BLOCKCHAIN TECHNOLOGY IN E-COMMERCE

Bhuvan S.T, Jayantkumar Rathod, Shwetha G.K., Ramyashree Shetty, Ranjan Kumar.
ALVAS INSTITUTE OF ENGINEERING AND TECHNOLOGY

ABSTRACT: As of late, Electronic Commerce (E-trade) applications are drawing in numerous clients and shippers to direct their everyday business online which incorporates installment of bills, internet banking, purchasing tickets and obtaining products and so on. Web based business exchange security is a significant worry for E-trade sites alongside its clients. The fundamental necessities for any E-business exchange are protection, validation, trustworthiness and non-disavowal. Existing E-business models are caught in a quandary between the verification of proprietorship and security insurance. To address this issue, Blockchain permits counterparties make bargains without the revelation of private data, for example, personalities, addresses, and telephone numbers. Besides, it utilizes the zero- information confirmation to ensure the possession.

KEYWORDS: E-commerce, blockchain, BPGS, peer blockchain protocol.

I. INTRODUCTION

E-commerce has become increasingly more famous due to rich items, quick exchanges, and free from time, areas, stores, etc. Be that as it may, the revelation of clients' close to home data, for example,

1) personalities, 2) locations, and 3) telephone numbers has become a major worry of online action. Genuinely, it has framed a colossal "dark industry" that truly imperils clients' wellbeing and protection[13]. In case of a debate between the client and the stage, it is disadvantageous to the client, at times, the stage may even erase or alter the information. Considerably more genuinely, when the stage comes up short, or be assaulted malevolently by culprits, the outcome is tragic, (for example, Information released, lost also, altered), particularly in the field of internet business, which are reasonable.[6] Truth be told, in any case, such security episodes are normal around us. In perspective on these issues, In the event that it receives the decentralized innovation of square chain, the issues could be all around settled.

II. BLOCKCHAIN TECHNOLOGY

The essential idea of blockchain was proposed by Nakamoto Satoshi. Blockchain is a decentralized database utilizing cryptographic innovation to create related squares, where each square record full exchanges over some undefined time frame. Every hub contains a complete verifiable square, and regardless of whether one hub is altered, it won't influence the confirmation of whole blockchain[5] .The blockchain data is open, and anybody can look the chain for verifiable exchanging data. Blockchains require diggers, when any hub in blockchain produces an exchange, the exchange is communicated to every excavator, and all diggers may check the exchange through the evidence of work instrument. Blockchain has the accompanying primary highlights:
(I) the capacity of hostile to adjustment (ii) the capacity of resistance as certain hubs are flawed (iii) the capacity of coming to communitarian trust among hubs in this circulated companion toper framework without the outsider confirmation office (iv)the capacity of getting to data of blockchain at any hub in this system.[1]
A blockchain comprises of constant hinders, each square record and stores sequential transections as a Merkle root by utilizing Merkle tree calculation in a timeframe, and each hinder after the primary square (called beginning square) has a cryptographic hash estimation of past square (called parent square).[7] All these hashed qualities are gathered into a chain, as appeared in Fig. 1.[13]Then again, the private blockchain has no mining component and digger's job, in light of the fact that the private
chain is normally utilized as a system inside organization, association and individuals. For instance, IBM blockchain stage gives a private chain to more than

REVIEW ON RECONSTRUCTION OF FACE IMAGES

[1]Darshan P B, [2]Jayantkumar Arjun Rathod, [3]Rakesh M R, [4]Acharya Sainath Balakrishna, [5]Akshaya Shenoy
[1]Student, [2]Associate Professor, [3]Student, [4]Student, [5]Student
Department of Information Science and Engineering,
Alva's Institute of Engineering and Technology, Moodbidri, India

Abstract : Cutting edge face acknowledgement frameworks depend on convolutional neural networks. In this way, it is basic to decide to what degree face templates got from these systems can be used to acquire the face image. In this project, we study the vulnerabilities of a best in class face recognition algorithms dependent on reconstruction attack. We use a neighbourly de-convolutional neural system (NbNet) to reconstruct face image from their profound template. In our examinations, we accepted that no information about the objective subject and the profound system are accessible. To prepare the NbNet reconstruction models, we use two benchmark face datasets (VGG-Face and NIST) with an enormous gathering of pictures incorporated using a face generator.

IndexTerms - **Biometrics, NbNet, Vulnerabilities, reconstruction, Face recognition.**

I. INTRODUCTION

Presently a days, Biometric confirmation is a typical security process that depends on the one of a kind organic qualities of a person to check that he is who is says he is. Biometric verification frameworks contrast a biometric information catch with put away, affirmed genuine information in a database. A portion of the significant biometrics are face, unique mark and iris. Face recognition technology has everyone's attention due to its potential for a wide variety of applications in both law enforcement and non-law enforcement.

As contrasted and different biometrics frameworks utilizing unique finger impression, palm print and iris, face acknowledgment has unmistakable points of interest in view of its non-contact process. Face pictures can be caught from a separation without contacting the individual being distinguished, and the ID doesn't require cooperating with the individual. Moreover, face acknowledgment fills the wrongdoing obstacle need since face pictures that have been recorded and documented can later help recognize an individual.

There are numerous points of interest related with facial acknowledgment. Contrasted with other biometric systems, facial acknowledgment is of a non-contact nature. Face pictures can be caught from a separation and can be examined while never requiring any connection with the client/individual. Subsequently, no client can effectively impersonate someone else. Facial acknowledgment can fill in as an amazing safety effort for time following and participation. Facial acknowledgment is additionally modest innovation as there is less handling included, as in other biometric strategies.

There are sure downsides related with facial acknowledgment. Facial acknowledgment can possibly distinguish individuals when the conditions, for example, lighting are great. The application could be less solid in the event of lacking light or if the face is in part darkened. Another hindrance is that facial acknowledgment is less powerful when outward appearances change.

II. LITERATURE SURVEY

Biometric verification is a typical security process that depends on the novel organic qualities of a person to confirm that he is who is says he is. Biometric verification frameworks contrast a biometric information catch with put away, affirmed bona fide information in a database. It has the forthcoming to avert assaults like deduplication of character. The audit of the different work utilizing diverse picture preparing based characterization systems like histogram based strategy, Fuzzy rationale procedure, fake neural system technique(ANN), bolster vector machine (SVM), Histogram strategy, RGB shading space strategy, Color mapping procedure.

An Adler et al. [1] displayed a paper on test pictures can be autonomously re-established from face acknowledgment formats. Calculation which permits diversion of an example picture from a face acknowledgment format utilizing match score esteems. J. Galbally et al. [2] On the weakness of face confirmation frameworks to slope climbing assault. Utilization of slope climbing assault calculation dependent on Bayesian adjustment to test the powerlessness of eigenface based framework furthermore, GMM part based framework to backhanded assaults. Y. C. Feng et al. [3] introduced Masquerade assault on change put together paired format security based with respect to perceptron learning. The assault utilizing a mix of perceptron learning and modified slope climbing calculations for creating engineered pictures.

D. Wen et al. [4] proposed the new calculation dependent on Image Distortion Analysis (IDA) to survive and recognize the satirize pictures. Four unique highlights specular reflection, haziness, chromatic minute and shading assorted variety are extricated to shape the IDA highlight vector. A troupe classifier, containing various SVM classifiers arranged for different face joke attacks (e.g., printed photo and replayed video), is used to perceive valid and joke faces. The proposed methodology is loosened up to multi-diagram face spoof acknowledgment in accounts using a vote based arrangement.

K. Patel et al. [5] displayed an unconstrained cell phone parody assault database (MSU USSA) containing in excess of 1000 subjects. It covers both the print and replay assaults utilizing diverse power channels (R, G, B and Grayscale), picture areas (whole picture, recognized face, and facial segment among nose and jaw), highlight descriptors. Exploratory results on the open space Idian Replay-Attack, CASIA FASD, likewise, MSU-MFSD databases, and the MSU USSA database give the idea that the proposed system is ground-breaking in face spoof area for both the cross-database and intra-database testing circumstances.

