An efficient chaotic system based hybrid radiation heat transfer sunflower optimization algorithm for securing digital image transmission

1 of 1

Export Download More...

Concurrency and Computation: Practice and Experience

Volume 34, Issue 10, 1 May 2022, Article number e6814

An efficient chaotic system based hybrid radiation heat transfer sunflower optimization algorithm for securing digital image transmission(Article)

Sekar, J.G., Ezhumalai, P., Chokkalingam, A.

[a]Department of Electronics and Communication Engineering, RMK College of Engineering and Technology, Anna University, Chennai, India
[b]Department of Computer Science and Engineering, RMD Engineering College, Anna University, Chennai, India

Abstract

At the pixel level, several chaos-based image encryption and decryption models have been developed throughout the years. However, due to long-haul, privacy, and security considerations, it has a number of drawbacks, including increased network complexity and low scalability, and actual text cracking avoidance is more challenging. In this study, we have proposed a novel approach for image encryption and decryption. The confusion and diffusion process is performed using fractional-order chaotic maps with the hybrid radiation heat transfer algorithm based sunflower optimization (HRHT-SO) algorithm. The proposed method works for both color and grayscale images. The HRHT-SO algorithm is the combination of both heat transfer search (HTS) and sunflower optimization (SO) algorithms. During the search process, the SO algorithm improves the radiation stage of the HTS model. Further, the DNA sequence improves the performance of image encryption and decryption using fractional-order chaotic maps with the HRHT-SO algorithm. The experimental investigations are carried out by using various parameters such as key sensitivity analysis, keyspace analysis, histogram analysis, correlation coefficient analysis, entropy analysis, PSNR, NPCR, and UACI analysis thereby analyzing the efficiency and complexity of the encryption scheme. Hence, the proposed method outperforms superior performances in all the experiments. © 2022 John Wiley & Sons, Ltd.

SciVal Topic Prominence

Topic: Image Encryption | Cryptography | Hyperchaotic System

Prominence percentile: 99.640

Author keywords

confusion and diffusion process | DNA sequence | hybrid radiation heat transfer algorithm based sunflower optimization algorithm | image encryption and decryption

Indexed keywords

Engineering controlled terms: Bioinformatics | Complex networks | Cryptography | DNA sequences | Heat transfer | Image enhancement | Lyapunov methods | Optimization | Sensitivity analysis

Cited by 0 documents

Inform me when this document is cited in Scopus:

Set citation alert > Set citation feed >

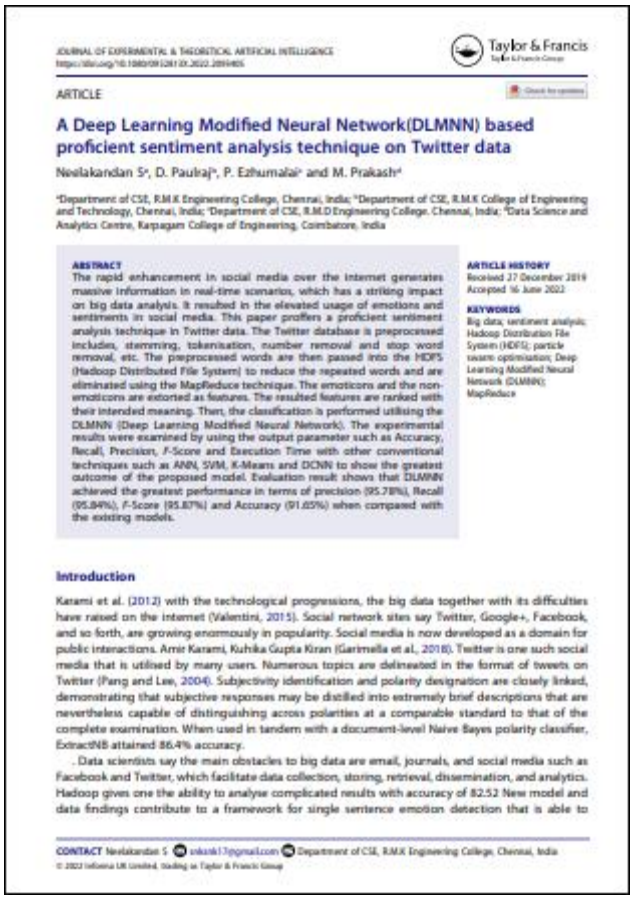
Related documents

Find more related documents in Scopus based on:

Authors > Keywords >

Page 1 / 3

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year



JOURNAL OF EXPERIMENTAL & THEORETICAL ARTIFICIAL INTELLIGENCE

Taylor & Francis

ARTICLE

A Deep Learning Modified Neural Network(DLMNN) based proficient sentiment analysis technique on Twitter data

Nevilakandan S[a], D. Paulraj[b], P. Ezhumalai[c] and M. Prakash[d]

[a]Department of CSE, R.M.K Engineering College, Chennai, India; [b]Department of CSE, R.M.K College of Engineering and Technology, Chennai, India; [c]Department of CSE, R.M.D Engineering College, Chennai, India; [d]Data Science and Analytics Centre, Karpagam College of Engineering, Coimbatore, India

ABSTRACT

The rapid enhancement in social media over the Internet generates massive information in real-time scenarios, which has a striking impact on big data analysis. It resulted in the elevated usage of emotions and sentiments in social media. This paper proffers a proficient sentiment analysis technique in Twitter data. The Twitter database is preprocessed includes, stemming, tokenisation, number removal and stop word removal, etc. The preprocessed words are then passed into the HDFS (Hadoop Distributed File System) to reduce the repeated words and are eliminated using the MapReduce technique. The emoticons and the non-emoticons are extorted as features. The resulted features are ranked with their intended meaning. Then, the classification is performed utilising the DLMNN (Deep Learning Modified Neural Network). The experimental results were examined by using the output parameter such as Accuracy, Recall, Precision, *F*-Score and Execution Time with other conventional techniques such as ANN, SVM, K-Means and DCNN to show the greatest outcome of the proposed model. Evaluation result shows that DLMNN achieved the greatest performance in terms of precision (95.78%), Recall (95.84%), *F*-Score (95.87%) and Accuracy (91.65%) when compared with the existing models.

ARTICLE HISTORY

Received 27 December 2019
Accepted 16 June 2022

KEYWORDS

Big data; sentiment analysis; Hadoop Distribution File System (HDFS); particle swarm optimisation; Deep Learning Modified Neural Network (DLMNN); MapReduce

Introduction

Karami et al. (2012) with the technological progressions, the big data together with its difficulties have raised on the internet (Valentini, 2015). Social network sites say Twitter, Google+, Facebook, and so forth, are growing enormously in popularity. Social media is now developed as a domain for public interactions. Amir Karami, Kuhika Gupta Kiran (Garimella et al., 2018). Twitter is one such social media that is utilised by many users. Numerous topics are delineated in the format of tweets on Twitter (Pang and Lee, 2004). Subjectivity identification and polarity designation are closely linked, demonstrating that subjective responses may be distilled into extremely brief descriptions that are nevertheless capable of distinguishing across polarities at a comparable standard to that of the complete examination. When used in tandem with a document-level Naive Bayes polarity classifier, ExtractNB attained 86.4% accuracy.

Data scientists say the main obstacles to big data are email, journals, and social media such as Facebook and Twitter, which facilitate data collection, storing, retrieval, dissemination, and analytics. Hadoop gives one the ability to analyse complicated results with accuracy of 82.52 New model and data findings contribute to a framework for single sentence emotion detection that is able to

CONTACT Nevilakandan S nskarik13@gmail.com Department of CSE, R.M.K Engineering College, Chennai, India

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

Studies in Informatics and Control, 31(2) 95-104, June 2022 ISSN: 1220-1766 eISSN: 1841-429X 95

Efficient Intrusion Detection and Prevention Model in Cloud Environment Using Sgd-LSTM and C2HA

Ponnuviji NAMAKKAL PONNUSAMY*, Vigihon Prem MONICKARAJ, Ezhumalai PERIYATHAMBI

Department of Computer Science and Engineering, R.M.D. Engineering College, Kavaraipettai, India
ponnuviji@gmail.com (**Corresponding author*), vigiprem@gmail.com, ezhumalai.cs@gmail.com

Abstract: Cloud computing is an attractive technology paradigm that has been widely used as a tool for storing and analyzing the data of different users. Since access to the cloud is achieved through the Internet, data stored in clouds is susceptible to attacks from external as well as internal intruders. Henceforth, cloud service providers (CSPs) need to take action in order to provide a secure framework that would detect intrusion in the cloud and protect and secure customer information against hackers and intruders. This paper proposes a Sgd-LSTM and signature-based access control policy based Intrusion Detection and Prevention System (IDPS) model which is meant to detect and prevent various intrusions in the cloud. The proposed system includes three phases: the user registration phase, intrusion detection phase, and intrusion prevention phase. Initially, user registration is performed based on a unique ID and password, and then, the password is converted into hashcode by using the C2HA algorithm and then stored in the cloud for authentication purposes. In the intrusion detection phase, the status of cloud data is predicted by employing the Sgd-LSTM classifier in order to discard the intruder data packets from the cloud. At last, in the intrusion prevention phase, data access to the cloud environment is controlled by using signature-based user authentication in order to authenticate the legitimate user. The proposed classifier can effectively detect the intruders, which was experimentally proved by comparing it with the existing classifiers.

Keywords: Intrusion Detection and Prevention System (IDPS), Cloud, User authentication, Stochastic Gradient Descent Long Short-Term Memory (Sgd-LSTM) classifier, Color Hidden Hashing Algorithm.

1. Introduction

Cloud computing is the recent growing computational model that provides convenient, on-demand network access for sharing the group of computing resources, i.e. servers, networks, storage, applications, etc. Three-tier intrusion detection and prevention model was created by Ali & Yousaf (2020). Virtualization is one of the key technologies in the cloud environment, which enables the creation of an intelligent abstraction layer, called Virtual Machine Monitor (VMM) or Hypervisor. However, cloud computing is vulnerable to traditional information technology (IT) attacks, i.e. intrusion, because it uses and widens the existing IT infrastructure, operating systems (OSs), and applications. Network intrusion detection is discussed in Mauro et al. (2020).

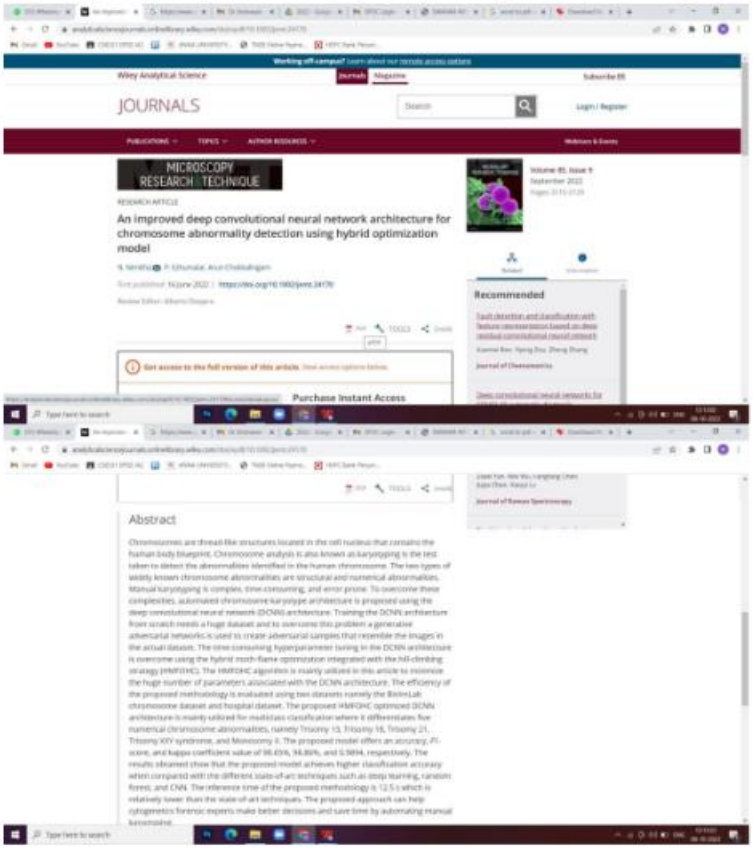
The process of stealing, modifying, or corrupting other users' information by sending malicious packets through the network is referred to as intrusion (Traore et al., 2012). To identify and protect the cloud user's data, Intrusion Detection Systems (IDS), and Intrusion Prevention Systems (IPS) are important (Xie et al., 2020). The primary reason for any IDS is to detect assaults/attacks and to avoid an assault if possible (Mishra et al., 2020). Most of the current IDSs can be divided into two main types: signature-based and anomaly-based IDS. For an intrusion detection system to be effective, the factors that should be taken into account are speed, self-monitoring, fault tolerance, a user-friendly configuration, and the ability of the system to be cheat-resistant and interruption-free with minimum overhead so that the malicious data may be detected and removed from the network automatically (Mishra et al., 2020).

Just like intrusion detection, intrusion prevention is also important for maintaining the security of the cloud user's data. A two-layer defence scheme application is presented in (Liu et al., 2018) Security has become one of the serious bottleneck problems that need to be resolved. Privacy, confidentiality, integrity, and access control are the common requirements of security (Saxon, Bordbar, & Harrison, 2015). Intrusion management system is presented in (Mauro, Galatro, & Liotta, 2020). Techniques based on access control, such as authentication methods, represent one of the best ways to defend data security based on control and limit unauthorized clients. IoT-based application is discussed in (Hafeez et al., 2020) and security challenges are discussed in (Mishra, & Pandya, 2021).

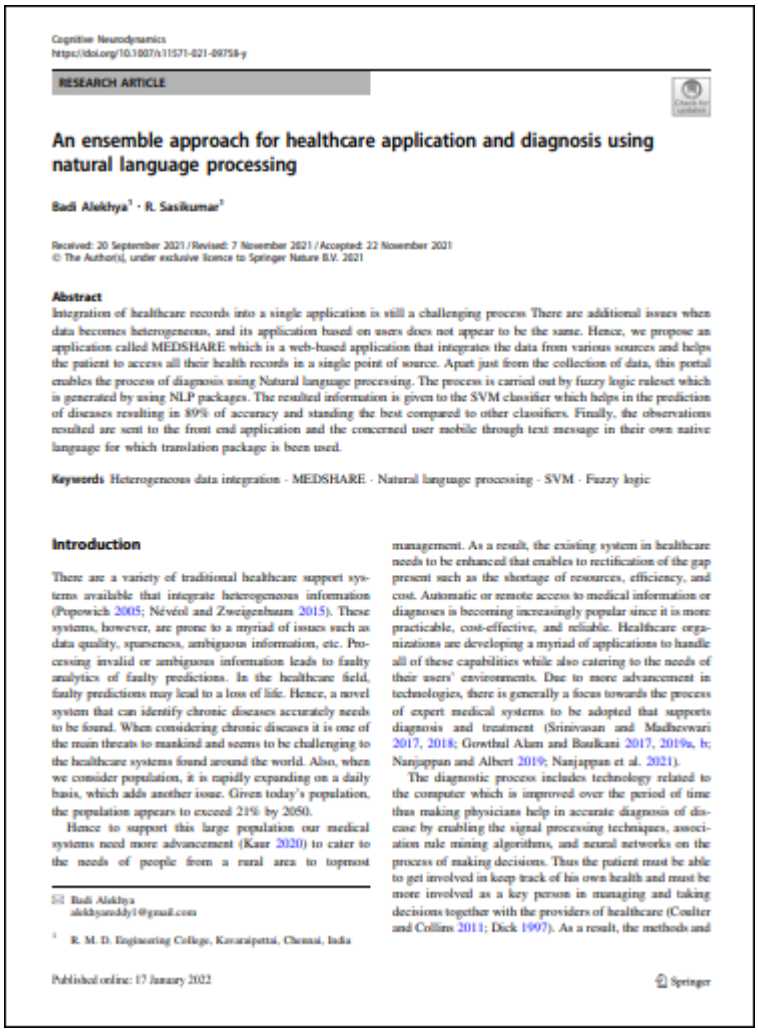
Defense Systems against Multi-Type Attacks in Cloud is presented in (Wahab et al., 2021). In Intrusion Prevention and Detection System (IPDS), if the first line of defense fails to prevent attacks, then the second line comes into play to detect any intrusion and remove the affected data from the cloud (Feng et al., 2019) Dynamic intrusion detection in cloud environment is discussed in (Chkirbene et al,

https://doi.org/10.24846/v31i2y202209

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year



3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year



Cognitive Neurodynamics
https://doi.org/10.1007/s11571-021-09758-y

RESEARCH ARTICLE

An ensemble approach for healthcare application and diagnosis using natural language processing

Badi Alekhya[1] · R. Sasikumar[1]

Received: 20 September 2021 / Revised: 7 November 2021 / Accepted: 22 November 2021

Abstract
Integration of healthcare records into a single application is still a challenging process There are additional issues when data becomes heterogeneous, and its application based on users does not appear to be the same. Hence, we propose an application called MEDSHARE which is a web-based application that integrates the data from various sources and helps the patient to access all their health records in a single point of source. Apart just from the collection of data, this portal enables the process of diagnosis using Natural language processing. The process is carried out by fuzzy logic ruleset which is generated by using NLP packages. The resulted information is given to the SVM classifier which helps in the prediction of diseases resulting in 89% of accuracy and standing the best compared to other classifiers. Finally, the observations resulted are sent to the front end application and the concerned user mobile through text message in their own native language for which translation package is been used.