In 2016, S. Liu et al. [6] proposed the strategy to distinguish the cover ridiculed person. It is a novel way to deal with 3D veil face against ridiculing from another point of view, by breaking down heartbeat signal through remote Photoplethysmography (rPPG). Neighborhood rPPG connection model to remove discriminative nearby heartbeat signal examples with the goal that a fraud can more readily be distinguished paying little heed to the material and nature of the cover. To additionally abuse the quality of rPPG appropriation on genuine appearances. They get familiar with a certainty map through heartbeat signal solidarity to weight nearby rPPG relationship

WEATHER PREDICTION USING MACHINE LEARNING

[1]Vishak Amin, [2]Manjunath H R, [3]Mayuresh Kunder, [4]Chaithanya B.N, [5]Lokesk P [1]Student, [2]Sr. Assistant Professor, [3]Student, [4]Student, [5]Student
[1]Department of Information Science & Engineering,
[1]AIET, Moodbidri

Abstract: In this paper, a reenacted framework is created to foresee different climate conditions crosswise over Indian subcontinent utilizing Information Investigation and AI procedures, for example, straight relapse and strategic relapse. The principle wellspring of information to be utilized for directed taking in is to be gathered from different information archive. The current climate condition parameters ex. temperature and so forth are utilized to fit a model and further utilizing AI strategies and extrapolating the data, the future varieties in the parameters are investigated.

Keywords: weather, climate, forecast, python, prediction, linear regression, machine learning.

I. INTRODUCTION

Customarily, climate anticipating has consistently been performed by physically recreating the air as a liquid. The present condition of the climate is tested. The future condition of the air is processed by tackling numerical conditions of thermodynamics and liquid elements. Be that as it may, this conventional arrangement of differential conditions that administer the physical model is now and again shaky under unsettling influences and uncertainties while estimating the underlying states of the air. This prompts a fragmented comprehension of the air forms, so it limits climate expectation up to a multi-day period, in light of the fact that past that climate conjectures are fundamentally unreliable .But AI is generally powerful to most air aggravations when contrasted with customary strategies. Another favorable position of machine learning is that it isn't reliant on the physical laws of barometrical forms.

Machine Learning Techniques

Linear Regression: it utilizes every one of the highlights present in the informational index and gives a straight chart consolidating high and low temperatures. Straight relapse isn't utilized for climate order of every day since this calculation can't be utilized with order information Functional Regression: The subsequent calculation to be utilized is a sort of practical relapse. It searches for recorded climate designs which are like the present day climate designs, at that point it predicts what's to come climate condition dependent on the information of the chronicled climate designs.

II. LITERATURE SURVEY

Imprint Holmstrom, Dylan Liu, Christopher Vo (2016) reasoned that both direct and practical relapse didn't execute just as expert climate determining techniques yet in the more drawn out run contrasts in their exhibitions diminished, proposing that over a more drawn out timeframe, Machine learning can undoubtedly outflank proficient and conventional methods. Linear relapse is a low inclination and high fluctuation calculation and henceits exactness can be improved by gathering further information.

Piyush Kapoor and Sarabjeet Singh Bedi (2013) reasoned that on the off chance that we perform comparison of climate condition variety by sliding window calculation, the outcomes are profoundly precise with the exception of the long periods of occasional change. The outcomes can be modified by changing the size of the window. Exactness of the eccentric months can be expanded by expanding the window size to one month.

Divya Chauhan and Jawahar Thakur (2013) made an examination in their paper, which shows that the calculations, for example, k-mean grouping and choice trees are appropriate for mining information to foresee future climate conditions. In the event that we increment the size of the preparation set, the precision from the outset increments yet then it gradually diminishes after a specific timeframe, contingent upon the size of the dataset.

Qing Yi Feng1 ,Ruggero Vasile, Marc Segond , AviGozolchiani , Yang Wang , Markus Abel, Shilomo Havlin , Armin Bunde , and Henk A. Dijkstra1(2016) have made an AI tool compartment which depends on atmosphere information assembled from examination and remaking of complex systems. It can likewise deal with information containing numerous factors from these systems. The advancement of indicator models in the tool stash is dynamic and information driven.

Siddharth S. Bhatkande, Roopa G. Hubballi(2016) In their work the creators have utilized information mining procedure and Decision tree calculation as a way to characterize climate parameters like greatest temperature, least temperature as far as day, month and year.

Sanyam Gupta, Indumathy, GovindSinghal (2016)suggested and proposed a proficient and precise climate expectation and anticipating model utilizing straight relapse ideas and typical condition model. Every one of these ideas are a part of AI. The typical condition is an exceptionally proficient climate forecast model and utilizing the substances temperature, moistness and dew-point, it very well may be utilized to make solid climate expectations. This model likewise encourages basic leadership in everyday life. It can yield better outcomes when applied to cleaner and bigger datasets.

Muthulakshmi A, ME (SE), Dr.S.Bhagavathi Priya(2015) in their work proposed a procedure that targets giving an effective and precise climate estimating models to anticipate and screen the climate datasets to foresee precipitation. Before, the parameters of climate

REFERRED POSITION OF EDGE REGISTERING IN DISTRIBUTED COMPUTING STAGE

[1]Priya, [2]Manjunath H R, [3]Prathiksha Patkar

[1]Student, [2]Sr. Assistant Professor, [3]Student

[1]Information Science and Engineering,

[1]Alva's Institute of Engineering and Technology, Moodbidri, Karnataka

Abstract: Cloud computing is used to enhance the exceptional and availability of the community structure. To remedy issues of community or any network problems we use cloud computing. In some case the cloud platforms cannot fulfilled IOT utility which requires actual acknowledge. The area of cloud services is predominant problem to solve. Recently edge cloud computing has proposed to make cloud offerings more useful to the end users two recently edge cloud computing has proposed to make cloud offerings more useful to the end users. The paper ambitions at supplying facet computing two regarding the motion of providers from centralized cloud platform to the decentralized platform and detects the troubles or challenges through these surprisingly distributed surrounding and helps to locate solutions to all these troubles to engineers. In this paper we record our trip in building an edge computing platform referred to as dispensed node red (DNR).

Index Terms **- Edge Computing, Cloud Computing, Services, Mobile Edge.**

1. INTRODUCTION

Cloud computing leads to IOT devices, which provides high performance, computing, storage, infrastructure, processing and analyzing of IOT data. Cloud computing is viewed as a revolutionary phase that allows IOT gadgets to refuse, smart self configuring. Along with cloud vendors get advantages like boom of IOT devices. Provides conversation between IOT devices, objects, that two are interconnected and managed through cloud infrastructure. As an end result new view referred to as cloud of matters is there to describe fusion between computing and IOT technologies. In this we talk about troubles faced by people in present scenario & also how to get to the bottom of it. We totally take delivery of challenges related to aspect cloud computing. We provide an explanation for how this will result in growth of IOT applications.

2 EDGE COMPUTING TECHNOOGY

Computing is a service that has turn out to be important section in all areas of human lifestyles used in healthcare, economical, education, agriculture, or smart cities. Before its appearance, computing offerings first lead to centralised servers earlier than preceding to dispensed computing, computing offerings have been adjusted by using supporting centralized mannequin with the cloud part, that allows customers to consume unlimited services in any place at any time. Cloud technologies face some Accessibility challenges when presenting services to human beings or users.

2.1 ACCORDING TO SOME SOURCE:

- Present Cloud, Edge and IOT concepts in a comprehensive way for readers from exclusive areas.
- Highlight the development of the Edge-Cloud-of-Things paradigm and its aid to the current innovation in extra than a few domains (i.e., healthcare)
- Provide a precise of the most frequent applied sciences associated to Edge Computing.
- Conduct a case find out about to demonstrate the examination of the have an impact on of location primarily based IOT services in Edge environment.
- Discuss the most current issues and future developments that need to be addressed for improvement of sustainable IOT functions and offerings under the Edge-Cloud-of-Things paradigm.

A Ogle Sign-Based User Authentication System to Counter Shoulder-Surfing Attacks

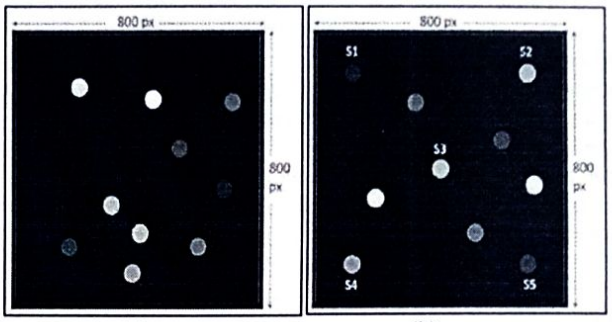
Pooja N[1] Nikshita[2] Priyanka S N[3] Tharunya U P[4] Prof. Sharan L Pais[5]
[1,2,3,4]Student [5]Assistant Professor
[1,2,3,4,5]Department of Information Science and Engineering
[1,2,3,4,5]Alvas Institute of Engineering and Technology, Mijar, India

Abstract— Shoulder surfing helps to gain the authentication details of a victim to attacker through observations and nowadays it is becoming a very big threat to visual privacy. We present DyOglePass: Dynamic Ogle Passwords, an authentication strategy that uses dynamic ogle sign. Here we present two authentication interfaces, a dynamic and a static-dynamic interface, that helps this strategy to counter shoulder surfing attacks. The main idea is to authenticate the user by following uniquely colored circles that move along random paths on the screen. After so many evaluations, we discuss how the authentication accuracy varies with respect to transition speed of the circles, and the number of moving and static circles. Furthermore, we evaluate the resiliency of our authentication method by comparing it to a ogle- and PIN-based authentication system. Finally, we found that the static-dynamic interface with a transition speed of two seconds was the most effective authentication method with a greater accuracy.

Keywords: Shoulder-Surfing, Ogle, Authentication, Static, Dynamic

I. INTRODUCTION

Shoulder surfing generally refers to unsolicited access to a user's confidential information (e.g., interests, hobbies, sexual preferences, login credentials, etc.) by an observer. In this work, we focus on preventing shoulder surfing attacks on a knowledge-based authentication method, i.e., using passwords specifically in public and semi-private spaces. Keypad monitoring commonly occurs at public places like ATMs, kiosks, airport lounges, coffee shops, airplanes, and semi-private spaces like offices, aimed at stealing the login credentials of users. A report on global visual hacking, presented by Ponemon Institute in 2016, found that in business office environments the attacks happen on laptops, tablets, smartphones, etc. They conducted shoulder surfing attacks in eight countries, and a staggering 91% of visual attacks were successful, resulting in 613 units of breached data of various types. Furthermore, 11% (69 units) of the breached data were login credentials. To prevent shoulder surfing, we focus on ogle-based authentication, which has been previously explored. The existing solutions are limited by low accuracy, the need for precise ogle input, accurate recall of the sign by users, and susceptibility to video analysis attacks.



(a) (b)

Fig. 1: a) Dynamic authentication interface with 10 uniquely colored circles placed at random positions. b) Static dynamic authentication interface comprising 5 static (S1, S2, S3, S4, S5) and 5 dynamic circles.

We present, a ogle sign-based approach to addressing shoulder surfing on user authentication. The central idea of our authentication system is, the interface comprises of 10 uniquely colored circles which move simultaneously along random paths during an animation of N seconds. An animation is a time interval where all the circles move from their source to destination locations. Analogous to a four digit PIN, a user selects a set of four colors (out of 10) as her password. To authenticate, the user follows the path of the circle, colored with her password color, during an animation. This animation is repeated four times allowing the user to enter all four colors. For example, if the user's password is "red-blue-yellow-green" the user follows the red colored circle during the first animation, blue during the second, and so on. For a successful authentication, the scan-path of the user's ogle should match with the path of the colored circle selected as the password, in each animation, for all the four animations. We hypothesize that people would be able to remember their password by associating the password colors with their favorite colors, the colors of the objects they frequently use (car, cloth), etc. The two authentication interfaces we have developed are the "dynamic interface" shown in Figure 1a and the "static dynamic interface" show in Figure 1b. Since we targeted our authentication system to be deployable at ATMs, kiosks, laptops, or in general, devices with smaller screens, we surveyed screen dimensions 2 of ATMs by various vendors. There is no single standardized size of the ATM screen, but commonly used dimensions include 8", 10.1", 12.1", 15". We chose a median size of 11.5" which approximately translates to a dimension of 800×800 pixels on a screen with 98.44 PPI (screen size 1900×1200 px, 23") used in our experiments. We evaluated our solutions through a two phase user study. In the first phase, both dynamic and static dynamic interfaces were tested for their accuracy under two animation speeds: 3 and 2 seconds. Since the static-dynamic interface was found to be a more practical

H.O.D.
Dept. Of Information Science & Engineering
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225

DESIGN OF SMART ENERGY METER FOR INTELLIGENT ENERGY NETWORK

[1]Girija R, [2]Pavan R, [3]Trupthi C, [4]Mouna R, [5]Mrs Jaishma Kumari B

[1,2,3,4]Students, [5]Guide
Department of Information Science and Engineering,
Alva's Institute of Engineering and Technology, Moodbidri, Karnataka, India

***Abstract*: The traditional approach towards energy auditing is not adequate for today's energy monitoring as it lacks the necessary data to estimate energy needs. The objective is to obtain more accurate information from single consumers connected to the low- and medium-voltage grid and to find new ways of making our everyday lives more energy efficient. We offer an innovative solution towards energy auditing and full control over the meters by making traditional energy meters to be smart. These sensor elements are originally deployed for invoicing purposes, they allow a previously unattainable degree of detail in state estimation and other grid analysis functionalities. Including the above functionalities, this allows real-time energy monitoring, Power factor inspection, Load scheduling during peak hours via collected data and energy theft.**

***Keywords*: NODEMCU, Voltage Sensor, Autodesk Eagle Software, Advanced Metering Infrastructure (AMI), The Intelligent Energy Network (IEN), printed circuit board (PCB).**

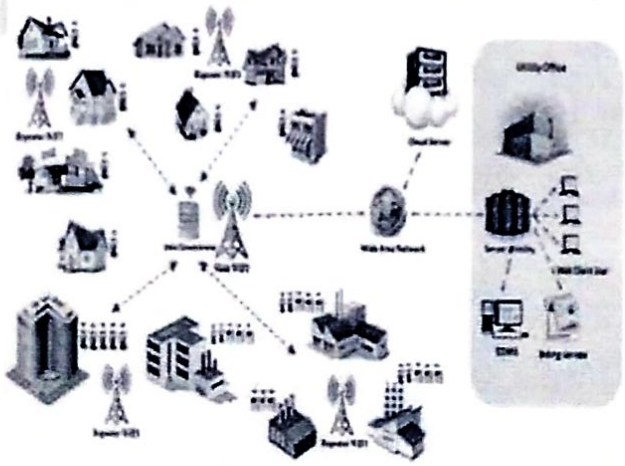
I. INTRODUCTION

Smart meter [1] is a device based on two way communication system between consumers and suppliers including Smart monitoring system. A smart meter is more reliable compared to a digital meter in terms of billing and tampering. It will also increase consumers concern about their electricity usage and at the same time, the Governing body will also be able to monitor power consumption in a better and best way through the information received from Smart Meters. In short, Smart Meter is a next-generation device for a better power distribution system and can be the first step to make a change in conventional Billing and metering

The Intelligent Energy Network (IEN)

Since the beginning of electricity regulation and the emergence of renewable energy sources, utilities have been looking for a means to match consumption with generation. Traditional meters only measure the total consumption and provide no information about when the energy was consumed

at each metered site. In contrast, smart meters are sensor elements that provide accurate high-resolution measurements on both the spatial scale, i.e., on a household level, and the temporal scale, i.e., every hour or 10 seconds, for parts of the low-voltage distribution grid topology for which previously only highly aggregate measurements on the substation and transformer level were available. Most of the current electricity meters can measure the active and reactive energy consumed or produced, the active and reactive power as well as voltage levels. Advanced Metering Infrastructure (AMI) differs from traditional Automatic Meter Reading (AMR) as it enables two-way communications between the meter and the control center of a Distribution System Operator (DSO). Thus, as shown in Fig. 1.1, bi-directional flow of energy and data information can be achieved.



II. PROBLEM STATEMENT

• Traditional electrical meters only measure total consumption of energy, and so provide no information of time in which energy was consumed. They neglect the power factor for non-commercial usage, which leads to inaccurate measurement and improper

A SYSTEMATIC REVIEW ON FACIAL RECOGNITION OF CANDIDATES DURING INTERVIEWS BY USING SENTIMENTAL RECOGNIZERS

[1]Shetty Ashika Chandrashekar, [2]Nithin NV, [3]Tanaz Jamal Shaikh, [4]Gagana GR Nayaka,[5]Manohar Gowda
[1]UG Student, [2]Assistant Professor, [3]UG Student, [3]UG Student, [3]UG Student
[1]Dept. of Information Science & Engineering,
[1]Alvas Institute Of Engineering &Technology, Moodbidri, India

Abstract : Face recognition is playing an important and vital role especially in the field of commercial, banking, social and law enforcement. By detecting the face in videos and extracting local characteristics (landmarks) to generate the geometric-based features to discriminate between a set of five emotion expressions such as amusement, outrage, disgust, fuss, and sadness for videos. Emotion more often is communicated by subtle changes in one or a few discrete facial features, such as a tightening of the lips in anger or obliquely lowering the lip corners in sadness artificially and naturally. The thousands of facial features analyzed include brow furrowing, brow raising, the amount eyes widen or close, lip tightening, chin raising and smiling.