Keywords Heterogeneous data integration · MEDSHARE · Natural language processing · SVM · Fuzzy logic

Introduction

There are a variety of traditional healthcare support systems available that integrate heterogeneous information (Popowich 2005; Névéol and Zweigenbaum 2015). These systems, however, are prone to a myriad of issues such as data quality, sparseness, ambiguous information, etc. Processing invalid or ambiguous information leads to faulty analytics of faulty predictions. In the healthcare field, faulty predictions may lead to a loss of life. Hence, a novel system that can identify chronic diseases accurately needs to be found. When considering chronic diseases it is one of the main threats to mankind and seems to be challenging to the healthcare systems found around the world. Also, when we consider population, it is rapidly expanding on a daily basis, which adds another issue. Given today's population, the population appears to exceed 21% by 2050.

Hence to support this large population our medical systems need more advancement (Kaur 2020) to cater to the needs of people from a rural area to topmost management. As a result, the existing system in healthcare needs to be enhanced that enables to rectification of the gap present such as the shortage of resources, efficiency, and cost. Automatic or remote access to medical information or diagnoses is becoming increasingly popular since it is more practicable, cost-effective, and reliable. Healthcare organizations are developing a myriad of applications to handle all of these capabilities while also catering to the needs of their users' environments. Due to more advancement in technologies, there is generally a focus towards the process of expert medical systems to be adopted that supports diagnosis and treatment (Srinivasan and Madheswari 2017, 2018; Gowthul Alam and Baulkani 2017, 2019a, b; Nanjappan and Albert 2019; Nanjappan et al. 2021).

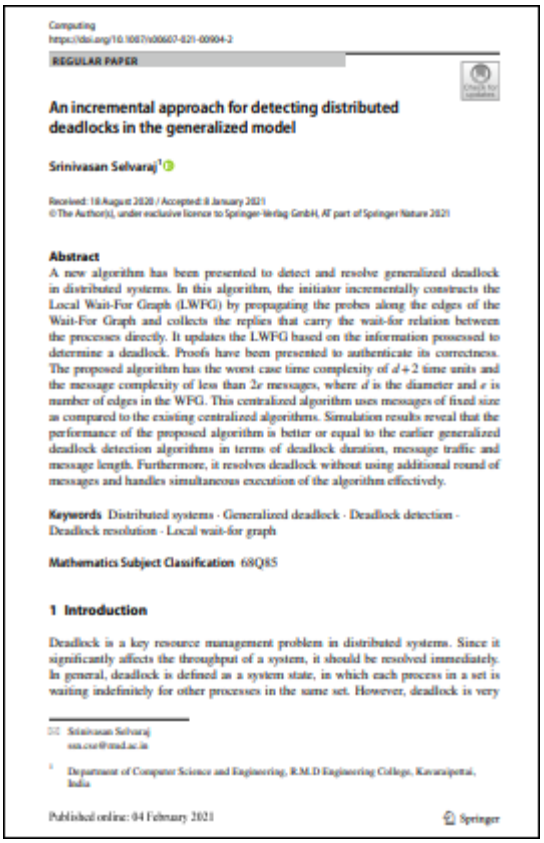
The diagnostic process includes technology related to the computer which is improved over the period of time thus making physicians help in accurate diagnosis of disease by enabling the signal processing techniques, association rule mining algorithms, and neural networks on the process of making decisions. Thus the patient must be able to get involved in keep track of his own health and must be more involved as a key person in managing and taking decisions together with the providers of healthcare (Coulter and Collins 2011; Dick 1997). As a result, the methods and

✉ Badi Alekhya
alekhyareddy19@gmail.com

[1] R. M. D. Engineering College, Kavaraipettai, Chennai, India

Published online: 17 January 2022

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year



Computing
https://doi.org/10.1007/s00607-021-00904-2

REGULAR PAPER

An incremental approach for detecting distributed deadlocks in the generalized model

Srinivasan Selvaraj[1]

Received: 18 August 2020 / Accepted: 8 January 2021

Abstract
A new algorithm has been presented to detect and resolve generalized deadlock in distributed systems. In this algorithm, the initiator incrementally constructs the Local Wait-For Graph (LWFG) by propagating the probes along the edges of the Wait-For Graph and collects the replies that carry the wait-for relation between the processes directly. It updates the LWFG based on the information possessed to determine a deadlock. Proofs have been presented to authenticate its correctness. The proposed algorithm has the worst case time complexity of $d+2$ time units and the message complexity of less than $2e$ messages, where d is the diameter and e is number of edges in the WFG. This centralized algorithm uses messages of fixed size as compared to the existing centralized algorithms. Simulation results reveal that the performance of the proposed algorithm is better or equal to the earlier generalized deadlock detection algorithms in terms of deadlock duration, message traffic and message length. Furthermore, it resolves deadlock without using additional round of messages and handles simultaneous execution of the algorithm effectively.

Keywords Distributed systems · Generalized deadlock · Deadlock detection · Deadlock resolution · Local wait-for graph

Mathematics Subject Classification 68Q85

1 Introduction

Deadlock is a key resource management problem in distributed systems. Since it significantly affects the throughput of a system, it should be resolved immediately. In general, deadlock is defined as a system state, in which each process in a set is waiting indefinitely for other processes in the same set. However, deadlock is very

✉ Srinivasan Selvaraj
ssa.cse@rmd.ac.in

[1] Department of Computer Science and Engineering, R.M.D Engineering College, Kavaraipettai, India

Published online: 04 February 2021

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

Learning automata and lexical composition method for optimal and load balanced RPL routing in IoT

C.S. Anita* and R. Sasikumar

Department of Computer Science and Engineering,
R.M.D. Engineering College,
Tamil Nadu, India
Email: anitacs28377@gmail.com
Email: rsn.cse@rmd.ac.in
*Corresponding author

Abstract: Low power and lossy network, internet of things (IoT) motivates energy-efficient and load-balanced routing in the network layer to extend network lifetime. IoT application scenarios exploit the Routing protocol for low-power and lossy networks (RPL) due to the significant potentials. The core components of RPL are the trickle algorithm and objective functions (OF) for creating destination oriented directed acyclic graph (DODAG) and data forwarding. The RPL needs more attention to avoid hotspot problems and unnecessary energy depletion. Most of the existing routing protocols take a single either hop count or ETX, or multiple routing decision metrics. However, the RPL cannot select appropriate link metrics efficiently against the dynamic and lossy environment without considering the relationship between those metrics. Thus, the proposed methodology takes important routing metrics, such as hop count, expected transmission count, and traffic-related metric, and composites the metrics using learning automata and lexical composition method. The special attention on network energy balancing through expected transmission energy (ETT) avoids a hotspot issue and inefficient routing energy. The proposed work supports multiple metrics-based OF with considerable routing overhead by tuning the trickle parameter. Moreover, the proposed work is evaluated to show its advantages over the dynamic and lossy network, IoT.

Keywords: internet of things; IoT; energy efficient routing; hotspot problem; learning automata; lexical composition technique.

Reference to this paper should be made as follows: Anita, C.S. and Sasikumar, R. (2022) 'Learning automata and lexical composition method for optimal and load balanced RPL routing in IoT', *Int. J. Ad Hoc and Ubiquitous Computing*, Vol. 40, No. 4, pp.288–300.

Biographical notes: C.S. Anita is an Associate Professor at the Department of Computer Science and Engineering, R.M.D. Engineering College. She obtained her BE (CSE) from Karunya Institute of Technology, Bharathiyar University and ME (CSE) from Sathyabama University. She received her PhD (Wireless Mesh Networks) from Anna University, Chennai in 2018. She has been in the teaching profession for the past 20 years and has handled both UG and PG programmes. Her areas of interest include computer networks, compiler design, operating systems and computer graphics. She has published four patents, five papers in international journals and nine papers in national/international conferences. She has attended many workshops and seminars related to her area of interest.

R. Sasikumar is a Professor in the Department of Computer Science and Engineering, R.M.D. Engineering College, Kavaraipettai. He completed his BE Computer Science and Engineering degree at Kongu Engineering College, Erode and ME Computer Science and Engineering degree at Annamalai University. He obtained his Doctorate from Anna University in the area of 'network security'. He has been in the teaching profession for the past 23 years. He has published 31 papers in various highly cited international/national journals and conferences. He has organised various seminars, guest lectures and conference. His current research interests are wireless networks and cloud computing.

1 Introduction

Recently, the internet of things (IoT) becomes an important topic in wireless communication due to the features of working in an IPV6 internet protocol-based network and the ability to connect thousands or millions of devices (Bibri, 2018; Gubbi et al., 2013). For an energy-efficient IoT network, an intelligent topology structure and routing in the network layer play a vital role. A routing protocol for low power and lossy networks (RPL) is mostly used in wireless communication among IoT devices (Winter et al., 2012). The RPL constructs the destination oriented directed acyclic graph (DODAG) to connect the sensors and root node using different objective functions (OFs) and trickle algorithm

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

Wireless Personal Communications
https://doi.org/10.1007/s11277-022-09846-0

Neighbor Coverage and Bandwidth Aware Multiple Disjoint Path Discovery in Wireless Mesh Networks

C. S. Anita[1] · R. Sasikumar[1]

Accepted: 28 May 2022

Abstract
With the ease of appending new nodes without re-installing the whole network, the Internet of Things (IoT) builds several smart applications on Wireless Mesh Network (WMN). One of the important aspects of integrating WMN and smart IoT applications is to provide an energy-efficient and reliable routing protocol. Seeking the communication route that delivers the high-quality stream quickly over WMN is an important issue, but the maximum utilization of a single high-quality path leads to poor throughput and large communication delay, including route discovery and data forwarding delay. The broadcasting mechanism creates redundant transmissions of control packets into the network and reinitializes the blind route discovery process due to link disconnections leading to network resource constraints and high delay during the route discovery process. Moreover, the congestion in the communication route incurs data transmission latency. This paper proposes the Multiple Disjoint Path Determination (MDPD) mechanism based on-demand routing in WMN to formulate the path discovery and data transmission latency. Reducing the neighbor list into the uncommon neighbor set reduces the unnecessary latency in route discovery, and deriving high capacity multiple disjoint communication routes reduce the communication delay in the proposed work. The proposed work employs the queue dynamics in queuing delay, which mainly provides adaptability to the dynamics in network capacity and efficient diversity paths to the gateway node to infer the available bandwidth and optimize the network traffic. To fully utilize the advantage of heterogeneous routers, it disables the flooding of control packets across the stable mesh routers, excluding the initial route discovery process, because it enables the available route storage system in each mesh router. Hence, the proposed work efficiently supports wireless broadband internet access with reduced delay and control overhead. The simulation results demonstrate the fast detection of the multiple disjoint routes and data traffic optimization over the discovered disjoint routes in the proposed MDPD mechanism over WMN.

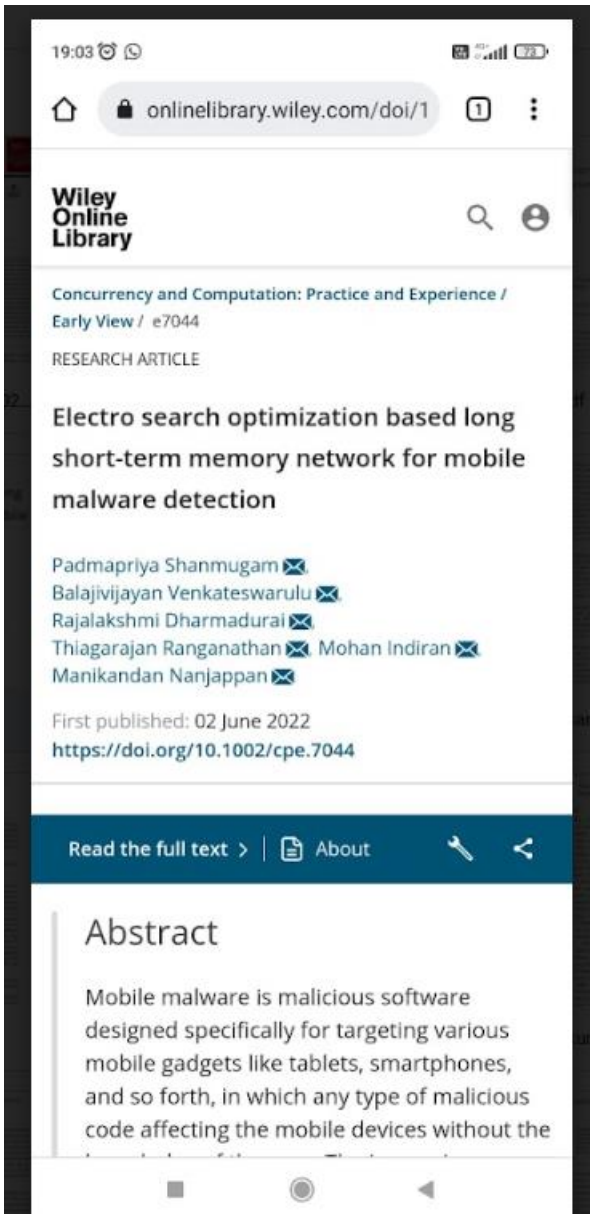
Keywords Wireless mesh networks (WMN) · Communication Delay · Multi-path routing · Interference · Uncommon neighbor Set

✉ C. S. Anita
anitacs28377@gmail.com

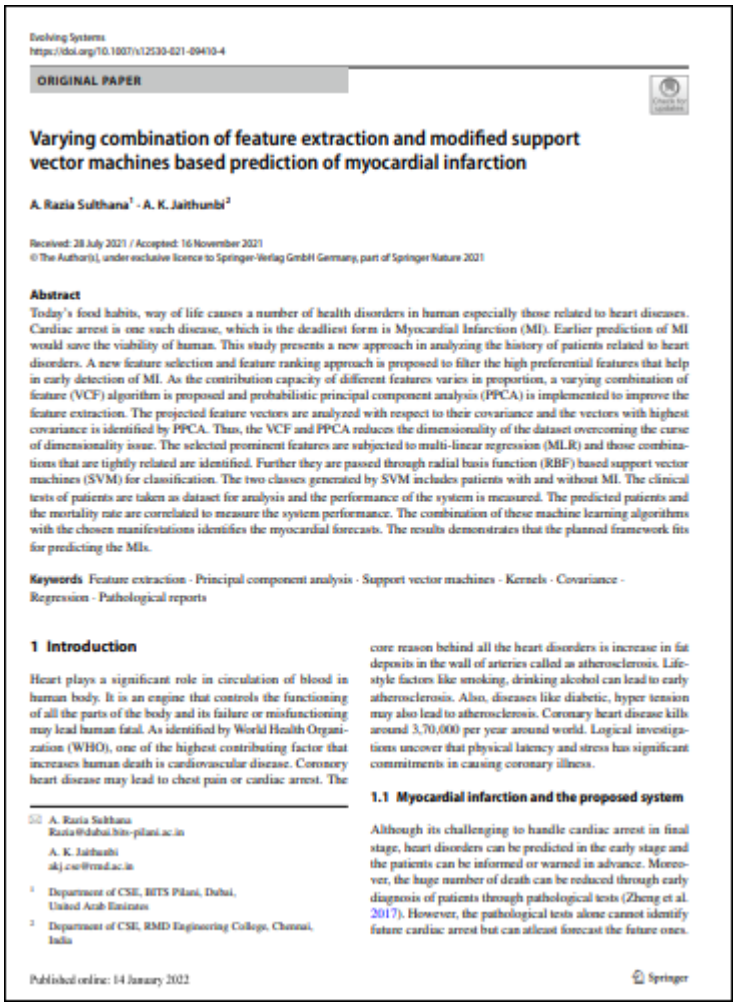
[1] CSE, R.M.D. Engineering College, Kavaraipettai, Tamil Nadu, India

Published online: 22 June 2022

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year



3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year



Evolving Systems
https://doi.org/10.1007/s12530-021-09410-4

ORIGINAL PAPER

Varying combination of feature extraction and modified support vector machines based prediction of myocardial infarction

A. Razia Sulthana[1] · A. K. Jaithunbi[2]

Received: 28 July 2021 / Accepted: 16 November 2021

Abstract
Today's food habits, way of life causes a number of health disorders in human especially those related to heart diseases. Cardiac arrest is one such disease, which is the deadliest form is Myocardial Infarction (MI). Earlier prediction of MI would save the viability of human. This study presents a new approach in analyzing the history of patients related to heart disorders. A new feature selection and feature ranking approach is proposed to filter the high preferential features that help in early detection of MI. As the contribution capacity of different features varies in proportion, a varying combination of feature (VCF) algorithm is proposed and probabilistic principal component analysis (PPCA) is implemented to improve the feature extraction. The projected feature vectors are analyzed with respect to their covariance and the vectors with highest covariance is identified by PPCA. Thus, the VCF and PPCA reduces the dimensionality of the dataset overcoming the curse of dimensionality issue. The selected prominent features are subjected to multi-linear regression (MLR) and those combinations that are tightly related are identified. Further they are passed through radial basis function (RBF) based support vector machines (SVM) for classification. The two classes generated by SVM includes patients with and without MI. The clinical tests of patients are taken as dataset for analysis and the performance of the system is measured. The predicted patients and the mortality rate are correlated to measure the system performance. The combination of these machine learning algorithms with the chosen manifestations identifies the myocardial forecasts. The results demonstrates that the planned framework fits for predicting the MIs.

Keywords Feature extraction · Principal component analysis · Support vector machines · Kernels · Covariance · Regression · Pathological reports

1 Introduction

Heart plays a significant role in circulation of blood in human body. It is an engine that controls the functioning of all the parts of the body and its failure or misfunctioning may lead human fatal. As identified by World Health Organization (WHO), one of the highest contributing factor that increases human death is cardiovascular disease. Coronery heart disease may lead to chest pain or cardiac arrest. The core reason behind all the heart disorders is increase in fat deposits in the wall of arteries called as atherosclerosis. Lifestyle factors like smoking, drinking alcohol can lead to early atherosclerosis. Also, diseases like diabetic, hyper tension may also lead to atherosclerosis. Coronary heart disease kills around 3,70,000 per year around world. Logical investigations uncover that physical latency and stress has significant commitments in causing coronary illness.

1.1 Myocardial infarction and the proposed system

Although its challenging to handle cardiac arrest in final stage, heart disorders can be predicted in the early stage and the patients can be informed or warned in advance. Moreover, the huge number of death can be reduced through early diagnosis of patients through pathological tests (Zheng et al. 2017). However, the pathological tests alone cannot identify future cardiac arrest but can atleast forecast the future ones.

✉ A. Razia Sulthana
Razia@dubai.bits-pilani.ac.in

A. K. Jaithunbi
akj.cse@rmd.ac.in

[1] Department of CSE, BITS Pilani, Dubai, United Arab Emirates

[2] Department of CSE, RMD Engineering College, Chennai, India

Published online: 14 January 2022

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE)
DOI: 10.9756/INT-JECSE/V14I2.545 ISSN:1308-5581 Vol 14, Issue 02, 2022

SHARE EATS - A FOOD REDISTRIBUTIONPLATFORM BASED ON AZONE ALGORITHM

[1]De.P.Ezhumalai, [2]V.Sharmila, [3]J.Sherine Glory,
[4]DharaneeshwarP, [5]Arun B, [6]Anandha Murthy B
[1]Professor and Head[2,3]Assistant Professor,, [4,5,6] Student ,
Department of Computer Science and Engineering
R.M.D. Engineering College (Autonomous), Chennai
[1]ezhumalai.cs@gmail.com
[2]sharmilavaradhan@gmail.com
[3]sherineglory@gmail.com
[4]ucs18124@rmd.ac.in

Abstract: One-third of the world's food production,1.3 billion tons of food is wasted. The report statesthat as wealth increases, people are becoming less concerned about food. According to a report by theWorldFoodOrganization,20,000childrenareforced to go hungry every day worldwide, when infact the figureis much higher. According to a survey done by the world bank, 48countriesx how a significant number of people running out of food or reducing their consumption. Another survey by the UN shows that, nearly 2.37billion people (or30%oftheglobal population) lacked access to adequate food in 2020–arise of 320millioninjustoneyear.Unequalfooddistributionisseenasaproblemresultingfromwealth imbalance and rapid population increase. In order to balance this abnormal situation, we are trying to buildaFood Redistribution Platform calledS HAREEATS.

keywords: *Food, Redistribution, Algorithm, zone.*

1. Introduction:

According toareportbytheWorldFoodOrganization,20,000childrenareforcedtogohungryeverydayworldwide,wheninfactthefigureis much higher. Moreover,basedonasurveydoneby the worldbank,48countriesshowasignificant number ofpeoplerunningoutoffoodorreducingtheirconsumption. To make the situation better, we triedto create a platform where excess food, excess fruitsand vegetables, and spoiled food can be distributedto the needy. The needy can be an Orphan Animalfarmorcompostsystemtoeffectivelyconvertspoiled food into compost.To have an in-housedelivery system (if possible) to quickly deliver thefoods in time to ensure food quality. Collaborativeconsumption and peer-to-peer exchange of food arestill not as developed and popular[1].

2. LITERATURESURVEY:

2.1 In this article, the concepts like food reuse andshared food use are explained and also the featuresof food sharing and existing models are analyzed.Community-basedguidelinesfor the developmentofthisprojectwerealsoadded.Thecompleteanalysis is based on the open-source knowledge andthe studies are published in both the business andthescientificjournalsandtheideasare gatheredfromvariousmediaandactivefoodsharingwebsitesandservices.Atlast,theresultswerecompared to the existing research publication.

2.2 Food-sharing in the distributed use economy:

1

Inordertoreducefoodwasteandlossesinthcindustry,severalchangeswerernade.Nowadaysmobilcapplicationsandweb-basedfoodsharingsystems are the currently used models in the foodindustry.Itwillreducefoodwaste and also helpsthe users to share the food. The massive amount offoodwastcleadstomajoreconomicalandenvironmentalproblems.Theconceptoffoodsharing has several processes such as storing andredistributingfood.Incommonfood,sharingincludespeer-to-peerexchangesandalsointhebusiness charities, and entities.

2.3 Foodsharingasasolutiontoasocially significantproblem :

Asthepopulationincreased,the food productionand also the growth of consumption also increased.Most people and companies buy excess food thatthey cannot eat, so instead of disposing of it in thegarage, they can send it to any charitable trust or tosomeone who is in a needy situation. Also, severalrestaurantsandhotelsshoulddeliverthcunusedfoodtosomeonefreeofcostorwithsomediscounts,andhencethisisthepurposeof foodsharingandredistributing. It will also reduce thevarious pollution. some people have the capacity tobuy some nutrients food and others don't have thesufficientmoneytobuythem,henceitleadstoirrational use of waste.

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE)
DOI: 10.9756/INT-JECSE/V14I2.546 ISSN:1308-5581 Vol 14, Issue 02, 2022

ROAD POTHOLE PREDICTION USING CNN

[1]Dr.P.Ezhumalai, [2]V.Sharmila, [3]E.Nalina, [4] A. Swathi ,[5] J. Preethi,[6] B. Roshinishri,

[1]Professor&HOD, [2,3]Assitant Professor, [4,5,6] Student
DepartmentofComputerScienceandEngineering
R.M.D. Engineering College (Autonomous), Chennai, Tamilnadu,India
E-mail:[1]ezhumalai.cs@gmail.com[2] sharmilavaradhan@gmail.com

[3]nalinasmit@gmail.com[4] swathiarasum@gmail.com

ABSTRACT:
Road reconstruction or restoration is amongst the most challenging difficulties to elude collisions ,dramatically increased obstruction and minimizing or maintaining upkeep costs .Potholes are generated or created as a result of poor natural situation and significantly very high traffic on highways. Only manual identification of potholes is now applicable which is highly slow and delayed process. The identification of potholes in this work is using on 2 methods which are spectral clustering (sc) and deep learning methods .In one approach, sc and morphological procedures are employed to process the input picture and then the road pothole is identified by making use of a threshold classifier. For spotting road potholes, this method will not require any training. Making use of cnn and alexnet is the other method for identifying road potholes. To test both strategies a balanced and proportional dataset of Three hundred non-pothole and pothole photographs was used. As higher number of photos are needed for deep learning ,training data augmentation is employed for enhancing the dataset size. In comparison to the spectral clustering method the accuracy of lenet and cnn was significantly higher.

Keywords: Road Pothole, deep learning, TensorFlow, CNN

I.INTRODUCTION

1.1 ROAD POTHOLE DETECTION

We're unveiling the patch label inference network (IOPLIN) ,a new deep learning structure that has been repeatedly improved to naturally or axiomatically detect a range of road obstacles not just particular obstacles like cracks and potholes .The expectation-maximization inspired patch label distillation (EMIPLD) technique may be used to train IOPLIN repeatedly in a sequence and systematically using just the label of each figure and it will perform well by understanding the labels of patches from the road or highway photos .IOPLIN has more alluring characteristics than the current CNN single-branch model .IOPLIN extracts visual aspect from the unmodified picture segment rather than the complete scaled image allowing you to process photos of various dimensions especially when working with high-resolution image data .It may also use approximation to localize road or highway distress while training without any prior information or data on localization to properly assess the performance of our system .In practice we created a large-scale bituminous pavement detection large-scale CQU-BPD dataset of 60059 high quality road photos collected from various locations at various periods .IOPLIN outperforms well developed picture classification techniques in direct road distress identification according to extensive results on this dataset.

II.LITERATURE SURVEY

2.1 Pothole Detection Using CV

Author: Amita Dhiman and Reinhard
Techniques for figuring out potholes on avenue surfaces goal
at growing techniques for real-time or offline identity of potholes, to guide real-time manage of a vehicle (for motive force help or self sustaining driving) or offline records series for avenue maintenance. For those reasons, studies round the sector has comprehensively explored techniques for the identity of potholes on roads. This paper begins offevolved with a short evaluate of the subject; it classifies advanced techniques into numerous categories. We, then, gift our contributions to this subject via way of means of enforcing techniques for automated identity of potholes. We advanced and studied strategies primarily based totally on stereo-imaginative and prescient evaluation of avenue environments beforehand of the vehicle; we additionally designed fashions for deep-learning-primarily based totally pothole detection. An experimental assessment of these 4 designed techniques is provided, and conclusions are drawn approximately unique advantages of those

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE)
DOI: 10.9756/INT-JECSE/V14I2.498 ISSN:1308-5581 Vol 14, Issue 02, 2022

RAINFALL PREDICTION USING RANDOM FOREST ALGORITHM TECHNIQUE

S.Srinivasan[1], P.Shobha Rani[2], Malini[3], Mahitha[4], Vema Lakshmi Surekha[5]
1 Professor ,Department of Computer Science and Engineering, R.M.D.Engineering College, Kavaraipettai, Chennai
2 Associate Professor , Department of Computer Science and Engineering , R.M.D.Engineering College, Kavaraipettai, Chennai
3, 4, 5 Computer Science Department, R.M.D.Engineering College, Kavaraipettai, Chennai

Abstract: *-Rain forecasting is a fairly difficult task. Rainfall forecasting is an application of science and technology for predicting atmospheric conditions at specific locations and times. Rain forecasting is done by collecting quantitative data about the current state of the atmosphere at a particular location and using meteorology to predict how the atmosphere will change. Monitored machine learning technology for collecting a variety of information such as variable identification, univariate analysis, bivariate and multivariate analysis, missing value handling and data validation analysis, data cleaning / preparation, and data visualization. Analysis of the dataset by (SMLT) is performed across the given dataset. Our analysis provides a comprehensive guide to the sensitivity analysis of model parameters in terms of the performance of rainfall prediction by accuracy calculation. Proposal of a machine learning-based method for accurately predicting rainfall index values with the highest accuracy prediction results obtained from comparisons of monitored classification machine learning algorithms. In addition, in order to discuss the performance of various machine learning algorithms on a particular dataset in comparison to the evaluation classification report, we identify the confusion matrix and classify the data by priority. The results compare the effectiveness of the proposed machine learning algorithm method with the highest accuracy in precision, recall, and F1 score.*

I. INTRODUCTION

Predicting subsidence can be an important factor and is important for applications surrounding the design and management of water resources. Over the years, various attempts have been made to capture the sinking. One of the areas where it is important to accurately predict set is the set derivative. Fate Derivatives form a comprehensive idea of weather derivatives. A weather derivative is similar to a regular derivative and is defined as a contract between two or more parties. The price depends on the underlying quality. Doom Derivatives are a way to reduce exposure to disadvantages and uncertainties. In addition, they upgraded different insurance policies. As a result, it is boring to prove that sinking played a role, unless it is as harmful as a drought. Similar contracts exist for different meteorological variables such as temperature and wind. In the literature, the derivative of the downfall is divided into the 2 m in elements.

An mathematical approach called Markov chains extended with Subsidence Prediction (MCRP) is used to predict the amount of subsidence of the subsidence derivative. However, since this approach is the most commonly used, it serves as a benchmark for the expected methodology. With these models, sinking can be simulated at for a period of days, which has many drawbacks. The description that you are interested in the amount of per day, not the monthly or annual volume model, is due to a significant change in the model. The MCRP approach is a bit fashionable, but it has many drawbacks. First, this model is very simple and relies heavily on historical data to reflect the long-term reflection.

During the precipitation event, responsible authorities must make decisions on barrier operations and evacuation / rescue strategies. Temporary rain protection may be an option and the decision must be made promptly. Knowledge of evacuation routes and prediction of closed roads will also help people. The system can assist users by quickly displaying available information about water levels, endangered objects, evacuation routes, vulnerabilities of local residents, and more. This support can be provided during rain event management preparations or actual rain events. The goal is to develop a machine learning model for predicting precipitation and potentially replace the updatable classification model of supervised machine learning by predicting results with the highest accuracy by comparing supervised algorithms.