IndexTerms **- Facial Expression, Geometric Facial Features, Emotion Recognition.**

I. INTRODUCTION

Emotion is a psycho-physiological process triggered by conscious and/or unconscious perception of an object or situation and is often associated with mood, temperament, personality and disposition, and motivation. Human sentiments and feelings are so unpredictable and require more examinations to be deciphered well regardless we have a little knowledge about them. We present a novel system which employs automatic facial emotion recognition technique for adaptive AI candidate behavior. The widely used feature extraction algorithms are Local binary pattern, Gabor filter and Scale Invariant Feature Transform [10]. A facial expression is worth a thousand words and few realize how loud their expressions really are. A smile from a stranger walking by on the street can indicate his good intention which could even make you smile back, while his scowl might turn you away. Without words, humans use their facial expressions to show their emotions and intentions to others.

II. RELATED WORK

In general, facial expression recognition consists of two stages: 1) feature extraction, and 2) classification. The main aim of feature extraction is to transform the input videos into the feature subspace while preserving the facial expression information. Face emotion recognition uses support vector machine for finding the different emotions of face and also for classifying them and is used to extract the facial features and to reduce the image dimensions. Face is a two-dimensional image, for face analysis it is preferred to use two-dimensional vector space.

III. PROPOSED WORK

Face emotion detection is used to predict the emotion state of the person based on their facial expressions. The overview of the proposed system architecture is shown in the Figure 1. The input video is classified into two types: training set and testing set. Training set is used for training of classifier. Testing set is used to verify the algorithm by predicting the different emotions of the face. Expression analysis is the major part of the emotion detection. PCA is applied to training images to reduce the dimensionality. Because training set is more compared to testing and if the dimension is high then the time taken for processing will be more. Support vector machine classification is done for classifying different emotions namely, Happy, Sad, Angry, Fear, Disgust and Surprise. Facial features such as eyes, nose, lips and face contour are considered as the action units of face and are responsible for creation of expressions on face, are extracted using open source software called dlib. SVM classifier compares the features of training data and testing data to predict any emotion of the face. Here facial features are considered as the key points which are used for training and testing. Support vector machine is the supervised learning method of machine learning. Machine learning algorithms are advantageous over other algorithms, because of less error rate and faster results. Video analytics is a technology that processes a video using various special algorithms in order to perform the required function. There are various types of video analytics but we make use of facial recognition systems. The Figure 1 describes the outline of the proposed framework. Recognition is based on the stored image data of the different group of persons. Input images are of any type can be used for recognition. Input image is subjected for face detection to detect the face. Detected face is the extracted from the image and these images are saved as a database.

H.O.D.
Dept. Of Information Science & Engineering
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225

BIG DATA APPLICATION IN ACADEMIC LIBRARIES

[1]Dikshit Kotian, [2]Mr.Pradeep Nayak, [3]Varada Shetty, [4]Manish R
[1]Student, [2]Assistant Professor, [3]Student, [4]Student
[1]Information Science and Engineering,
[1]Alva's Institute of Engineering and Technology, Moodbidri, Karnataka, India-574225

Abstract : With the fast development of information technology and the amount of data generated every day, Big Data has got the majority of attention. The use of Big Data as a useful resource can turn out to be very rife due to its application in instructional analysis and data-driven decision-making. The library is also undergoing specific modifications each and every day in the processing of information sources and data resources. Big Data analytics in academic libraries confront two crucial challenges: the massive volume, velocity, and variety of data and the complexity of its techniques and algorithms. Our major aim is to explore the current position of Big Data in Academic Libraries and find out which methods and equipment can be utilized in educational libraries in order to analyze Big Data.

Index Terms **– Big Data, Libraries**

INTRODUCTION:

The abrupt advancement of technologies such as common networking and cloud computing produces tremendous power for data. These data have the aspects of high-value large velocity, a large proportion, and a tremendous variation. Nevertheless, big data is reshaping the ways libraries remember and utilize for accomplishing their obligations. An outstanding aspect of big data is the enormous data it deals with as big data is contemplated as an appropriate and considerable concept for forthcoming libraries. Here the abilities of the librarians need to be revamped in order to deal with problems affected by big data. There are numerous elements of data like paper copies, CD ROM's, database resources and customary library assistance due to user browsing, borrowing, and supervision of staff, etc. And the academic library data advancement grows quickly at the same period the exploration and browsing data produced by mobile appliances are expanding quickly. The significance of library data is enormous, but the consistency is low. It is essential to merge the distinct categories of abundance data in the archive with the relevant technologies and methods in the data field.

In this explanation, real-time examination and data mining are attained. For academic libraries, Big Data analytics is influenced by two fundamental challenges: first, due to the enormous proportion, selection, and speed of the information bothered, the storage and procedure needs of the system are rather irresistible, and second, the analytics procedures and algorithms are entangled, which makes Big Data analytics a computing-intensive task. To support the storage and procedure needs of Big Data analytics applications, the cloud has been establish to be the most reasonable infrastructural explanation. Cloud computing proposes a reasonable determination for stocking, processing and controlling Big Data for analytical processes, facilitating the application of administered and similar paradigms in order to fulfill potential necessities. Big Data analytics is an enormous area that has establish applications in several areas and researches. This study attempts to evaluate the emergence and capability of Big Data and transmit their influence on academic libraries. With these libraries growing to deliver numerous data services, librarians are most likely to satisfy specialists and authorities in the information age. Consequently, the objective of this study is to entirely examine the literature correlated with Big Data in instructional libraries. In doing so, we try to explore about following:

1. Challenges in implementing Big Data.
2. Benefits of Big Data in academic libraries.
3. Involvement of librarians in Big Data.

CHALLENGES OF BIG DATA

[2]The sharply increasing information deluge within the massive facts technology brings approximately huge challenges on statistics acquisition, garage, management and evaluation. Traditional statistics management and analysis structures are based totally on the relational database management system (RDBMS). However, such RDBMSs most effective practice to established statistics, aside from semi-structured or unstructured information. Similarly, RDBMSs are increasingly more utilizing increasingly more steeply-priced hardware. For solutions of everlasting garage and management of big-scale disordered datasets, distributed record structures and NoSQL databases are excellent selections. Such programming frameworks have accomplished fantastic fulfillment in processing clustered tasks, especially for website rating.

H.O.D.
Dept. of Information Science & Engineering
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225

Natural Language Processing of Social Media as Screening for Suicide Risk

[1]Kavyashree S,[2]Pradeep Nayak,[3]Nikitha Shetty
[1]Student,[2]Assistant Professor,[3]Student
[1]Information Science & Engineering,
[1]Alva's Institute of Engineering and technology, Moodbidri, Karnataka, India

Abstract: Among all the death cases occurring around the world suicidal cases are estimated to the highest possible causes of death. An estimated 16 million suicidal attempts occur each year out of which 800,000 people die of those attempts. From the continuous analysis it is said that from past 20 decades the attempts for suicide has been increased at the rate of 24%. In the same way as the cause of ending this problem the progress has been made in understanding suicide and improving outcomes in at-risk individuals.Assessing an individual's risk for suicidal conduct is difficult. Experienced and talented clinicians frequently struggle to correctly interpret changes (can be said as alerts) in their patients behavior that are indicative of suicide risk as most existing techniques for detecting high hazard of suiciderequire that persons reveal their want to harm themselves to a health professional. In this case, Beck's Scale for Suicide Ideation, a 5- or19-item questionnaire inspecting the patient's energetic and passive wish for suicide, and any precise plans they might have. Many patients who are at risk for suicide interact with primary physician they don't consult psychiatrist and those health care providers may lack training to administer a specific questionnaire for suicide risk. And the main issue is patients cannot be relied to disclose the suicidal thoughts in clinical setting. In this case signals related to a person's mental health and well-being have been extracted from a person's *digital life*. Digital life stores the information related to person's interactions with digital devices, through the daily course of their life, including social media data (e.g., Facebook, Instagram, Twitter) .In this way Natural Language Processing helps in avoiding the suicidal risk.

IndexTerms -**Suicide, suicide screening, suicide prevention, social media, data science, natural language processing.**

I. INTRODUCTION

Among all the death cases occurring around the world suicidal cases are estimated to the highest possible causes of death. An estimated 16 million suicidal attempts occur each year out of which 800,000 people die of those attempts. From the continuous analysis it is said that from past 20 decades the attempts for suicide has been increased at the rate of 24%. In the same way as the cause of ending this problem the progress has been made in understanding suicide and improving outcomes in at-risk individuals.