II. LITERATURE SURVEY

The literature overview deals with topics that facilitate the understanding of common measurement systems such as this project, and therefore studies. The purpose of this literature review is to analyze the work related to the current project and the mechanisms used in previous studies. A state of the art realtime rain detection and wiper control method is proposed in this article. Currently, commercial models adopt electronic sensors that can only sample the humidity of a small region of the windshield. The existing computer vision methods primarily

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE)
DOI: 10.9756/INT-JECSE/V14I2.465 ISSN: 1308-5581 Vol 14, Issue 02, 2022

ONLINE PARKING SPACE SHARING SYSTEM

M.A. Berlin,
Department of Computer Science and Engineering
R.M.D Engineering College, Chennai, Tamil Nadu, INDIA
mab.cse@rmd.ac.in;

Ahmed Waseem I,
Department of Computer Science and Engineering
R.M.D Engineering College. Chennai. Tamil Nadu, INDIA
ace18103@rmd.ac.in;

Charan Pandian S,
Department of Computer Science and Engineering
R.M.D Engineering College, Chennai, Tamil Nadu, INDIA
ace18118@rmd.ac.in;

Deeraj V,
Department of Computer Science and Engineering
R.M.D Engineering College, Chennai, Tamil Nadu, INDIA
ace18122@rmd.ac.in;

ABSTRACT: The aim of this paper is to help find and park their vehicles with ease in traffic-congested areas by pre-booking parking slots in the location they need. We created a system between the people who have space for parking (dealer) and another group who needs the space to park their vehicle (purchaser). The purchasers can book their slot in the specified period so that they are assured that there is a slot available for them. The purchaser can extend the time of their slot if space is available in the dealer's area. The system is designed in such a way that no two people can book the same slot at the same time and thus smooth parking system can be achieved.
KEYWORDS: smart parking, vehicle theft prevention, smart city.

I.INTRODUCTION

One of the most serious issues caused by on-street parking is traffic.Vehicles require not just room to travel about, but also space to park for people to enter and exit.The time an automobile is parked is quite long in comparison to the time it is in motion.It is estimated that a car operates for 400 hours out of 8760 hours in a year, leaving 8360 hours while it is parked.Every car owner prefers to park as close to his or her destination as feasible to save walking distance.As a result, parking spots in the CBD and other places where activity is concentrated are in high demand.With the expanding population of automobiles, the parking problem has reached crisis proportions

Parking regulation has emerged as the primary tool available to cities throughout the world for reducing congestion. It is the process of enforcing rules and regulations. Illegally parked autos can be found practically anywhere. Traffic congestion is a malignant condition caused by a lack of car parking places in city centers. The problem of damage to vehicles if parked unattended on a road is also a problem for citizens. They want a safe place to park their vehicles that is reasonably close to their desired location. Some barren lands in the city are not used so the dealer can use those lands to turn them into parking spaces and make quick cash.

Everyone has access to the internet so they can easily book the slots beforetraveling and ensure they have a parking space available.

The rest of the paper is organized as follows: Section II deals with related work; Section III explains the working principle of the proposed system. Section IV deals withthe conclusion and future work.

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE)
DOI: 10.9756/INT-JECSE/V14I2.322 ISSN:1308-5581 Vol 14, Issue 02, 2022

PREVENTION OF UNAUTHORISED CONTENT SHARING USING WATERMARKING AND PROXY RE-ENCRYPTION IN CLOUD

[1]Dr.S.Muthusundari,[2]Damisetty Hima Bindu ,[3]AishwaryaVinod Menon, [4]Harshini S

[1] Associate Professor, Department of CSE, R.M.D. Engineering College, Kavaraipettai
[2,3,4] Final Year Student,Department of CSE, R.M.D. Engineering College, Kavaraipettai
Mail: sms.cse@rmd.ac.in

Abstract- Cloud security consists of security measures to protect cloud-based systems and data, by introducing authentication rules for all individuals involved in it. However, such security measures may have fallen short. In one such case is the problem of security threats where the user that requests data, after getting access to the said data may try to send it to reveal it to a certain unauthorized user. This could potentially cause a crippling loss to the content provider. The content provider uploads cloud-based media files as encrypted format. When a user requests access to this content, the content provider rewrites the content using the new key and sends it to the requested user. After accessing cloud-based content by users, if they republish this content in the cloud, then this file could not be uploaded to the cloud and are considered users of unscrupulousbehaviour. Allows secure distribution of exported media content to authorized users, while allowing you to track and redistribute illegal content in an appropriate manner. This paper analyses how water marking and bi directional proxy re-encryption can be used to reduce the security threat of unauthorized content sharing in cloud environment.

Index terms- filtering, Global recommending, Cluster, Quantization, Collaborative, Security

I.INTRODUCTION

These days, mixed media utilization is progressively turning into a fundamental piece of daily existence for end clients to get to various assets, and applications. An increasing number of mixed media content is created and shared every day[4].There is an immediate need of big data storage whose basic requirement is to guarantee the confidentiality of the data while maintaining anonymity of the service clients[10][14][15]. Content suppliers also look towards distributed computing for media storage and sharing, as it can give cheaper,requested client maintenance and estimation. To ensure privacy of the content and anonymity if the client access control is the best and most fundamental security function [21][22]. Access control helps sharing information in a controlled manner by applying control over which resource can be accessed by which client and how much of that resource he can access based on a permission relationship between attributes of the user and resource [7][12][13].Subsequently, it is vital to install security in making a cloud-based media sharing assistance right from the start, which gives access control to permit just approved admittance to posted media content[16]-[19].

To help oversee secure media sharing admittance to a cloud-based media place, there are two well-known strategies in the writing[2]. The first approach depends on Attribute based encryption (ABE), a related access structure provided over attributes, at the same time ciphertext with cloud code can be used to allow clients with credentials that fulfill policies and eliminate the rest[9]. The most recent rendition is Proxy Encryption (PRE), where an intermediary party is introduced to give the privilege to approved clients in a controlled manner. The key difference between ABE and PRE is that the content provider must download and decrypt the encryption and then again encrypt it in ABE[20]. This becomes a very tiresome task as the access control policies are continually evolving. However, that is not the case in PRE where an already encrypted version can be re encrypted by the intermediary party before providing it to the authorized client[1][6][7][8].

Watermarking helps us in fair-traitor tracing. When some content from the cloud content provider is shared to a client a distinct water mark is given to that particular content [24]. When a content is shared illegally, we can find the traitor just by scanning the content for watermark[23]. However, there are some limitations of watermarking. Here, we are focussing on PRE based secure media sharing in an encrypted cloud media centre.

To help secure the content in the cloud water marking and proxy re-encryption shall further be explained in section II and section III.

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE)
DOI: 10.9756/INT-JECSE/V14I2.466 ISSN: 1308-5581 Vol 14, Issue 02, 2022

IDENTIFYING NETWORKS VULNERABLE TO IP SPOOFING

[1]Dr. S. Muthusundari, [2]M. Tarun Sai Krishna, [3]M. Govardhan Reddy, [4]N. Dinakar Sai Pavan
[1] **Associate Professor, Department of CSE, R.M.D. Engineering College, Kavaraipettai**
[2,3,4] Final Year Student, Department of CSE, R.M.D. Engineering College, Kavaraipettai
Mail: sms.cse@rmd.ac.in

Abstract: *This seeks to strengthen any company's security strategy by detecting weaknesses and ensuring that the security mechanisms in place give the protection that the company need. Administrators must conduct vulnerability assessments in order to discover network security weaknesses that might result in the compromise or destruction of devices or information as a consequence of exploits. The variety of these outputs makes further analysis challenging. Unauthorized users may acquire access to a typical user network as authorised agents. When people access internet networks without understanding it, they are being watched by a third party or another possibly dangerous person. The administrator or authorised person must also review the user networks, such as IP addresses and email, to protect against harmful actions.*

Keywords:- Internet,IP networks,Routing,Location awareness,Denial-of-service attack,Authentication,Volume measurement

I. INTRODUCTION

Servers may try to spoof (spoof) the source IP addresses of your connection and transfer unwanted traffic to arbitrary sites since the Internet data plane lacks authentication. Amplification denial-of-service attacks based on these flaws have been successfully used against geographically scattered service providers (e.g., [2–7]). Spoofing source addresses obscures the origins of such attacks, making attribution more difficult and hampering attempts to prevent attacks or persuade networks to reject forged traffic.

Hundreds of IP sniffing methods have been developed during the last two decades to determine the paths travelled by forged packets [8–14]. Change routers to store packet digests and offer an interface for querying a packet's signature [9–11], provide information on a limited subset of forwarded packets to destinations [12], or change routers to store packet digests and provide an interface for querying a packet's signature [13], [14]. Despite the research, none of these methods have been adopted and have improved our ability to detect sources of false data since they require router upgrades and collaboration.

accurate recognition of other networks, and widespread deployment In this study, we look at how a network's source of information, the interconnection link via which data enters the network, might be changed to better detect phoney traffic sources. Because these routes are partially controlled by a source network, the network receiving the phoney traffic has some control over which connection receives the traffic rather than having to rely on routers it does not control. We provide methodologies that are fundamentally different from traditional tracking methods, and they may be implemented right away with no adjustments to existing equipment or cooperation from other networks. Our methods work effectively when malicious website traffic comes from a small number of sources, such as in amplification DoS assaults.When malicious website traffic originates from a limited number of sources, such as in amplification DoS attacks, our approaches are successful.

RELATED WORKS

Fuzheng Zhang et al. describe how the community separation normally suffers from the negative consequences of constrained execution due to the scarcity of client thing interactions. Helper data is often utilised to support the exhibition in order to remedy the concerns. Because of the rapid accumulation of data on the web, the information base provides heterogeneous data, containing both structured and unstructured information with varying semantics, which can be consumed by multiple applications. In this research, we look at ways to improve the nature of recommender systems by utilising heterogeneous data in an information base. First, we intend to separate things; semantic depictions from underlying material, printed content, and visual substance independently by misusing the information base.

Ethan Katz-Bassett and his associates, The Internet will always find a way if there is a policy-compliant path. Even if there is a valid path below, the connection is frequently lost. Route convergence-induced short-term disturbances were also explored. Long-term problems that may have been prevented have slowed growth. According to our research, long-term events begin to contribute significantly to overall unavailability. With an automated failure localization and repair solution, LIFEGUARD was built to solve these issues. Even in the presence of asymmetric pathways and failures, LIFEGUARD employs active measurements and a historical path map to detect flaws.

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE)
DOI: 10.9756/INT-JECSE/V14I2.499 ISSN:1308-5581 Vol 14, Issue 02, 2022

Supervised Machine Learning Model to Predict the Bank Loan Application Using Binary Classification, Decision Tree and Random Forest

[1]A Gnanasekar,[2]P Shobha Rani, [3]Akash S, [4]Arjunan S, [5]Devananth A
[1,2]Associate Professor, Department of Computer Science and Engineering, R.M.D Engineering College, Chennai, Tamil Nadu, India
[3,4,5]UG Students, Department of Computer Science and Engineering
R.M.D Engineering College, Chennai, Tamil Nadu, India
[1]ags.cse@rmd.ac.in, [2]psr.cse@rmd.ac.in, [3]ucs18106@rmd.ac.in, [4]ucs18111@rmd.ac.in, [5]ucs18123@rmd.ac.in

Abstract

This paper presents an online fraud detection system that uses anomaly detection to monitor an individual's behavior pattern and compare it with its usage history, which is a representation of the user's normal behavior patterns. Fraud is indicated by any significant deviation from normal behavior. The mechanism suffers from three disadvantages. Limited observations from the historical data, assorted nature of transaction data, and highly distorted information lead to unusually high positive failure rates of anomaly detection. Therefore, we propose a ranking metric embedding-based multi-contextual behavior profiling (ReMEMBeR) model to incorporate the detection mechanism effectively. We transform the original anomaly detection problem into a pseudo-recommender system problem and solve it using a ranking metric embedding-based method. With collaborative filtering, an individual could utilize information from similar individuals implicitly and automatically, which alleviates the individual's possible lack of historical data. By the ranking scheme, the model is trained to maximize the ability to distinguish between legitimate and fraudulent transactions. This helps to make full use of label information and, thus, solves the data skewness problem to the utmost extent. The proposed model integrates multi-contextual behaviour patterns, from purely local to more global ones. Evaluating transactions against multi- contextual behaviour patterns could reduce the error rate and, hence, could bring down the false positive rate. By creating a contrast vector for each transaction based on the customer's past behavior sequence, we profile the differentiation rate of each current transaction against the customer's behavior preference.

Index Terms— Anomaly detection, ReMEMBeR, multi-contextual behavior profiling, filtering, online banking, fraud detection.

1.Introduction

Online banking has become increasingly popular due to the popularity of computers and Internet technology. They provide a great convenience in daily life, but online banking is more likely to fall victim to fraudulent activities, and online banking fraud is not uncommon. Anomaly detection is based on behavioural profiling of individuals and works by detecting any deviation from the norm. To detect anomalies, characterizing an individual's behavior is necessary, but this isn't possible under most circumstances due to a lack of historical data. To remedy this, it might be possible to look at similar individuals to find similar behavior, but this presents another challenge. Moreover, even if the behavior profile can be established, the highly skewed distribution between legitimate classes and fraudulent ones has always been problematic, making it difficult to utilize the label information to its fullest extent. Fraud detection is approached as a pseudo-recommender system problem, with an individual being treated as a pseudo-user, his/her behavior as a pseudo-item, and the label as a pseudo-rating. This idea is based on collaborative filtering, which can be applied to multiple individuals over time. We can create a behaviour profile for an individual based on information from other similar individuals using collaborative filtering. In order to achieve a uniform treatment of heterogeneous attributes, we use an embedding-based method to obtain both attributes. As a way to utilize label information better, our model was designed to fit pseudo-users' correct preference rankings for pseudo-items and, as a result, tell the fraudulent from the genuine. Furthermore, we proposed an algorithm for the identification and differentiation of individuals. By using the proposed model, the multi-contextual behavior patterns can be integrated, allowing transactions to be examined across different contexts. When applied for anomaly detection, unsupervised learning assumes that legitimate data instances are much more prevalent than anomalies in test data. This method does not necessitate labeled training data, which is a huge benefit. We create a contrast vector for each transaction based on the customer's historical behavior sequence to profile the differentiation rate of each current transaction versus the customer's behavior preference. This study outlines a methodology and

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE)
DOI: 10.9756/INT-JECSE/V14I2.508 ISSN: 1308-5581 Vol 14, Issue 02, 2022

BITCOIN PRICE ANALYZE AND PREDICTION USING DATA SCIENCE PROCESS

[1]M.Vedaraj,[2] P.Shobha Rani, [3]G .S.Gokul, [4]S.Guru Vishal, [5]J.Harish
[1]Assistant Professor,B.Tech,M.E.,Ph.D, Department of CSE,
R.M.D. Engineering College, Kavaraipettai
[2]Associate Professor, Department of CSE, R.M.D.Engineering College,Kavaraipettai
[3,4,5]Student, Department of CSE, R.M.D. Engineering College, Kavaraipettai

ABSTRACT:
Bitcoin is a digital asset and a payment system that is used as a form of Internet currency. It allows for anonymous payment from one person to another and is therefore a preferred payment method for criminal actions on the Internet. Recently Bitcoin has received a lot of attention from the media and the public due to its recent price hike. The objective of this paper is to determine the predictable price direction of Bitcoin price. Machine learning models can likely give us the insight we need to learn about thefuture of Cryptocurrency. It will not tell us the future but it might tell us the general trend and direction to expect the prices to move. The proposed model is to build a machine learning model where the data is used to made to learn about the pattern in the dataset and the machine learning algorithm is used to predict the bitcoin price.

Key words: Bitcoin, Cryptocurrency, Machine Learning, Internet Currency

I. INTRODUCTION:

Bitcoin is a cryptocurrency, a virtual currency designed to act as money and a form of payment outside the control of any one person, group, or entity, and thus removing the need for third-party involvement in financial transactions. It is rewarded to blockchain miners for the work done to verify transactions and can be purchased on several exchanges.

Bitcoin was introduced to the public in 2009 by an anonymous developer or group of developers using the name Satoshi Nakamoto.

It has since become the most well-known cryptocurrency in the world. Its popularity has inspired the development of many other cryptocurrencies. These competitors either attempt to replace it as a payment system or are used as utility or security tokens in other blockchains and emerging financial technologies.

Learn more about the cryptocurrency that started it all – the history behind it, how it works, how to get it, and what it can be used for[1]

Bitcoin is a digital asset and a payment system that is used as a form of Internet currency. It allows for anonymous payment from one person to another and is therefore a preferred payment method for criminal actions on the Internet. Recently Bitcoin has received a lot of attention from the media and the public due to its recent price hike. The objective of this paper is to determine the predictable price direction of Bitcoin price. Machine learning models can likely give us the insight we need to learn about the future of Cryptocurrency. It will not tell us the future but it might tell us the general trend and direction to expect the prices to move. The proposed model is to build a machine learning model where the data is used to made to learn about the pattern in the dataset and the machine learning algorithm is used to predict the bitcoin price.

1.They had made only data analysis and they did not build a predicting model.
2.The classification model was not discussed and performance metrics like accuracy are not calculated.

Bitcoin has received a lot of attention from the media and the public due to its recent price hike. The objective of this paper is to determine the predictable price direction of Bitcoin price. The analysis of dataset by supervised machine learning technique (SMLT) to capture several information's like, variable identification, uni-variate analysis, bi-variate and multi-variate analysis, missing value treatments and analyse the data validation, data cleaning/preparing and data visualization will be done on the entire given dataset. Our analysis provides a

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE)
DOI:10.9756/INTJECSE/V14I2.893 ISSN: 1308-5581 Vol 14, Issue 02 2022

A Cloud Based Secured Model for Sensitive Data Transactions Using Blockchain

K.Balasaranya,K.Mohanasundaram,J.Geetha Priya,G.Prithivika,L.Saranya

Introduction

Against falsifying discernibility has been a fundamental creation element of customary endeavors. Generally merchandise delivered by formal endeavors incorporate hostile to forging two-layered (2D) or one-layered (1D) code marks that are utilized for hostile to forging detectability inquiries. The mark content is a computerized encoding (DE) string. At present, modern DEs are ordinarily produced by framework integrators prior to being conveyed to printing manufacturing plants. The printing plants utilize the DEs to create paper or plastic enemy of duplicating names and return them to industry clients or makers. All through the mark fabricating process, industry clients utilize the equipment also programming of the framework integrators to accumulate data applicable to the DE on the names before the items are sent out. In the utilization stage, purchasers can recognize DEs in different ways (for instance, by examining) and inquiry the item data in the data set to survey the validness of the product. This data is given by framework integrators. The previously mentioned exchange includes a significant gamble of spillage during the DE creation of the 2D code. Machine integrators, which supply DE records straightforwardly to printing manufacturing plants or industry customers, establish a critical wellspring of hazard of human spillage in the course of DE records. When DE parcels are spilled, itis unimaginable for framework integrators, printing plants, what's more different gatherings to defend themselves. Furthermore, industry clients ordinarily approve numerous specialists to subcontract their organizations. The event of phony specialists can be exceptionally dangerous for framework integrators, causing critical monetary misfortunes both upstream and downstream. As of now, because of the protection spillage peculiarity brought about by DE records in the flow cycle, analysts have presented blockchain innovation. Simultaneously, homomorphic secret sharing and secure multi-party processing advances are mutually utilized. In any case, the majority of the current homomorphic secret sharing and secure multi-party figuring innovation shave the issues of huge correspondence adjusts and an excessive amount of traffic load. This definitely causes the working productivity misfortune in view of blockchain stage. Furthermore, the blockchain stage utilizes plaintext and ciphertext techniques for exchanges. In the event that the plaintext is utilized, the framework face the gamble of uncovering information protection. In any case, if the ciphertext is utilized, in spite of the fact that information security is secured, it is challenging to help homomorphic figuring. In like manner, the peculiarity of DE course in present day ventures experience the accompanying issues:

There is a gamble of spillage of delicate information in the dissemination.

Framework integrators and printing processing plants can't be very much recorded, and the dependability of upstream specialists can't be distinguished.

After the DE information are created, they are put away in the information base of every framework integrator for future reference and are defence less to altering by laborers.

The current innovation has high intricacy in handling delicate information and low working productivity.

In this article, we propose an exchange structure for delicate information and a blockchain-based process. The shrewd organization contains a blockchain module, an electronic agreement (E-contract) layer hub, and a Programming as-a-Service (SaaS) layer module. The blockchain module offers innovative help, for example, virtual machines, agreement calculations, and systems for exchange check. A dispersed application administration is given by the E-contract layer module. In expansion, this runs the touchy information exchange structure code and the code produced at the E-contract layer by the calculation to encode the age. The SaaS layer module gives a cloud-stage administration that works with each party to partake in business correspondence through web-based interfaces. The savvy framework utilizes the blockchain to record the activities and investment of each party in producing DE data. No party can access the DE data until it is printed as marks, along these lines forestalling any human spillage of the DE data. In particular, the commitments of this paper are as per the following:

We propose a handling system for touchy information in light of blockchain. The general intricacy of handling touchy information in the current blockchain innovation is decreased.

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE)
DOI:10.9756/INTJECSE/V1412.891 ISSN: 1308-5581 Vol 14, Issue 02 2022

Astronomical Object Shape Detection Using Deep Learning Models

K. Mohanasundaram1,K. Balasaranya2,J. Geetha Priya3,B. Ruchitha4,A. Vishnu Priya5,D. Hima Harshini6

Abstract

In astronomy, over a large kilometer of distance, it has been find out that it has billions of changeable and unchangeable sources are available. The challenges is, researches are not able to split that source into necessary and unnecessary and from that source most of the shapes will never been seen through human eye. In order to overcome that the machine-learning model is designed whereas, most of the machine learning models will not provide good outcomes. In addition, it struggles to differentiate between necessary anomalies and unwanted sources like artefacts or rare anomalies source, for which the researches will not show much interest. Which say that the ML models cannot be implemented in real time. So to achieve the required outcome the deep learning models have been introduced. Which combine both the flexibility and goal of the human brain with the structure of machine learning. Space scientist do analysis on astronomy images, light curves and spectra. In our system, the transfer learning models from the deep learning have been implemented. VGGNet models like VGG16 and VGG19 models are done and then performance of both the models are compared.

Keywords: Astronomical Object, Deep Learning, VGGNet, Transfer Learning, Performance.

Introduction

Most recent astronomical monitoring can create huge measures of information that surpasses the capacities of the scientists to process genuinely through trial. A lot of difficulties and possibilities also arise, with these perceptions, for astronomers and scientists in the field of machine learning.

The work done in this concept is to predict the anomaly detected in the huge amount of dataset gathered from the astronomical space and also the prediction is done be evaluating the shape of the astronomical object using deep learning models.

Since, huge amount of data is collected from the astronomy it is not possible for the researchers to go through all the data and do the analysis. Using the deep learning and machine learning models the prediction for separating the necessary data for the scientist has been done will less amount of time.

The new technique of data sampling process has been implemented to increase the count of dataset and it plays an vital role in improvement of output image from classification and prediction [1]. For Multiclass detection system various machine learning models can be used. Models like SVM, Random Forest, KNN etc., can be designed. However, the Random forest gives better outcome among them, but the outcome is lesser than the deep learning models [2]. Different models of machine learning has been implemented to the galaxy detection. The various ways of utilizing the neural network models are also been implemented. In this system, the prediction of galaxy shape is spiral or elliptical are analyzed [3-4]. The CNN consume more time for training and memory, to overcome that other models of CNN can be used. The architecture of CNN are VGGNet, Resnet, Mobilenet, InceptionV3. The more number of data can be trained and tested for various galaxy shape detection system [5].

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE)
DOI: 10.9756/INT-JECSE/V14I2.467 ISSN: 1308-5581 Vol 14, Issue 02, 2022

Design and Development of Home Security Rover with Dedicated Application Control

J. Geetha Priya[1], S. Srinivasan[2] , S. Praveen[3], T.V. Sudharsan[4], S. Varun Prashanth[5]
[1]*Assistant Professor, CSE Department, R.M.D. Engineering College, Kavaraipettai, Chennai*
[2] *Professor, CSE Department, R.M.D. Engineering College, Kavaraipettai, Chennai*
[3] *Intern-Veram Technologies,*
[4], *Intern-Cognizant Technologies,*
[5], *Intern-Wipro Technologies*

Abstract- With the increase in theft and security issues in our day to day life the need for the development of home security technologies is increasing rapidly. Although there are several home security automation devices available nowadays they are all specific to the area of operations and require human supervision and require high installation effort. This project aims to eliminate the security problems of domestic and commercial environments by the use of machine learning and automated rover mechanisms. This project also aims to reduce the risk of fire accidents by detecting the gases at point of operation and indicate the users in case of any gas leakage.

Keywords- **Security, Surveillance Robot, Home Security, Face Recognition, OpenCV, CNG or LPG leak detection.**

I. INTRODUCTION

Security automation is a growing trend in every domestic and commercial space. The need for security has increased much due to the increase in robberies and theft. Thus people want to live and work in a safer environment. As this need is ever-growing the development of security automation devices has been on the rise that provides site-specific security services. These traditional security systems are mostly confined to a specific region of operation based on the environment they are deployed and are usually fixed or mounted at some place. They usually require human supervision for effective operation. They use multiple sensors mounted at multiple positions in the environment organized in a sensor network. As there may be rooms that are irregular in size and shape these sensors cannot cover all the points and there may be regions that may be un-mapped. Based on the above drawbacks of the traditional security systems, a more flexible and effective solution is to deploy a mobile rover with surveillance capabilities. This paper presents the development of a security surveillance rover with object detection, face recognition and monitoring capabilities. The proposed rover comprises of two wheels, a camera, Raspberry Pi Microcontroller can move around the environment autonomously and can overcome obstacles available in common household buildings. It can communicate with the user through a dedicated mobile application and can recognize faces and identify intruders and provide live feeds to the user through a dedicated database. It can also be used collectively in coordination with multiple units and monitor the environment's air quality and detect LPG gas leakage and alert the user. All these features make the rover a powerful security device.

II. LITERATURE SURVEY

Hemavathy et.al [1] proposed a system which has the ability to monitor sound in the premises. Any sound after company is closed, the robotic vehicle starts moving towards the sound on its predefined path. It then scans the area using its camera to detect any human faces detected.

Kalpesh Gupthe et.al [2] proposed a system which transforms input data into multi-dimensional embedding space & trained using triplet network structure. The model was trained in a triplet structure using triplet loss, having the well known ResNet-18 as the fundamental model. Based on these promising results, it can be concluded that projection-based methods could provide a solution for visual identification problems on low memory systems, like smart phones, smart cameras and other IOT devices.

Gabor et.al [3] proposed a system which has a surveillance robot with hopping capabilities for home security. The surveillance robot is capable of negotiating cluttered home environments by a hybrid rolling-hopping locomotion mode. It adopts the Zig-Bee protocol for wireless communication and therefore can be added to a Zig-Bee based home control network as a mobile video sensor node.

Mona Kumari et.al [4] proposed a system for domestic air quality monitoring and cooking gas leak detection for a safer home. They used to measure the quality of air in terms of concentration of harmful gases like CO2, smoke, LPG leak detection, CNG leak detection etc. A hybrid, low cost, low power IoT based system for air

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE)
DOI:10.9756/INTJECSE/V14I2.892 ISSN: 1308-5581 Vol 14, Issue 02 2022

Smart Student Monitoring System through Face Recognition

D.JayakumarS,C.Srinivasan,T Pradhikasha,M. Subitha,D. Tejaswini

Abstract

Smart campus management systems are currently in use and further improvement of the system or focused to improve the accuracy of attendance prediction, reduce the faulty data entry in the eternals, in order to work out robust rules on attendance making. The main purpose of the presented work is to enhance the relationship between the student and the teaching staff. in many sectors, online classes are still in practice to make the students interactive on regular classes, numerous steps are taken. Students are not attentive in the online classes due to long duration of class and various distractions. Facial attendants' making system is helpful to make the student be attentive in the class and get the seriousness of the attendance system. The present a system is focused on detailed mobile application where the student database automatically recorded, as, study materials or uploaded in fourth making the student interactive with the staff taking the classes. Further the analysis of student based on score and presentation on the given assignment or also estimated by the staff. The detailed analysis of individual students or helpful for the staff to provide unique training to them.

Keywords: Smart attendance, Machine learning, deep learning, Face recognition, and face features.

Introduction

The development of machine learning and artificial intelligence models in the current scenario required face recognition models everywhere to make a tent occasion, to recognize the people, to analyse the scene and crowd analysis etc. Automatic face recognition Is used to detect, locate face features present in the crowd.[1] The most well-known detector used for face recognition processes is the Viola Jones algorithm. The algorithm is composed of adaboost and Haar cascade model together to determine the used to determine the facial features correlate with the training features accurately. The model is tested with pre-trained face images, Japanese emotion face image, and real time face images to validate the process. The major issue with the face recognition process is arise because of the low-resolution images captured by the camera, external noises that damage the facial images, processing delay on complex face features. Face recognition can also be made if the face data is captured on behalf of angle such as frontal face side face and back face. Facebook location access is one of the challenges in face detection process [2].

Various feature extraction techniques are used to attain the unique parameters present in the face images. (LBP) local binary pattern extraction is one of the interesting techniques that grabbed the unique Landmark points present in the face images. As discussed in the previous analysis, Viola Jones acts as a robust methodology for face feature extraction. in any kind of automatic face recognition systems and features required to be gathered induct from the face images to make the accurate recognition[3]. Some of the other phases feature text extraction techniques such as neural network enabled self-organized mapping models that capture the unique pixels and their weights that correlate with the face features. Utilization of linear regression model and decision tree in order

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE)
DOI:10.9756/INTJECSE/V14I2.890 ISSN: 1308-5581 Vol 14, Issue 02 2022

Credit Card Fraud Detection Using Data Science Technique

D. Jayakumar, R. Remya Rose,P.Gangula Sudheer Kumar,C. Bhuvan Vignesh,A.K. Bhupath

Abstract

The study focuses on detecting credit card spam in real-world Entity. Credit card spam is on the rise in comparison to prior years. Criminals are employing false identities and other technologies to trick people and steal their money. As a result, finding a solution to these sorts of scams is critical. In this paper, we developed a model to detect fraudulent behaviour in credit card transactions. This system can provide the majority of the functionality required to detect fraudulent and illegal transactions. It gets increasingly difficult to trace the behaviour and patterns of unlawful transactions as technology advances. Machine learning, artificial intelligence, and other technology disciplines can be used to discover a solution; it is now easy to automate this process and save part of the significant work needed in detecting credit card fraud. Initially, we will gather credit card use data from consumers and use a machine learning approach to separate it into training and testing data sets. We may examine the broader data-set and the user-supplied current data-set using this possible technique. The precision of the outcome data is then increased. We moved on to the processing application of some of the given attributes, which can impact the identification of fraud in the graphic data visualisation model's display. The techniques' accuracy, sensitivity, specificity, and precision are used to evaluate their performance.

Keywords: Machine Learning Algorithm, Illegal Transactions, Credit Card.

Introduction

Now the Credit card usage have improved over the world today; individuals are increasingly becoming cashless and depending only on internet purchases. The credit card has increased the convenience and accessibility of digital transactions. Illicit credit card transactions cost millions of dollars each year. Fraud is as ancient as humanity and comes in various forms. According to PwC?s 2017 Global Economic Crime Report, around 48% of businesses faced economic crime. As a result, there is an obvious need to research credit card fraud detection. Furthermore, the emergence of new technology opens up new options for criminals to create a fake. Credit cards are often used in modern life, and credit card fraud has recently increased damages.

Among the techniques used in supervised machine learning include random forest algorithm, multiclass classification, decision trees, and supports vector machines.

The data required to train the supervised learning system should already be labelled with the right responses. Subsets of supervised learning issues are classification problems. The goal of this challenge is to develop a short model that can predict the value of the dependent attribute based on the attribute variables.