Assessing an individual's risk for suicidal conduct is difficult. Experienced and talented clinicians frequently struggle to correctly interpret changes (can be said as alerts) in their patients behavior that are indicative of suicide risk as most existing techniques for detecting high hazard of suiciderequire that persons reveal their want to harm themselves to a health professional. In this case, Beck's Scale for Suicide Ideation, a 5- or19-item questionnaire inspecting the patient's energetic and passive wish for suicide, and any precise plans they might have. Many patients who are at risk for suicide interact with primary physician they don't consult psychiatrist and those health care providers may lack training to administer a specific questionnaire for suicide risk. And the main issue is patients cannot be relied to disclose the suicidal thoughts in clinical setting. In this case signals related to a person's mental health and well-being have been extracted from a person's *digital life*. Digital life stores the information related to person's interactions with digital devices, through the daily course of their life, including social media data (e.g., Facebook, Instagram, Twitter) .In this way Natural Language Processing helps in avoiding the suicidal risk.

II. DATA (software data)

The development and analysis of these machine learning algorithms relies on pre-suicide attempt social media data from people and a contrasting array of users who have not attempted suicide. We also needed examples of users who are as close as possible to those who would attempt suicide but did not attempt suicide (as far as we know) to train the algorithms to distinguish between those who are at risk of suicide and those who are not. Thus, social media posts from control users provide a benchmark that can be linked to the information from those who would go on trying to commit suicide. To create this data set, we combine data from 2 sources—examining self-reported public data and data reported through and data donated through OurDataHelps organization.

III. USERS OF OURDATAHELPS.ORG

The first data source is from a set of users who have graciously donated their data to support research in this field through OurDataHelps.org. Users of this platform are logged in and author-enabled access to data from their digital life— social media (e.g. Facebook, Twitter, Instagram, Reddit, Tumblr), wearable (e.g. Fitbit, Jawbone) and other technology (e.g. Strava, Runkeeper).

Users also fill out questionnaires asking for basic demographic data as well as information on their history of various mental health conditions. Specifically relevant to this study, the number and dates of past suicide attempts are noted. A handful of user data in OurDataHelps.org have been provided by their loved ones.

H.O.D.
Dept. of Information Science & Engineering
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881; IMPACT FACTOR :6.514(2020); IC VALUE:5.16; ISI VALUE:2.286

ILLUSION PIN: TRICKING THE EYE TO DEFEAT SHOULDER SURFING ATTACK BY USING HYBRID IMAGES

Sharan L Pais, Nikshita, Pooja Shetty, Priyanka S N and Tharunya U P
Department of Information Science and Engineering
Alva's Institute of Engineering and Technology Mijar, Moodbidri

Abstract

We evaluate 20 years of proposals to exchange text passwords for general-purpose user authentication on the online employing a broad set of usability and security benefits. Our comprehensive approach results in key insights about the problem of replacing passwords. Touch screens are an increasingly common feature on personal computing devices, especially smartphones, Oily residues, or smudges, on the touch screen surface, are one side effect of touches from which frequently used patterns like a graphical password could be inferred. Here we examine the feasibility of such smudge attacks on touch screens for smartphones, and focus our analysis on the Android password pattern.

Keywords-Password, Smudgeattack, Patterns, Graphical Password

I. INTRODUCTION

Due to increased processing power and storage capabilities, modern smartphones store a plethora of sensitive data that users want to stop others from accessing thanks to increased processing power and storage capabilities, modern smartphones store a plethora of sensitive data that users want to stop others from accessing. Touch screens are touched, so oily residues, or smudges, remain on the screen as a side effect. Latent smudges could also be usable to infer recently and regularly touched areas of the screen – a sort of information leakage. Here we explore the feasibility of smudge attacks, where an attacker, by inspection of smudges, attempts to extract sensitive information about recent user input And also feasibility of smudge attacks against the Android password pattern, our analysis begins by evaluating the conditions by which smudges are often photo graphically extracted from smartphone touch screen surfaces. Here we also consider simulated user usage scenarios supported expected applications, like making a call , and if the pattern entry occurred before or post application usage. Mobile phones are increasingly integrating security-sensitive services, such as electronic wallets and banking transactions. we not only need to secure user authentication on mobile devices, but we must aim for secure user authentication systems that work equally well on miniaturized devices as they would on large size displays. Traditional authentication systems that believe textual password entry, despite their simplicity, aren't adequate for little portable devices. For the vast majority of android, passwords are the method of choice for authenticating users. We design and analyze graphical passwords, which may be input by the user to any device with a graphical input interface. A graphical password serves an equivalent purpose as a

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881; IMPACT FACTOR :6.514(2020); IC VALUE:5.16; ISI VALUE:2.286

A Systematic Review on Candidate Selection Process by Resume Sorting and Facial Emotion Recognition

Shetty Ashika Chandrashekar [1]
UG Student
Dept. of Information Science & Engineering,
Alva's Institute of Engineering & Technology,
Moodbidri, India
ashi2011shetty@gmail.com

Tanaz Jamal Shaikh [2]
UG Student
Dept. of Information Science & Engineering,
Alva's Institute of Engineering & Technology,
Moodbidri, India
tanazshaikh97@gmail.com

Gagana G R [3]
UG Student
Dept. of Information Science & Engineering,
Alva's Institute of Engineering & Technology,
Moodbidri, India
gaganagnayaka98@gmail.com

Nagesh U B [4]
Assistant Professor
Dept. of Information Science & Engineering,
Alva's Institute of Engineering & Technology,
Moodbidri, India
nageshub@gmail.com

Manohar Maithi Gowda Y K [5]
UG Student
Dept. of Information Science & Engineering,
Alva's Institute of Engineering & Technology,
Moodbidri, India
manohargowda1717@gmail.com

Abstract*— *After completing education the next phase that comes in a person's life is job. However, there are lots of people who start working before completing their formal education. While looking for a job the most significant thing that speaks about a candidate is Curriculum Vitae (CV) or Resume. In this period of innovation, job searching has become progressively easier and simpler simultaneously. There are a large number of applicants pouncing for a single position and hence it becomes extremely difficult for the employer to decide just dependent on their CV/Resume. To take care of this issue, there are organizations who give explicit configuration to their candidates with the goal that they can make this procedure somewhat simpler. The way toward choosing an applicant dependent on their CV/Resume has not been totally robotized. To solve this problem, an approach combined with Natural Language Processing (NLP) and Machine Learning (ML) seems like a feasible opportunity. Research shows that, 90% of all CVs/ Resumes are checked for less than 2 minutes by the employers. This implies that, in most of the cases the employers only look at the bits of important parts or the points of interest in the CV/ Resumes and ignores the rest. The specific segmentation scheme of a general CV/ Resume makes it far easier to analyze and understand the necessary information. Therefore, the first objective was to segment the CV/ Resume into parts and then separate them in order to figure out the topics of each sentence through analyzing the keywords of each segment. After resume sorting of the curriculum vitae(cv) we go for the facial recognition of the candidates to analyze the situation of the candidates during interview by using machine learning algorithms. Facial expressions play a key job in analyzing and distinguishing emotions.

Keywords*— *Natural language processing, Machine learning;

I. INTRODUCTION

The entire process of resume sorting is separated into three segments. The initial segment contains the segment of entire CV based on each part, the second part contains extracting data in structured form, from the unstructured data and the third segment contains evaluating the structured data by decision tree algorithm. All segmented resumes are converted into HTML format by data extraction process. Decision tree algorithm technique are used to classifies input into different categories based the qualification and quality of data for future benefits. The next step being facial emotion recognition is very active re-search topic in order to detect the emotion from face which has used frontal view images. The fragmentation of facial area and other body parts is done on the basis of skin shading model. To recognize the eye and lip area from face we utilized Viola-Jones algorithm. By the help of neural network, we can identify the emotion of those features. Human emotion displayed by face captures in video. Artificial intelligence system can copy and measure the reaction from face. Perceiving feeling from picture or video task is extremely complex for machine and furthermore it requires many image processing methods for extraction. This paper examines about the machine learning technique and feature extraction.

H.O.D.
Dept. Of Information Science & Engineering
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881; IMPACT FACTOR :6.514(2020); IC VALUE:5.16; ISI VALUE:2.286

Medicinal Plant Identification through Leaf Structure Analysis

Prathiksha [1]
UG Student
Dept. of Information Science & Engineering,
Alva's Institute of Engineering & Technology,
Moodbidri, India
prathikshapoojary2@gmail.com

Manjunath H R [2]
Senior Assistant Professor
Dept. of Information Science & Engineering,
Alva's Institute of Engineering & Technology,
Moodbidri, India
manjunathhdvp@gmail.com

Sanjana Shekhar Shetty [3]
UG Student
Dept. of Information Science & Engineering,
Alva's Institute of Engineering & Technology,
Moodbidri, India
sanju2905shetty@gmail.com

Shreesha B [4]
UG Student
Dept. of Information Science & Engineering,
Alva's Institute of Engineering & Technology,
Moodbidri, India
shreeshabilur27@gmail.com

*Abstract— **Plants are an essential a part of our ecosystem and Republic of India incorporates a long history of using plants as a source of medicines. Since the appearance of recent medical aid drugs, the utilization of ancient drugs declined to a substantial extent. It's necessary to classify these plants in order that it might be straightforward to pick out the proper plant for the medicative preparation or to review a lot of regarding its characteristics. This project proposes a computer vision approach for the popularity of Ayurvedic medicative plant species by processing the leaf image. The planned system uses Heralick options extracted from leaf pictures and also the classification using Support Vector Machine classifier. This technique is enforced with a python editor Anaconda each for frontend and backend. Once the user uploads the leaf image he will get the name of the leaf and it classifies the leaf whether or not it's medicative or not.***

Index Terms— Preprocessing, Gray scale, GLCM, Haralick features, Support Vector Machine, RBF

1. INTRODUCTION

Plants are the most important factor for the survival of life on earth. There are vast variety of plants existing in nature. In recent years, ancient medication has created a comeback for a set of reasons like they're cheap, nontoxic and doesn't impact any aspect. At present, plants are known manually by taxonomist that are vulnerable to human errors. So as to stop this drawback this project makes an attempt to supply an automatic system to acknowledge species of plants by recognizing the digital image of their leaf [2].
Leaf identification forms an important part in plant classification. Plants are often sorted completely based on the different components of plants. Leaf image classification technique is that the most popular selection compared to strategies like Cell biology or Molecule biology strategies for leaf plant classification. Hence for the aim of plant classification, recognizing its individual leaf image may be a straightforward and easier manner. Every leaf image is classed through variety of connected processes. At first an information base is formed from the sample pictures of all types of leaves. Every leaf image is connected to the corresponding plant details. Once the leaf image is uploaded to system then its essential options are known and recorded using image process strategies [1].

Our dataset consists of various plant leaf pictures. Here we are creating the folder for every of the plant leaf pictures and every folder consists of various orientation of an equivalent plant leaf and additionally the various growth stages of the plant leaf The image is uploaded then classified based on the image present in the dataset If the image satisfies the feature of any of the image folder present in the dataset then the system outputs that this plant leaf is medicinal and displays its name.

2. RELATED WORK

The best supervised classification algorithm 'K Nearest Neighbor' for classifying the leaves. The dataset was partitioned off into 2 equal elements

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881; IMPACT FACTOR :6.514(2020); IC VALUE:5.16; ISI VALUE:2.286

A TRANSLATION OF KANNADA TEXT IMAGE TO ENGLISH TEXT BY PROCESSING OF IMAGE USING OCR

Sushanth S[1], Vanyashree[2], Dheeraj Shetty[3], Hegde Akshay Raghuram[4], Rakesh S R[5]
Department of Information Science and Engineering
Alva's Institute of Engineering and Technology Mijar, Moodbidri

***Abstract*— Text extraction from an image and translation are the key areas in the field of pattern recognition and machine learning. In this paper we extract the text from an image and translate the obtained text into the user required language. This is done by using a web application that takes image as an input where input is a user defined image file containing text in any language available in the python-tesseract library and then its exact translation on any supported language using Google Translator. Different python script and machine learning libraries are made used for text extraction and translation of the text or document.**

Keywords: Image Processing, Tesseract, Optical Character Recognition (OCR), Segmentation, Google Trans.

I. INTRODUCTION

Nowadays text translation from one language is a challenging task. This is done by using Machine Learning. When a person is travelling from one place to another, there is a chance that the person will not be able to read or understand the sign boards of that place. To overcome this problem we proposed an architecture where we translate the given text into English. This is done by using a machine learning techniques that are OCR and image processing where the captured image is scanned and a text is extracted from it and then it is translated. We propose an architecture for kannada to a english translation of the texts present in the document form. We detect the text using OCR that is optical character recognition and translate the script into a english. The output or the result is a useful, simple, affordable and robust system that can also handle problems by using an image process technique. In this project we have used a simple web interface which accepts the input in a text document form and then the text is extracted, then the extracted text is translated into english by using Google trans API. Google trans API was created by google in the year 2006.

II. LITERATURE SURVEY

Optical character recognition (OCR) has been an interesting topic as it has a wide application. OCR is used as it extracts a text from a digital image and converts the text into string. OCR enables a large number of useful applications. During the early day, OCR has been used for mail sorting, bank cheques reading and signature verifications. Besides OCR can be used by organizations like automated number plates recognition, etc. and another useful applications of OCR is helping blind and visually impaired people to read the text. [1]

The study of technology acceptance is one of the widely spread issues that has been concern of many researchers recently. Google Translate is one of the widely used translation technology. Machine translation is an influential and google translate is one of the widely used translation technology.[2]

Language being a natural object that its translation hasn't reaches every corner of the world. But translation is always made a bridge that reduces the distances of languages. Google translator is a machine translate that has been recently used to translate one language into another.[3] Sometime there is a chance when we search for a information and information turns to be in a language which the user may not be familiar with, at this time translating system which will translate a input text into user understandable text is very useful.[4]

Google itself as a translating page which gives information in the user required language, the user just has to give the language which he wants and output is generated accordingly.[5] Sometimes when we receive email, the e-mail is automatically translated into a user defined languages, this is done by the system which analysis the previous data and an output is generated accordingly.[6]

Translation from Hindi to English can also be done through document translation but accuracy is not very high. Google translate can be used to learn any foreign language which also helps in text – to – speech with a handy pronunciation guide.[7] We can quickly learn how to pronounce different word in different languages, like French, German or Spanish words can be easily understood by Google translates and their meaning can be known too.[8]

Google OCR has been always used to extract text from an image. OCR has been always useful In the field of an banking sector, or any other sectors, where there are systems which extract information from a cheque[9]

Automatic number plate detection is helpful in advanced systems for tracking the vehicles and also used to recognize the unauthorized vehicles. In this paper algorithm is implemented to recognize the characters in the number plate.[10]

A Machine learning algorithm is implemented to automatically learn the feature form the unlabeled data and that is used to detection and extraction of the text from the scene image..[11]

Recognizing the character present in the character is very import role in the extraction. The machine learning algorithm is used for a character recognition. The machine learning model is build, which is trained for the different alphabets and numbers and along with the results.[12]

III. SYSTEM ARCHITECTURE

1. Our proposed system diagram is as shown below.

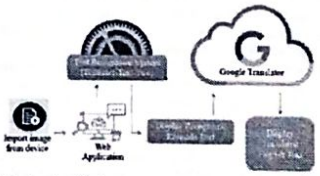


Fig 1: System Architecture

Our proposed system consists of web interface through which the image containing the text is given as the input and OCR will extract the text from the image and then translate it to English using Google Translator API. Our web application is based on the python web

H.O.D.
Dept. Of Information Science & Engineering
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881; IMPACT FACTOR :6.514(2020); IC VALUE:5.16; ISI VALUE:2.286

Aquaponics System: IoT Based Innovative Plant Cultivation and Fish Feeding System

Samrudhi Shetty[1] Vanyashree[2] Meghana Naik[3] Parinitha K P[4] H M Mihana[5]
Department of Information Science and Engineering
Alva's Institute of Engineering and Technology Mijar,Moodbidri
{samshetty98@gmail.com vanyashreemurli97@gmail.com meghanar771998@gmail.com parinithalp@gmail.com hmmihana123@gmail.com}

Abstract— **Aquaponics is a system which amalgamates the aquaculture & hydroponics that grows fish and plants together in one system. It utilizes fish wastes to provide essential nutrients to the plants and in reciprocation the plants will purify the water and gives it back to the fishes. The purport of this paper is to build an efficient system by implementing aquaponics system by utilizing the technology of IOT (Internet of Things). By engendering an automated System with the avail of sensors interfaced with the Arduino board, it possible to automate fish victualing and water supply to the plants at the conventional interval of time. Subsisting system that coalesces these technologies must overcome the fundamental issues like cost, victuals quality control and circumscribed grow. In this paper we intend to propose a kit which contains all these features mentioned above, and that is auxiliary to provide the rudimental organic vegetation for the abode along with Aquaculture farmers and exporters conventionally face concerns cognate to data of their farm, while utilizing digital apps (Mobile Applications).**

Keywords—aquaponics; hydroponics; aquaculture; IOT;

I. INTRODUCTION

There is immense need to grow organic vegetation due to the prime injunctive authorization of people around the world to get the chemical free aliment; hence the current buzz word in agriculture has become organic. There are lots of researches going on to find out the ways to achieve this goal, and one such technique is aquaponics. The word "Aquaponic" is referred to the integration of hydroponic and aquaculture. Soil-less gardening is called hydroponics, it rudimental involvement of growing salubrious plants without utilizing the traditional medium such as soil, instead it utilizes nutrients in water. A plant just needs nutrients, water, and sunlight to grow, but it can additionally grow without soil, they often grow a lot better with their roots in water instead.