The dependent feature in the categorical classification is numerical, which distinguishes the two tasks. A classification model tries to draw a conclusion from observable data. Given one or more inputs, a

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

ISSN 2228-9860 eISSN 1906-9642 CODEN: ITJEA8

International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies

http://TuEngr.com

Genetic-based Crow Search Algorithm for Test Case Generation

A.Tamizharasi[1*], P.Ezhumalai[1]

[1] *Department of Computer Science and Engineering, R.M.D. Engineering College, Kavaraipettai, Chennai, INDIA.*
**Corresponding Author (Email: tamizh4384 @gmail.com).*

Paper ID: 13A4K

Volume 13 Issue 4

Received 25 December 2021
Received in revised form 31 March 2022
Accepted 30 March 2022
Available online 07 April 2022

Keywords:
Software Testing, Test case generation, Path coverage, Genetic Algorithm, Crow search algorithm, GBCSA, Test case optimization, Unified Modelling Language (UML), Control flow graph (CFG), Genetic optimization.

Abstract

Generating test data for a complex domain is still a challenging area of research in software testing, which builds the test suites for validating the system. The quality of test cases generated decides the cost and effectiveness of the software process, which drives this research to optimize the test suites. Unified Model Language (UML) models depict the system responses to a given scenario, so generating the test case from the models would give maximum path coverage from start to finish. The proposed work attempts to create optimized test data from the UML model at the early stages of software development. The Hybrid Genetic and Crow Search Algorithm (GBCSA) helps to optimize the test suite by removing the redundant test data. This helps in maintaining a pool of solutions and directs the search towards global optima, decreasing the likelihood of getting trapped in the local optima. The experimental results show 100% path coverage and time efficiency when compared with traditional crow search and genetic optimization algorithms.

Disciplinary: Computer Science and Engineering.

Cite This Article:

Tamizharasi, A., Ezhumalai, P. (2022). Genetic-based Crow Search Algorithm for Test Case Generation. *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies, 13*(4), 13A4K, 1-11. http://TUENGR.COM/V13/13A4K.pdf DOI: 10.14456/ITJEMAST.2022.74

1 Introduction

Testing plays a crucial part in assuring the quality of the released software product. Testing time increases with respect to the project size and complexity. Testing includes test case design, preparation, and implementation of test cases to validate the system, and, finally, comparison of results. Generating optimized test data that covers the entire critical path is a big challenge in the testing domain. Test cases help in determining whether the user requirements are met or not. Test cases can be produced from both the user stories and the code as well. Testing the software after the coding phase may give accurate results, but still delays the completion time. This work

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE), 14(4): 1397-1404.
DOI: 10.9756/INTJECSE/V14I4.184

Received: 08-05-2022 Accepted: 22-05-2022

A. Tamizharasi[1]
S. Remya Rose[2]
Iska Venkata Gowtham Reddy[3]
K.V.S. Kireet[4]
Kollu Yagnesh[5]

Plant Leaf Disease Detection Using Convolutional Neural Network

Abstract

One of the many strands of AI includes "deep learning". According to this research, Autonomous learning and feature extraction have made it a hot topic in academia and industry in recent years. Images, videos, and speech and natural language processing have all benefited from it. Agriculture plant disease and pest range assessment research is also being conducted locally. Artificially selected disease spot features may have limitations, but deep learning can help overcome these problems by enhancing both the adequacy of plant disease recognition models that use deep learning as well as the objectivity of feature extraction. Agricultural leaf disease identification using deep learning technologies is summarized in this paper. In order to detect plant leaf illness, we used deep learning and high-resolution imaging techniques within the scope of this study. A Convolutional Neural Network (CNN) algorithm was employed here (CNN). The level of accuracy can be reached can be increased to 85% by repetitive iterations.

Keywords: Convolutional Neural Network, Machine Learning Techniques, Deep Learning Technology

Introduction

Modern technology has made it possible for human civilization to feed over 7 billion people around the planet. It's still an issue that affects multiple aspects, such as climate change, plant diseases and biotic stress. Global food security is threatened by plant diseases, which have serious ramifications for small farmers who rely on healthy crops to sustain their businesses. Agricultural production is dominated by smallholder farmers, who account for more than 80% of total output, with pests and illnesses accounting for 50% of total losses. With the help of a wide range of experts, agriculture extension organizations and other institutions are always working toward the prevention of crop loss. It's an expensive, time-consuming, and labor-intensive process. On the other hand, in rural parts of many nations, farmers may be unable to contact professionals because of a lack of resources. Plant diseases can be prevented from spreading if they are detected early enough (before symptoms show). Deep learning-based computer vision applications are increasingly being used in agriculture, such as pest prediction, disease diagnosis, water resource management, and so forth. To help farmers and agronomists make quick judgments and reduce major financial losses, an autonomous system like this is needed. We employ the Efficient Det framework in this paper to build a viable a real-time disease detection system for plants using machine learning techniques. The following is a summary of the article's major contributions:

A new interactive deep learning framework has been implemented for the identification of

A. Tamizharasi[1], Assistant Professor, R.M.D Engineering College, Chennai.
Email: tamizh4384@gmail.com
S. Remya Rose[2], Assistant Professor, R.M.D Engineering College, Chennai.
Iska Venkata Gowtham Reddy[3], UG Student, R.M.D Engineering College, Chennai.
K.V.S. Kireet[4], UG Student, R.M.D Engineering College, Chennai.
Kollu Yagnesh[5], Programmer Analyst Trainee, Tata Elxsi, Chennai.

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE), 14(04): 1405-1414.
DOI: 10.9756/INTJECSE/V14I4

Received: 19-05-2022 Accepted: 28-05-2022

A. Tamizharasi[1]
S. Remya Rose[2]
T. Priyadharshini[3]
S. Rasidha Begum[4]
P. Jayapradha[5]

Software Bug Detection Using Supervised Machine Learning Techniques

Abstract

A software bug is an error, defect, or weakness in a particularly malevolent program orsystem that causes it to produce an inaccurate or unexpected outcome, or to act in unanticipated ways. The majority of defects are caused by faults and errors in a program's design or ASCII text file, as well as components and operating systems used by such applications. A software is said to be buggy if it has several defects and/or problems that substantially impair its functionality. When a coder commits a logical error, bugs occur. The analysis of a dataset using supervised machine learning techniques (SMLT) to capture various information such as variable identification, uni- variate analysis, bi-variate and multi-variate analysis, missing value treatments, and knowledge analysis, data cleaning/preparation, and data visualizationare going to be performed on the entire dataset. This is because spotting software flaws earlier in the development process boosts software quality, dependability, efficiency, and cost. Many ideas to solving this dilemma have been discussed.

Keywords: Software Bug Detection, Supervised Machine Learning, Dataset, Analysis, Algorithm

Introduction

A. Background

Software flaws have an impact on software dependability, integrity, and maintenance costs.

Machine learning is the capability to learn from experience and detect an outcome.

Unsupervised learning algorithms are machine learning algorithms. Supervised algorithms will have an output variable, and we will seek for correlations between dependent and independent variables. The unsupervised procedure is used to transfer data and forecast the outcome. The algorithms analyze all of the data and generate the results. Uncertainty is also predicted using a machine learning system. Some Machine Learning techniques are used to anticipate a flaw in software, primarily during the development phase of the life cycle, which involves problem identification, planning, design, development, testing, deployment, and maintenance, as well as models of the software development life cycle. It's also difficult to design software that's bug-free, even if the program is precisely applied, because hidden faults are common. Software bug detection is an important part of the software development process that helps in boosting resource usage. Because of software faults, the number of software design issues is escalating. Trained testers enhance software quality by resolving problems, hence bug analysis improves software performance before it is implemented.

B. Problem Statement

A software bug arises whenever a system goes down. Developers and team members are to accountable for software bugs. Software bug monitoring is essential to improve software quality, minimize costs, and save time. It discovers and validates the modules that

A. Tamizharasi[1], Assistant Professor, R.M.D Engineering College, Chennai.
E-mail: tamizh4384@gmail.com
S. Remya Rose[2], Assistant Professor, R.M.D Engineering College, Chennai.
T. Priyadharshini[3], UG Student, R.M.D Engineering College, Chennai.
S. Rasidha Begum[4], UG Student, R.M.D Engineering College, Chennai.
P. Jayapradha[5], UG Student, R.M.D Engineering College, Chennai.

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE)
DOI: 10.9756/INT-JECSE/V14I2.460 ISSN: 1308-5581 Vol 14, Issue 02, 2022

An Educational Vision Application Think lab using Firebase

Padmapriya.K[1], Dr.P.Ezhumalai[2], SakkuruKundan Srinivas[3], Mallu Dhanush Kumar[4], Pabolu Mukesh Narayana[5], Tanguturu Venkata Sukesh[6]

[1]Assistant Professor,Department of CSE,RMDEngineeringCollege,Kavaraipettai, Ch-601206.
[2]Professor& Head,Department of CSE,RMDEngineeringCollege,Kavaraipettai, Ch-601206.
[3,4,5,6]Student,Department of CSE,RMDEngineeringCollege,Kavaraipettai, Ch-601206.

Abstract -Education is having a very vast domain for gaining knowledge. There are many applications all-around on the internet, that provides various application for an individual to learn through explanation videos,onlinematerials and in other means. So,in this paper an app that provides all the individual material required for the individualeducationalpath is proposed. For some of the existing applications like Inshorts, there are news and talks in a generalized way.But there is no application particularly showing the trending discussion about every individual education pathwhichisrequiredforstudent community. In this paper, a personal, individual, education-friendly, and informative application namedThinkLab which provides a good education setup for the students in every sector (includes college, school,playschool) is proposed.In this application, there is more space for developing the skills based on interested domain. For example,the students have a feature called code blog where they can improve their coding abilities. This application is varied from other application with the ToDo feature which acts as a guidance to an individual user which helps to remind their work, assignments and due date so the user can do complete their task on time. Thus, the proposed application provides a complete educational guidance for an individual.

Keywords—ThinkLab, ToDo feature, code blog.

INTRODUCTION

The 21st century is very well developed in education in the past in the ancient time's students used to teachers and stay foryears but now time changed.The trend of the educational system is also upgraded, students can study even if they are farfrom the teacher.There are many alternative ways for the scope of education in this century.Thinklab is one such scope.Humans are evolving,buttechnology is updating faster than humans. It is necessary to upgrade our knowledge to grow withthe updatingtechnologiesand forthatwe needthetechnology to be learnt forthis upgrade,Thinklabwill beprovidedwithqualified mentors and an authorized website for giving such knowledge. The application is named as Thinklab for its feature which is a lab for thinking. A lab is a place where we can experiment so Thinklab is the place where we can experiment with our thinkingcapability which upgrades our technical knowledge. The application Thinklabis featured with a beautiful cool pleasant blue color which motivates the user to concentrate on what he wants to do in Thinklab.The authentication for the application is done usingthe firebase console so that everysingle user can get an account inThinklab andcan be identified and guided in a great way possible because the motive of the Thinklab is to make every individual studentbe benefited. By using the doubt room icon in the mens,the student can chat with the trained professors to get their doubtsclarified. As a future asset, a mentor option is added to the students so that the student can follow their wished mentors to guidethem and also follow the courses offered by them. Users can ask doubts to their wished mentor whom they follow and also,they can contact their mentors from other colleges too as there is no limits to the knowledge. Students can ask any professional or academicdoubtstotheirmentorsandgetproperguidancefromthem.Notonlyregardingacademicsbuthe/shecanalsoaskany doubts regarding their internships or any carrier relateddoubts to their mentors who are assigned specially for clearingdoubts in any sector. Students can use their assignment record which will be redirected to google classroom connected bytheir college. If any work assigned to them by their college using platforms like google classroom they can view the assignments in to-do list, so that the student can know their task and can be punctual for submitting their assignments assigned to them. The students can not only view their assignments in Thinklab but they can also easily submit their work in google classroom using the feature provided by Thinklab. All the co-curricular activities also will be viewed in Thinklab. It will be shown intodo list sector where they can form their to-do list and can try to complete them effectively on time which will promote punctuality discipline of the student as this discipline is the most important attitude for every student irrespective of their branch. This application will recommend using to-do list because it listsout all the tasks and assignments to be done in future and also analarm remainder can be added inthe todo list sothat the application alarms and makes sure that the task or assignment is made known to the user to complete their taskon time.

Coming to knowledge-based education, it is an important aspect for a student to know aboutevery important development in technology. This application can update the user all such things about the brand-new methods,principles, andtechniqueswhich aredeveloped and being developed inthisworldof technology.Thinklab is an application which contains all brand-new information from various websitessuch as google and everwindering circle,which will update all the tech news in our app and this feature is named as techknow specifying the technology

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE)
DOI: 10.9756/INT-JECSE/V14I2.461 ISSN:1308-5581 Vol 14, Issue 02, 2022

A Robust real time Handwritten recognition system using Neural Networks

Padmapriya.K[1], Jenitha Kubendran[2], Kowshika RajaMuthu[3] , Janani Suresh Kumar[4]
[1] Assistant Professor , R.M.D Engineering College, R.S.M Nagar, Kavaraipettai, Chennai 601206
[2,3,4] Student, R.M.D Engineering College, R.S.M Nagar, Kavaraipettai, Chennai 601206

***Abstract*— Handwritten recognition is the ability of the computer to read, recognize and interpret the various styles of handwritten from different sources such as papers, documents, photographs, stored screens and devices. An intelligent word recognition framework is developed with the help of optical character recognition (OCR). The features of the character written are recognized by the unique strokes. The proposed work is formulated based on (ARIMA) Auto regressive integrated moving average estimation model to determine the uniqueness present in it. The presented model calculates the time series update of the character is fetched to determine the pattern. Further the ARIMA model determines the prediction statistics based on unique statistical metrics arrived from the independent data. The proposed approach generates the lead lag parameter on independent inputs; further the maximum correlation pattern determines the character recognition. The input dataset is collected from real time camera, and training data from different sources of internet. To avoid human errors, automated recognition systems are derived in recent days. The real time camera enabled system, recognize the characters accurately using neural network model of auto regressive structure. Detection accuracy of 95% is achieved with the proposed system.**

***Keywords*— Handwritten recognition, signature verification, neural networks, pattern recognition, statistical metrics.**

I. INTRODUCTION

The role of handwritten recognition systems are improved in recent days in many smart devices. To provide security, automated recognition of handwritten is developed. It is the ability of the computer to read, understand and interpret different styles of handwriting strokes to analyze the uniqueness. Printed documents, photographs touch-screen windows need to recognize the unique stroke of the writing style to make it as a unique identity. Handwritten recognition can be done with online mode and offline mode. During online mode, the given test data is compared with massive text database, in analysis of various strokes. Further the offline mode utilizes optical character recognition system (OCR). Automated handwritten recognition systems are helpful in reading the postal address, reading bank check amounts, reading the forms, digital libraries etc. the advantages of the offline recognition system is that, it can be read at any time with the help of local computers. The input handwritten texts are considered as the images that contain various strokes in spite of segregating the image into different parts.

Handwritten recognition, on the other end used for making the unique identity. For various security reasons the unique handwritten recognition is made to authenticate the person. In some cases handwritten strokes are helpful to provide authentication for secret document access.

In consideration with handwritten models, different languages have unique strokes of writing . The massive data collected from the unique languages and its strokes are developed as pre-trained models. This pre-trained model contains numerous stroke mechanisms and its equivalent statistical parameters analysed using Hidden markov Model. Some of the commonly using statistical models includes, Gaussian mixture models (GMM), Baum–Welch training, Viterbi decoding, neural networks etc. In interfacing with smart screens, the handwritten stroke written for testing is fetched. Using Long short term memory, those acts as the light weight pattern recognition model utilize the efficient training process of massive dataset. some of the other kinds of recognition methodologies includes, gesture recognition, voice recognition, eye tracking system are also used for authentications. In spite of all different authentication methodology, handwritten recognition acts as the robust method. .