One of the major issue in the world is providing the aliment, because there is an immensely colossal incrementation in the population where as other side there is very congested place for farming. Most of the consumer wants to ascertain that the aliment they are consuming is salubrious, hence this can be assured utilizing aquaponics system that avails in growing chemical free vegetation.

The climatical transmutations in the environment will not have any impact on this system and hence it can grow any kind of vegetation. This system provides minimal risk and high profit farming method as expected by the consumers or people around the world. Moreover, this aquaponics farming requires little upkeep and investment once it is plenary setup, giving a chemical free, feasible, weed free, less cost, reliable solution to farming [2]. Traditional farming requires customary monitoring, whereas aquaponics system is an automated system which requires less monitoring. Survey verbalizes that aquaponics requires less than 10 percent of fresh water as the system itself recycles the water. In this paper, main goal is to propose an automated aquaponics system, that demands nominal requisites providing best results with the avail of the technologies also informing the farmer on issues with the system and any slight fluctuations in the ideal environment required.The necessity of an automated and smart system comes from this for aquaponics.

II. RELATED STUDY

N Hari Kumar *et al* [1] proposed a system which initiated the concept of hydroponics and aquaculture to bring about a interrelated system which is in the controlled system and minimal human intervention. Internet of Things (IoT) application for aquaponics in order to engender an autonomous,self-regulating system with the avail of WirelessSensor Network (WSN). An open standard of WSN called 6LoWPAN is utilized in this system which avails us to construct an ecumenical infrastructure.

Megnni U *et al* [2], says that in diminutive place we can grow the plants adapting the conception of aquaponics. VEGILAB is mainly an indoor system which grows vegetables such as lettuce and tomatoes to surmount the fundamental issues such as extravagant manufacturing cost, inhibited grow and pabulum quality. The need for this system was the reduction of farm lands globally and with the help of artificial environment cultivating the crops as well as maintaining the quality of food production as well.

M.F. Saaid *et al* [3] tried implementing a model of Aquaponics such that a selection of particular type of fish (comet goldfish) and a particular hydrophilic plant type which is Ipomoea aquatic (water spinach), Spinacia oleracea (spinach) type of leafy vegetable was considered, so that it could perform recirculation of water from the aquaculture and back to the same. Feeds containing 30% crude protein were provided for plants as required for growth and auto fish feeder to note the growth and survival rates of fishes were given importance. Filter systems to filter wastes from water. The brain of the system is Aurdino UNO board which receives the signals and performs the required functions via actuators. The factors such as temperature, water level in both plants and aquaculture was maintained resulting in good statistics of growth in both the plant and fishes.

Analene Montesines Nagyo *et al* [4] an automated solar powered. The aquaponics system is cost efficient and more ideal for the farmers. The system designed consists of four modules: 1) water recirculation system that is required to

H.O.D
Dept. Of Information Science & Engineering
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225

International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056
Volume: 07 Issue: 08 | Aug 2020 www.irjet.net p-ISSN: 2395-0072

FACE RECOGNITION ATTENDANCE SYSTEM USING RPA

Anusha Shetty, Pradeep Nayak, Nagendra Prasad, Prathvi P Shetty,Priyanka Karkera

Student, Info. Science and Engineering ,Alva's Institute of Engineering and Technology
Assistant Professor, Info. Science and Engineering ,Alva's Institute of Engineering and Technology
Student, Info. Science and Engineering ,Alva's Institute of Engineering and Technology
Student, Info. Science and Engineering ,Alva's Institute of Engineering and Technology
Student, Info. Science and Engineering ,Alva's Institute of Engineering and Technology

---

Abstract - *Students attending classes is crucial within the learning process. To track student attendance, many ways that is done. one in all them is through student signatures. the method has many shortcomings, like requiring a protracted time to form attendance; the attending paper is lost, the administration must enter attending information one by one into the pc. To overcome this, the paper projected a web-based student attendance system that uses face recognition. within the projected system, siamese Neural Network (CNN) is employed to notice faces in pictures, deep metric learning is employed to supply facial embedding, and to classify student's faces. Thus, the computer will acknowledge faces. From the experiments conducted, the system was ready to acknowledge the faces of students agency did attend and their attending information was automatically saved. Thus, the university administration is alleviated in recording attending information.*

***Key Words*: (Siamese Neural Network (CNN), RPA)**

1.INTRODUCTION

Most of the colleges round the world apply the group action system to capture student's promptness. However, this paper/manual group action system has several challenges.Passing associate degree group action sheet from one student to the opposite to sign takes time furthermore as causes distraction. because of such issues, some lecturers delay the group action until the top of the category, nonetheless some students may well be in an exceedingly hurry to go away the category right away, therefore they could miss linguistic communication the group action sheet. moreover, there area unit some students United Nations agency ne'er return to the category however sign group action by proxy. In some cases, lecturers decision by names one by one to mark the group action however this technique conjointly consumes innumerable time. yet one more drawback is a few students return to category late particularly the morning categories. Hence, the manual group action system isn't secure and reliable.It allow us to take associate degree example of application to the idea we have a tendency to area unit proposing here. Taking group action within the colleges and faculties is being a waste of your time and energy for each the scholars and lectures furthermore. today biometric is additional usage they're fingerprint recognition face recognition biometric authentication recognition voice recognition biometric authentication etc. one among that biometric class is face detection and recognition. supported the image we have a tendency to take security safety, attendances and a few time it helpful for call conjointly. largely this facial detection and recognition is decrease the manual work for human. Image capturing from camera or cc camera someday this is often conjointly a streaming video from camera. type that offline or on-line information, we have a tendency to capture the image subsequently applying the face detection techniques. Face detection is detective work the face location and presence of face in pictures. during this face detection we have a tendency to largely see the nose,hair, ears, mouth, eyes and conjointly completely different create of faces in pictures. numerous Face detection techniques, few of them is Viola Jones Face Detection algorithmic rule, (LBP), and Ada-Boost for Face Detection, smqt options and snow Classifier technique. when applying face detection techniques we have a tendency to detected the faces or objects in image and crop that image apply Face recognition technique. numerous ways in which to acknowledge the faces by applying Hog options, Haar options, Machine learning, deep learning, classification technical schoolniques another tech conjointly used for recognition of the faces. Recognition of face we'd like coaching information sets. Instances taking camera capture currently make certain image to information pictures. Face recognition of various peoples supported the connected pictures of that person image we'd like take pictures for before face recognition. just in case if the image isn't within the information then we have a tendency to store that image as a replacement person

International Journal of Advanced Science and Technology
Vol. 29, No. 3, (2020), pp. 10196 - 10206

Histopathological Image Classification of Breast Cancer Using Kervolutional Neural Networks

[1] Jayantkumar A. Rathod, [2] Darshan P B, [3] Rakesh M R, [4] Akshaya Shenoy and [5] Acharya Sainath Balakrishna
Department of Information Science and Engineering
Alva's Institute of Engineering and Technology, Mijar, Moodbidri
[1] jayantkumarrathod@gmail.com, [2] darshanpb111@gmail.com, [3]rakeshmr20@gmail.com, [4]akshayashenoy1234@gmail.com, [5]sainathacharya@gmail.com

Abstract

Histopathological Image Classification is a standard for diagnosing cancer. The classification helps in determining the best treatment among various treatment methods available. Breast Cancer classification are primarily constructed on histopathological photographs of the tissue in the tumor. In this project, we classify the histopathological images belonging to two major categories of tumor Benign and Malignant using KNN (Kervolutional Neural Network— Kernel Convolution Neural Network). Existing works using CNN mainly leverages activation layers as it only provides point-wise non-linearity, so we use KNN over CNN which provides indefinite complex actions of the human recognition system by making use of the kernel trick. It is a generalized version of convolution which can enhance the model's extent and can capture higher order of traits using reinforcement kernel functions short of any added parameters.