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE)
DOI: 10.9756/INT-JECSE/V14I2.311 ISSN:1308-5581 Vol 14, Issue 02, 2022

ONLINE SHOPPING MANAGEMENT SYSTEM USING DJANGO FRAMEWORK

S. Logesswari[1], S. Jayanthi [2],Kumara Swamy Reddy D[3],Kollu Yaswanth[4]
[1] Assistant Professor,Computer Science & Engineering Department R.M.D Engineering College Kavaraipettai, Chennai, India
[2]Assistant Professor,Electronics&Communication Engineering Department R.M.D Engineering College Kavaraipettai, Chennai, India
[3]B.E 4th year Computer Science Department R.M.D Engineering College Kavaraipettai, Chennai, India
[4]Project Developer,Wipro

Abstract: -Online Shopping is a lifestyle e-commerce web application that sells a range of goods. This paper lets customers to explore numerous products and purchase desired things instantaneously utilising Braintree payment processor, which is a sub-division of PayPal payment processor. The overall aim of this study is to create an ecommerce website and incorporate a payment processor. It also allows Administrators and Managers to easily view orders placed by users. The objective of this paper is to examine the effectiveness of Django in creating an e-commerce website for the clients Before installing Django for this project's development, a Python interpreter was installed on the host operating system of the platform used for development, which could be a computer or a cloud service provider. Other third-party modules used in the development of this project include Django-Rosetta, which facilitates language translation through the browser, ngrok, which temporarily exposes the local web server to the internet for testing purposes, and Redis, which recommends products to users based on previous purchase statistics. In conclusion, the purpose of translating language from English to various indigenous languages was met with success. To facilitate payment for orders, a payment processor was incorporated, and a recommendation engine was also constructed.

Keywords: - Python, Django, Libraries, Redis, Ngrok, Virtual environment, Payment Processor

1.INTRODUCTION

With the evolution of the internet and so many other computing devices, market places have been brought to the fingertips of customers without requiring them to leave their homes, businesses, or other locations that would otherwise prevent them access to the market at that time. One notable effect of the internet is the advent of online purchasing, commonly known as e-commerce (Electronic Commerce).Many companies now invest heavily in e-commerce, including Amazon, Shopify, AliExpress, Jumia, Konga, and others. These big organisations' main job is to operate as middlemen between producers and consumers, sometimes known as an online retailer between manufacturers and consumers. Because consumers cannot always be in all market places at the same time to purchase goods, these major players in this business deal with goods from a variety of manufacturers from different industries ranging from edible goods (groceries, desserts, etc.) to non-edible goods (such as computers and electronics, wears, utensils, and so on). This procedure of goods supply chain stays the same as before, and it has alleviated consumers of the burden of having to go to numerous market places to buy items.Databases are now widely recognised as a vital asset for many applications, and consequently their security is critical. Data confidentiality is especially important since data has monetary and non-monetary value. Criteria for assessing the effectiveness of various security-control methods are identified. The security-control systems based on each of the four approaches are described, as well as their performance in relation to the stated assessment criteria.The paper focuses on reducing the barrier, allowing the official spoken language (English) to be converted to a native tongue or any other language. The goal of this study is to create an online store using Django, a famous Python web framework. The goals are as follows: to investigate the functionality of the technology powering certain major e-commerce sites; to create an e-commerce website that is translated into some indigenous languages; and to design an e-commerce website that is translated into some indigenous languages. Integrate a payment processor to manage payments for clients on the site; Create a recommendation engine to recommend things linked to the item being purchased at the time.This study will investigate the functions of a conventional e-commerce website as well as other third-party software used in the building of an e-commerce website, all of which are based on the popular Python web framework (Django).

I. LITERATURE SURVEY

Python is a high-level, general-purpose programming language that is interpreted. Python's design philosophy, developed by Guido van Rossum and initially released in 1991, emphasises code readability through the usage of substantial whitespace. Its language elements and object-oriented approach are intended to assist programmers in writing clear, logical code for both small and large-scale projects. Python is garbage-collected

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE)
DOI: 10.9756/INT-JECSE/V14I2.455 ISSN:1308-5581 Vol 14, Issue 02, 2022

Traffic Sign Board Recognition usingConvolution Neural Network and Voice Alerting System

SHERIN BEEVI L [1], SUNKAVALLI VARSHITH SAI KRISHNA [2], SADLA CHARAN SAI[3], SUCHETH PALAGUMMI [4]

[1]Assistant Professor, Department of Computer Science and Engineering, R.M.D Engineering College, Kavaraipettai, Tiruvallur-601 206, lsh.cse@rmd.ac.in

[2,3,4]Student, Department of Computer Science and Engineering, R.M.D Engineering College, Kavaraipettai, Tiruvallur-601 206

[2]ucs18326@rmd.ac.in, [3]ucs18316@rmd.ac.in, [4]ucs18324@rmd.ac.in

ABSTRACT

Road signs are required to ensure a safe and secure flow of traffic. Laxity in seeing traffic signs and displaying them inaccurately is a major cause of road accidents. The proposed system assists in identifying traffic signs and alerting the driver so that he or she may make the appropriate selections. Convolutional Neural Network (CNN) is used to train and test the suggested system, which aids in traffic sign picture identification and categorization. To improve the accuracy of a dataset, a set of classes is developed and trained on it. The German Traffic Sign Benchmarks Dataset was utilised, which contains 51,900 pictures of traffic signs divided into 43 categories. The execution precision is around 98.52 percent.The suggested system includes a segment in which the motorist is notified to nearby traffic signs, which helps them understand what laws to follow on the road. A voice alarm is broadcast over the speaker once the sign is detected, alerting the driver. The suggested system also includes a segment in which the vehicle driver is notified to nearby traffic signs, which assists them in understanding the regulations that must be obeyed to guarantee maximum safety. The goal of this system is to protect the driver, passengers, and pedestrians in the vehicle..

1. INTRODUCTION

Data science is a discipline that combines domain knowledge, computer abilities, and math and statistics understanding to extract useful insights from data. Machine learning algorithms are used to numbers, text, pictures, video, audio, and other data to create artificial intelligence (AI) systems that execute tasks that would normally need human intellect. As a result, these systems produce insights that analysts and business users may employ to create meaningful commercial value. [1] In today's evolving modern world, where automated driving technologies are becoming more prevalent, traffic sign recognition is critical. [3] It adds enormous value to systems like smart sensors, artificial intelligence for navigation, and geographic information systems (GIS).[1] Furthermore, the benefits to pedestrian and driver safety might be enormous. [4] Furthermore, due to the country-specific character of traffic signals in terms of both colours and forms, it is difficult to identify a single approach that will ease detection. [3]Colour degradation, occlusion, and swings and oscillations in illumination are only a few of the issues that might arise during data collecting. However, creating a single system that works for everyone is tough. [1] We use the GTSRB (German Traffic Sign Benchmarks) dataset for the purposes of this work, with an emphasis on Thai traffic signs..We discovered that the quantity of traffic accidents in India is worrying after performing a survey. According to reports, over 53 accidents occur on the highways every hour. Furthermore, more than 16 people die per hour as a result of these catastrophes. When a driver disregards traffic signs while driving, they endangering their own life as well as the lives of other drivers, passengers, and other road users. [1] As a result, we developed a system in which traffic signs are automatically identified using a live video stream and read aloud to the driver, who can then make the appropriate decision.[7]Another focus in our system is the notion of using GPS to determine the user's position. Furthermore, all traffic signs will be kept in a database, along with their locations, so that the motorist will be warned in advance of the next Traffic Signs.

2. RELATED WORK

People in today's fast-paced world frequently fail to recognise traffic signs and, as a result, breach the regulations. In order to limit the amount of accidents, a lot of study has been done in this area. To categorise traffic signs and notify the driver, researchers employed a range of classification techniques and CNN architectures. Our solution attempts to improve the identification process while also providing other benefits to the driver, such as an early warning.

Vehicles' Automatic Signboard Detection System Avoiding signboards on the road and failing to obey the laws are two main causes of accidents. To avoid this problem, automobiles will be equipped with a traffic signboard detecting system that will identify the signboard and alert the driver. It shows the alert message or notice on the supplied screen and provides voice notification through speakers. Recognition of traffic signs is critical to the highway or road transportation system. The use of openCV to recognise and extract traffic signs is a major method. Many lives will be saved as a result of this method.

Using picture detection and identification, a smart driver alert system for vehicle traffic is created. Road signs are essential for maintaining a smooth traffic flow free of bottlenecks and catastrophes. Road symbols are graphical representations of various information that the motorist must understand. Drivers frequently disregard road signs in front of their vehicles, which can result in serious accidents. This paper gives an overview of traffic sign detection and recognition, as well as a strategy for extracting the road sign from a natural complicated image, processing it, and alerting the driver by voice command. It's designed to help drivers make quick judgments.

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

International Journal of Early Childhood Special Education (INT-JECSE)
DOI:10.9756/INTJECSE/V14I5.334 ISSN: 1308-5581 Vol 14, Issue 05 2022

OPTIMIZED SIMILARITY BASED HIERARCHICAL CLUSTERING APPROACH FOR BRAIN MRI IMAGE SEGMENTATION

Roslin Dayana K[1], D Vishnu Sakthi[2],L SherinBeevi[3],G Manisha[4],Shobha Rani P[5]
[1,2,3,4]Assistant Professor,[5]Associate Professor
Department of Computer Science and Engineering, R.M.D. Engineering College, Tiruvallur, Tamil Nadu, Pincode – 601206.
[1]dayana.moncy@gmail.com,[2]vishnu.cse@rmd.ac.in,[3]lsb.cse@rmd.ac.in,
[4]manisha.cse@rmd.ac.in,[5]psr.cse@rmd.ac.in

Abstract

Brain Magnetic Resonance Imaging (MRI) techniques are the kind of diagnostic techniques that are used to analyse and understand the structure of human brain which serves as a starting point in identifying and understanding brain activity and diagnosis and treatment of several neurological disorders. The proposed Optimized Similarity based Hierarchical Clustering (OSBHC) is useful for the segmentation of images of the brain MRI. Hierarchical clustering is useful for data analysis. It catches the full image of the brain in all sides. It is a well proved method. OSBHC has improved segmentation performance and can precisely segment brain tissue, according to the segmentation results of a large number of brain MRI images. The OSBHC technique outperforms other related clustering algorithms in terms of performance and flexibility.

Keywords: Clustering approach, image segmentation, neurological disorders, MRI images.

1. INTRODUCTION

The most significant component of the central nervous system is the brain.An MRI scans of the brain a simple skill that delivers crystal-clear images of the internal head components, primarily the brain. Brain MRIs are used by medical professionals to assess, identify, and keep track of a variety of medical disorders that affect your brain or other head structures. A semi-imaging technique called magnetic resonance imaging (MRI) creates three-dimensional, intricate anatomical images. For disease detection, diagnosis, and therapy monitoring, it is frequently employed. Based on cutting-edge technology, it stimulates and detects changes in the rotational axis of protons in the water that makes up living tissues.

Using MRI camera system, doctors and researchers must study the semi shape and function of the human brain. Cells of numerous sorts build up the corpse. Every single cell has a distinct purpose. When cells are unable to manage its natural development, they divide frequently and randomly. A tumour is a mass comprising consisting of cells of extra cells. When a doctor is diagnosing and treatment a person, an MRI assists in the diagnosis. Pictures of fatty tissue are generated using this imaging method.

The obtained medical photos depict the inside structure, but the doctors are interested in more information than just equal photographs, such as how to highlight unusual tissue and identify its own thickness, shape, and other characteristics. If these duties are carried out by the doctors themselves, it may be inefficient, time-consuming, and burdensome for them. In order to accurately detect brain tumours from Neuroimaging, a machine system can be created.Brain tumours can be roughly categorised as primary brain tumours, where the tumour originates in the brain, and secondary brain tumours, where the tumour has moved to the brain through metastasis from another part of the body. Secondary brain tumours have always been dangerous, but primary brain tumours do not migrate to other body parts and might be either noncancerous. Compared to benign tumours, malignant tumours are riskier and more dangerous. Benign tumours are harder to detect than malignant tumours. A 3-D brain model and three dimensional analyserprograms are necessary for the precise detection of a cancerous growth.

A recursive division of a dataset into progressively smaller clusters is known as a hierarchical clustering. A weighted graph with edge weights that represent pair wise similarities or differences between data points serves as the input. A rooted branch is used to portray a hierarchical clustering, with each leaf representing a data point and each internal node representing a cluster that includes its descendant leaves. A common method for analysing, categorising, and pre-processing huge sets is computing a hierarchical clustering, which is a fundamental issue in data analysis.

To separate an MRI brain image into distinct areas with various granularities, to identify communities, or to ascertain the origin of life, hierarchical clustering can be applied. In various academic fields, including machine learning, large data analysis, and bioinformatics, developing efficient and consistent algorithms for computing hierarchical clustering is crucial. From a theory perspective, hierarchical clustering has received much less attention than flat partition-based clustering, which divides the dataset into k pieces.

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

Task Scheduling in Geo-Distributed Big Data Using Ant Colony Optimization

J. Rajkamal[1], P. Ezhumalai[2]

[1]*Department of Computer Science and Engineering, Sri Venkateswara Institute of Science and Technology, Thiruvallur, Tamil Nadu, INDIA*

[2]*Department of Computer Science and Engineering, R.M.D. Engineering College, Chennai, Tamil Nadu, INDIA*

*Corresponding author: *rajkamaljambulingam@gmail.com*

Abstract: Our commercial application main design depends on the big data in grid computing, distributed computing, and fog computing. The significant challenges facing big data is higher time consumption and cost consumption. Scheduling algorithm is used to save time and money to introduced in big data analytics. The proposed work deals with a significant challenge in task planning. The formidable Optimization challenge in the meta-heuristic algorithm is a considerable solution for cloud task planning. An effective task Manager includes the changes in the working of the task algorithm's task and schedule. Work consists of the cloud a task-based policy of the Ant Colony Optimization (ACO) listens to the various programming algorithm such as first in first out and Round Robin arbitrary algorithm. The purpose of this algorithm is to increase the efficiency of the scheduled task within cloud computing. ACO is an arbitrary Optimization technique that selects the various functions from the incoming jobs to virtual machines. Cloud-Sim toolkit package is used to simulate the proposed algorithm. Various experimental studies were carried out with cloud activities using first in first out and Round Robin based on the ACO technique.

Keywords: Cloud computing; task scheduling; makes-pan; ant colony optimization; Round-Robin

INTRODUCTION

Cloud Computing is connected to a particular computing system and is typically, three key aspects covered: Service Infrastructure (IaaS) and Service Implementation (PaaS) [1]. Because of the rapid expansion of cloud computing, in the IT world, different ideas have been developed. Cloud computing is a parallel and distributed system made up of a collection of interconnected and virtualized computers, through agreements between service providers and customers, are enthusiastically supporting and providing at least centralized computing services depends on the level of service arrangements [2]. Companies can use cloud virtualization platforms [3] to lease computing power on virtual servers from customers. Since hundreds of thousands of virtual machines (VMs) are being used, it is impossible to assign tasks manually [4] by cloud computing software. So we need a realistic cloud preparation algorithm. The good task manager will have to change his strategy to the shifting timetable and styles of tasks [5]. The cloud also uses a complicated job preparation algorithm. Based on their table [6] the random search algorithm is known as Ant Colony Optimizer. This approach uses a system of positive feedback which imitates actual natural colonies for food and travel pheromones.

Several investigators have employed ACO in addressing problems that are NP-hard, such as a vendor's movement problem, graphics, car routing and scheduling [7]. Many companies are engaged in extensive data mining in geo-distributing and storage environments to spread their global wealth. Google uses, e.g., a number of geo-deployed WAN data centers [8] for its services. For example, Hadoop and Spark, open-source software framework frames have been great promises in terms of providing good big data. The same data center analytics (DC). The key question was the limited bandwidth of the Inter-DC network, which slows the exchange of data on different DC connections. As shown in Figure 1, a paper focuses on data analysis in four different DC data

12th National Conference on Recent Advancements in Biomedical Engineering
AIP Conf. Proc. 2405, 030023-1–030023-13; https://doi.org/10.1063/5.0074500
Published by AIP Publishing. 978-0-7354-4170-1/$30.00

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

How to Cite:
Anita, C. S., Vasukidevi, G., Rajalakshmi, D., Selvi, K., & Ramesh, T. (2022). Lung cancer prediction model using machine learning techniques. *International Journal of Health Sciences*, *6*(S2), 12533–12539. https://doi.org/10.53730/ijhs.v6nS2.8306

Lung cancer prediction model using machine learning techniques

C. S. Anita
Professor, Department of AIML, R.M.D. Engineering College

Vasukidevi.G
Assistant Professor, Department of Science & Humanities, R.M.K.College of Engineering and Technology

D. Rajalakshmi
Associate Professor, Department of CSE, R.M.D. Engineering College

K. Selvi
Professor, Department of CSE, R.M.K. Engineering College

Ramesh. T.
Associate Professor, Department of CSE, R.M.K. Engineering College

***Abstract*---**Lung cancer is cancer that forms in tissues of the lung, usually in the cells that line the air passages. It is the leading cause of cancer death in both men and women. Some of the Symptoms are Chest pain or discomfort, Trouble breathing, Wheezing, Blood in sputum (mucus coughed up from the lungs),Hoarseness, Loss of appetite, etc. Sometimes lung cancer does not cause any signs or symptoms. It may be found during a chest x-ray done for another condition. So early prediction of disease is very important to avoid death. So many machine learning algorithms are used to predict the lung cancer early but lack of accuracy. To overcome disease prediction accuracy issues, Gaussian Naive Bayes machine learning algorithm is used. The performance of the proposed GNB algorithm is evaluated using UCI Machine Learning Repository. The performance analysis shows GNB prediction model achieves 97.5%.

***Keywords*---**lung cancer, GNB, UCI dataset prediction model, accuracy.

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

How to Cite:
Vasukidevi, G., Anita, C. S., Rani, P. S., Kumar, V. M. N., & Jaithunbi, A. K. (2022). COVID tweet analysis using NLP. *International Journal of Health Sciences*, *6*(S3), 9457–9466. https://doi.org/10.53730/ijhs.v6nS3.8314

COVID tweet analysis using NLP

Vasukidevi G.
Assistant Professor, Department of Science & Humanities, R.M.K.College of Engineering and Technology, Kavaraipettai

C. S. Anita
Professor, Department of AIML, R.M.D. Engineering College, Kavaraipettai

P. Shobha Rani
Associate Professor, Department of CSE, R.M.D. Engineering College, Kavaraipettai

Vimal Kumar M. N.
Associate Professor, Department of Mechatronics Engineering, Sona College of Technology, Salem

A. K. Jaithunbi
Assistant Professor, Department of CSE, R.M.D. Engineering College, Kavaraipettai

***Abstract*---**The pandemic has taken the world by storm. Almost the entire world went into lockdown to save the people from the deadly COVID-19. With the progression of time, news and mindfulness about COVID-19 spread like the actual pandemic, with a blast of messages, updates, recordings, and posts. Widespread panic manifest as one more worry not withstanding the well-being risk that COVID-19 introduced. Typically, for the most part because of misinterpretations, an absence of data, or now and again by and large deception about COVID- 19 and its effects. General people however have been expressing their feelings about the safety and effectiveness of the vaccines on social media like Twitter. In this study, such tweets are being extracted from Twitter using a Twitter API authentication token. The raw tweets are stored and processed using NLP. The processed data is then classified using a CNN classification algorithm. The algorithm classifies the data into three classes, positive, negative, and neutral. These classes refer to the sentiment of the general people whose Tweets are extracted for analysis. From the analysis it is seen that Our review upholds the view that there is a need to foster a proactive and general well-being presence to battle the spread of negative opinion via web- based entertainment following a pandemic.

International Journal of Health Sciences ISSN 2550-6978 E-ISSN 2550-696X © 2022.
Manuscript submitted: 27 March 2022, Manuscript revised: 9 April 2022, Accepted for publication: 18 May 2022

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

Journal of Positive School Psychology http://journalppw.com
2022, Vol. 6, No. 6, 7466-7472

A Viable Methodology Of Defending Smart Iot Devices Cyberattacks With Notification Using ML

R.Jaya Bharathi[1], S.Anitha Rajathi[2], M.A.Berlin[3], Josephin Sharmila[4], P.Shobha Rani[5]

[1]*Assistant Professor, Department of Computer Science and Engineering, RMK College of Engineering and Technology, Chennai. TamilNadu, India , jayabharathicse@rmkcet.ac.in*
[2]*Assistant Professor, Department of Computer Science and Business Systems, R.M.D. Engineering College, Chennai. TamilNadu, India, anitha.csbs@rmd.ac.in*
[3]*Professor, Department of Computer Science and Engineering, R.M.D. Engineering College, Chennai. TamilNadu, India, mab.cse@rmd.ac.in*
[4]*Department of Electronics and Communication, RMK College of Engineering and Technology, Chennai, TamilNadu, India , blossomsharmi@gmail.com*
[5]*Associate Professor, Department of Computer Science and Engineering, R.M.D. Engineering College, Chennai. TamilNadu, India, psr.cse@rmd.ac.in*

Abstract - Vulnerabilities in smart home (IoT) platforms make it possible for intruders to perform attacks in a variety of settings, including home automation, industrial automation, and sophisticated health systems. Research has developed a variety of comprehensive security technologies to get around this cyber-attack obstacle. Machine Learning (ML), which is being deployed, has been identified as the most viable method. Consequently, the majority of ML approaches solely concentrate on researching suitable learning models in order to increase the recognition rate. However, a lack of suitable identification characteristics frequently contributes to the limits in terms of recognition rate in a variety of assaults. The present approaches, however, are inadequate to cover the comprehensive security spectral range of IoT environments due to the distinctive characteristics of IoT nodes. Furthermore, the majority of previous efforts lacked implementation structures and methods for defending against cyber-attacks. As a result, in this research, we examine the characteristics of several smart home security threats as well as the value of the information that may be extracted and used in Ml techniques to effectively identify any of these cyberattacks. Due to the increase in internet traffic, it is more difficult to identify cyberattacks in the IoT as well as identify fraudulent traffic in its initial stages. SVM, RF, LR, and decision tree algorithms were successfully used in machine learning systems to determine and alert users of smart IoT devices to potential threats. A methodology for the identification of malicious cyber activity is suggested in this paper.

Keywords: IoT, Drones, Remote Sensing, GPS, Deforestation.

I. INTRODUCTION

IoT is characterized as a dispersed, linked network of integrated devices that communicate via wireless connection methods. IoT devices produce a staggering quantity of data, so conventional methods for gathering data, storing, and analytics might not even be effective at this level. This massive amount of data can be used to identify correlations, behaviors, predict outcomes, and perform assessments. This capacity of a smart device to change or regulate a condition or behavior based on experience is regarded to be a key component of an IoT application and can enable machinery with smart devices to derive relevant information using user facts.

The Internet of Things' primary goal is to link networks, green infrastructure, tools, platforms, and devices so that they can communicate, share data, and be controlled. This Internet of Things is intended to make our livelihoods and modernity work more efficiently. Our everyday lives are being impacted by the IoT. It's all online, including intelligent sensors, smartphone health apps, thermometers, photovoltaic systems, coolers, and household appliances. As a result of the IoT technology's

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

How to Cite:
Vedaraj, M., Saravanan, K., Srinivasan, V. P., Balachander, K., & Jaithunbi, A. K. (2022). Prediction of COVID 19 using marching learning techniques. *International Journal of Health Sciences*, 6(S3), 9467–9474. https://doi.org/10.53730/ijhs.v6nS3.8315

Prediction of COVID 19 using marching learning techniques

M. Vedaraj
Assistant professor, Department of CSE, R.M.D. Engineering College

K. Saravanan
Associate professor, Department of IT, R.M.D. Engineering College

V. Prasanna Srinivasan
Associate professor, Department of IT, R.M.D. Engineering College

K. Balachander
Associate professor, Department of CSE, Velammal Institute of Technology

A. K. Jaithunbi
Assistant professor, Department of CSE, R.M.D. Engineering College

***Abstract*---**Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. Most people infected with the virus will experience mild to moderate respiratory illness and recover without requiring special treatment. However, some will become seriously ill and require medical attention. Older people and those with underlying medical conditions like cardiovascular disease, diabetes, chronic respiratory disease, or cancer are more likely to develop serious illness. Supervised machine learning models for COVID-19 infection were developed in this work with learning algorithms which include support vector machine, naive Bayes, random Forest, GNB using epidemiology labeled dataset for positive and negative COVID-19 cases of Mexico. The correlation coefficient analysis between various dependent and independent features was carried out to determine a strength relationship between each dependent feature and independent feature of the dataset prior to developing the models. The 80% of the training dataset were used for training the models while the remaining 20% were used for testing the models. The result of the performance evaluation of the models showed that GNB prediction model has the highest accuracy of 98% compared to other existing ML techniques.

***Keywords*---**COVID, SARS, artificial neural network (ann), dataset.

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

Journal of Positive School Psychology http://journalppw.com
2022, Vol. 6, No. 6, 6855-6861

Trading App Analyzer Using Implanted Sensing Technique In Iot Via Block Chain-Based Networks

N.Kalyani[1], G.Manjula[2], R.Panneer Selvi[3], K.Saravanan[4], M.Vedaraj[5]

[1]*Assistant Professor, Department of Computer Science and Engineering, RMK College of Engineering and Technology, TamilNadu, India, kalyanicse@rmkcet.ac.in*
[2]*Assistant Professor, Department of Computer Science and Engineering, RMK College of Engineering and Technology, TamilNadu, India, manjulacse@rmkcet.ac.in*
[3]*Assistant Professor, Dept of School of Computing Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology Chennai, TamilNadu, India, panneerselvir@veltech.edu.in*
[4]*Associate Professor Department of Information Technology, R.M.D. Engineering College, Chennai, TamilNadu, India, saravanan.it@rmd.ac.in*
[5]*Assistant Professor, Department of Computer Science and Engineering, R.M.D. Engineering College, Chennai, TamilNadu, India, vedu.cse@rmd.ac.in*

Abstract - The low-bandwidth trade method is built upon portable devices integrating smart devices for information gathering and remote monitoring. For instance, this information may be connected to dioxide emissions and impurities, but it may be used to evaluate adherence to regulatory requirements. The current approach to IoT data trading, which is ineffective and unsafe, relies on a centralized third-party institution that mediates disputes among information providers and consumers. The decentralised solution based on block chain technology, on the other hand, allows data exchange while guaranteeing integrity, confidentiality, and anonymity. Due to the seller's and buyers' ignorance of such improved performance, there is a large disparity when gauging the IoT data trade processes. With the Internet of Things and block chain technology, we provide a paradigm of IoT-based data trade that is intended to facilitate major environmental monitoring motivated by a gap in knowledge. We can assess the feasibility of communications across three fundamental IoT data trade schemes in terms of either delay or power consumption. These protocol models and analysis serve as a baseline for IoT data exchange solutions.

Keywords: Data Trading, Internet-Of-Things, Block chain, Performance Efficiency.

I. INTRODUCTION

Traditional trading systems have a central failure point, a less confidence, integrity, and motivation for trading data, all of which restrict data suppliers from making digital data available to clients. Distributed ledger technology like block chains, on the other hand, enable irreversible and transparent information dissemination across untrustworthy parties. Irrespective of being used within payment information, block chain-based paper records are viewed as a critical facilitator for professional and trusted decentralised system monitoring. The authentication procedure for distributed ledgers is based on network consensus across many nodes. Sensor data or monitor control packets may be included in the operations of block chain-based IoT networks. This information and communications are distributed and synced among the parties involved. Miners or peers are the terms used to describe these participants.

Furthermore, smart contracts allow for the storage of all operations in irrevocable copies, with each document distributed among several parties. Confidentiality is, however, provided by the decentralised nature of DLTs, powerful public-key verification, and cryptographic hashing. The following are some advantages of incorporating block chain networks into IoT data trading platforms. To protect anonym zed direct exposure and the implant of bogus information from those stockholders, IoT information trade networks are being used. Authenticity and integrity for environmental sensors. The prerequisite for 3rd parties is eliminated. In a previous

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

How to Cite:
Balasaranya, K., Ezhumalai, P., Lalluprasad, B., Logesh, B. N., & Reddy, L. I. (2022). Crop cultivation and sustainability for agricultural lands based on soil and atmosphere conditions using modified deep valley algorithm. *International Journal of Health Sciences*, *6*(S2), 12516–12524. https://doi.org/10.53730/ijhs.v6nS2.8304

Crop cultivation and sustainability for agricultural lands based on soil and atmosphere conditions using modified deep valley algorithm

Mrs. K. Balasaranya
Assistant Professor, Department of CSE, R.M.D. Engineering College

Dr. P. Ezhumalai
Professor and Head, Department of CSE, R.M.D Engineering College

Mr. B. Lalluprasad
Project Engineer, Wipro Limited

Mr. B. N. Logesh
Program Analyst Trainee, Cognizant Technology Solutions India Private Limited
Mr. L. Indhiresh Reddy
Student, Department of CSE, R.M.D. Engineering College.

***Abstract*---**Agriculture is the major aspect of human being worldwide. The production of the raw materials for both food and industries may not be sufficient in future given that population growth is rapid. The agriculture techniques was modernised in the past in many ways by shuffling the crop type, introduction of new farming, techniques, fertilizer, pesticides and farming equipments , looking forward to the future ecosystem control technologies can help increase production . It is not only that agriculture raw materials is a need but it also a good source of economy and if it becomes a good stable business it might attract more people into agriculture, increasing the farmer's count which has been falling. The agricultural ecosystem can be sustained by predicting the type of the crop that can be sourced and would give major returns on the yield, this can be done using data science technique and machine will be trained with dataset. This will aid the farmers and vendors for increasing the productivity.

***Keywords*---**crop cultivation, agricultural lands, atmosphere conditions, soil.

International Journal of Health Sciences ISSN 2550-6978 E-ISSN 2550-696X © 2022.
Manuscript submitted: 09 March 2022, Manuscript revised: 18 April 2022, Accepted for publication: 27 May 2022

3.4.3 Number of research papers per teacher in CARE Journals notified on UGC website during the year

How to Cite:
Umamageswari, A., Deepa, S., & Beevi, L. S. (2022). A novel approach for classification of diabetics from retinal image using deep learning technique. *International Journal of Health Sciences*, *6*(S1), 2729–2736. https://doi.org/10.53730/ijhs.v6nS1.5196

A Novel Approach for Classification of Diabetics from Retinal Image Using Deep Learning Technique

A. Umamageswari
Associate Professor, Department of CSE, SRM Institute of Science and Technology, Ramapuram Campus
Email: umamagea@srmist.edu.in

S. Deepa
Assistant Professor, Department of CSE, SRM Institute of Science and Technology, Ramapuram Campus
Email: deepas1@srmist.edu.in

L. Sherin Beevi
Assistant Professor, Department of CSE, RMD Engineering College, Kavaraipettai, Thiruvallur, Tamil Nadu 601206,
Email: sherinbeevi@gmail.com

***Abstract*---**Diabetic Retinopathy (DR) is quite possibly the main widely recognized diabetic disease found in the vast majority. Advancement of diabetic retinopathy is grouped by its seriousness. Be that as it may, critical lacks of master spectators have incited supercomputer helped observing frameworks to distinguish the DR. In retinopathy, the kind of vascular organization of the natural eye is a crucial indicator element. This study provides a method for recognizing exudates and veins in retinal images for the purpose of examining the retinal vasculature. Convolution Neural Network (CNN) is used for image identification and preparation of retinal images following image processing stages to arrange the retinal fundus images. The proposed recognizing diabetics by fundus retinal picture arrangement utilizing return for capital invested (Region of Interest) assumes significant parts in recognition of certain illnesses in beginning phase diabetes by contrasting its exactness and existing strategies like the conditions of retinal veins.

***Keywords*---**Retinal Image, Gaussian Blurring, Diabetics Retinopathy, Convolution Neural Network, Segmentation, Image Blurring.