Keywords: *Breast Cancer, Kervolution, Classification, Histopathology*

1. Introduction

Deep Learning is an emerging technique which has caught the interest of various scientists and researchers. Deep learning a variant in machine learning technology which lets machines learn from training, skill, data, futures, and helps computers comprehend a collection of concepts and rules for the problem of the real world. The need of the human-machine operator to determine all the details a machine needs is depreciating as device collects the information or data from expertise. The architectures like CNN, SVM, KNN helps the machine to learn features hidden in the data collection which in turn helps the networks for classifying the data into groups.

Multi-layered perceptron is a nice example of deep learning where layers are fully connected. In this project paper, we used kervolutional neural network for classifying breast cancer images. In kervolutional neural networks, the learning network architecture follows the same method as that of Convolution neural networks except for the convolution layer we use Kervolution layer.

Breast Cancer has struck around 2.1 million women worldwide and additionally a reason for the biggest number of cancer-related death among ladies. Breast cancer is one out of the many most general diseases among women. In 2018, 627,000 people were reported to be dead with breast cancer–about 15% of the total deaths from cancer. Although women in more developing countries are at higher rates of breast cancer, rates are increasing worldwide in nearly all areas.

To improve outcomes of breast cancer and for the survival, early detection of the type of cancer is important, with advancements in technologies and with the availability of a

ISSN: 2005-4238 IJAST

International Journal of Engineering and Advanced Technology (IJEAT)
ISSN: 2249 – 8958, Volume-9 Issue-5, June 2020

Active Prediction of Heart Disease using Techniques of Hybrid Machine Learning

Jayantkumar A. Rathod, Apoorva R, M. Ramakrishna, Gowthami H R, Rachana T

Abstract: *In this world one of the main sources of death is dependent on coronary illness happens in both men and women. It might cause because of the absence of data or inadequate data gave by the doctor in light of some innovation issue or because the prediction level is low. We have additionally observed the utilization of ML methods in ongoing advancements in different Internet of Things (IoT) fields. Different examinations just give a brief look at anticipating coronary illness utilizing ML methods. In this paper, we are looking at how this hybrid method is better than utilizing a single calculation which gives higher exactness up to 88.7% than contrast with different procedures*

Keywords: *Algorithms of classification, cardiovascular disease (CVD), Machine learning, Model of prediction, Prediction of heart disease, Selection of functions*

I. INTRODUCTION

The idea of our heart is so flawlessly sorted out and furthermore it is so hard to perceive on account of numerous fundamental hazard factors, for example, diabetes, hypertension, raised cholesterol, sporadic heartbeat cadence and a few different components it is hard to distinguish coronary illness. Various strategies have been utilized in information mining and neural systems to survey the degree of cardiovascular illness among people. It has been characterized in different strategies like Naïve bayes, Decision tree, and SVM and weighted fuzzy principle. In this investigation, different readings were performed to create a prescient model utilizing particular procedures as well as at least two strategies to associate these methodologies together are commonly known as half and half techniques. This strategy utilizes fruitful affiliation rules induced with the GA for the choice, hybrid, and transformation of the competition which brings about the new wellness include proposed. We utilize the notable Cleveland dataset, which is accumulated from a UCI AI vault for exploratory approval.

The forecast for coronary illness depends on symptoms, to be specific heartbeat rate, sex, age, and numerous others. Inside this work, we present a strategy with the Linear Model (HRFLM) called the Hybrid Random Forest. The principal objective of this examination is to improve coronary illness expectation yield exactness, there have been a few investigations that bring about capacity choice requirements for algorithmic uses alternately, and the HRFLM approach utilizes all usefulness with no imperatives on the assortment of usefulness. We likewise presented an effective clinical choice decision support system in the presented studies, utilizing fuzzy logic, in which weighted fuzzy principles are utilized, that are created automatically. In this paper, we are going to look at between two strategies that are hybrid AI procedure versus a single AI calculation that is a weighted fuzzy principle.

II. RELATED WORK

Many researchers and scholars have focused on prediction of heart disease and classification activities, and have reported their findings. We saw that many of the related works were done using the methodologies of deep learning and machine learning, and were done using single algorithms. In this paper we used the HRFLM to predict modified data set for our research; this HRFLM consists mainly of three algorithms. The 13 UCD-Cleveland dataset is used by SVM.DT and NB to achieve greater accuracy compared to that based on sensitivity, precision and specificity.

III. INPUT SOURCES:

In this paper we used 3 main algorithms namely 1). SVM Algorithm 2). Naive Bayes Classifier Algorithm 3). Decision tree Classification.

NAIVE BAYES: It is a method of the order dependent on Bayes's hypothesis, with an assumption of independence between predictors. Basically, a Naive Bayes classifier accepts that the nearness of a particular component in a class isn't identified with some other feature. P (C\X) = P (X\C)*P(C) P(X) P(C) =>independent likelihood of C(prior probability) P (X) => independent likelihood of X P (X\C) => conditional likelihood of X given C (probability).

DECISION TREE: The decision tree is a regulated calculation for AI. It handles both numerical and downright information. It gives an unmitigated arrangement, for example, Yes/No, True or False, 1 or 0, contingent upon specific conditions.

Revised Manuscript Received on June 15, 2020.
* Correspondence Author
Jayantkumar A, Department of Information Science and Engineering, Alva's Institute of Engineering and Technology, Moodbidri , India.
Email: jayantkumarrathod@gmail.com
Apoorva R, Department of Information Science and Engineering, Alva's Institute of Engineering and Technology, Moodbidri, India.
Email: apoorvarajr@gmail.com
Gowthami H R, Department of Information Science and Engineering, Alva's Institute of Engineering and Technology, Moodbidri, India.
Email: gowthamihr2666@gmail.com
Ramakrishna M, Department of Information Science and Engineering, Alva's Institute of Engineering and Technology, Moodbidri, India.
Email: ramakrishna7748@gmail.com
Rachana T, Department of Information Science and Engineering, Alva's Institute of Engineering and Technology, Moodbidri, India.
Email: rachanagowda543143@gmail.com

Retrieval Number: E9660069520/2020©BEIESP
DOI: 10.35940/ijeat.E9660.069520

Published By:
Blue Eyes Intelligence Engineering
& Sciences Publication

International Journal of Science and Research (IJSR)
ISSN: 2319-7064
ResearchGate Impact Factor (2018): 0.28 | SJIF (2019): 7.583

A Novel Technique for Fake News Detection using Machine Learning Algorithms and Web Scrapping

K S Veda[1], Sudarshana K[2], Moulya M[3], Amulya[4], Chandana N S[5]

Department of Information Science and Engineering, AIET, Moodbidri, 574225, India

Abstract: *In today's world we all can see the growth of social media. Social media is one of the common platforms where large number of people interacts with each other. Social media is a communication bridge between the people to interact, share, and to provide information. The same social media is facing some sort of issues like fake news. Fake means which is not real instead they are spreading fake news as real news and unfortunately people are not able differentiate them and are believing that news. In this paper we would like to provide a software that would differentiate between fake and real news. In this model we had come up with four algorithm and web scarping technology.*

Keywords: Fake news, Web Scrapping

1. Introduction

As of Now we can see lot of improvement in technology through internet world and one among them is social media. Social media has made life easier where we can interact with our close ones and even unknown people or a different people who is from different places. But through social media some people are spreading or posting fake news which might affect people or make people to believe unreal facts. This is one of the major problem that the social media is facing. Facebook and Google have been taking measures for the same problem. Facebook is using tools to help users to find out the fake news by flagging them as fake. Google is using hoax sites. They are using fact checking labels in Google news.

People should be aware what to believe and what not to believe but in some cases it can't be differentiated which is true and which is fake news.

Since the news spread faster and wider it could be difficult to predict them. So, our model could help them out to predict these kinds of news. Some people wontedly miss uses the social media to spread unreal facts or a fake news to mislead the people to believe such kind of people and let us try not to believe such kind of fake news. To find out the news is fake or real we can use machine learning algorithms.

These machine learning algorithms train system to predict the news to be real or fake based on text, words used and stop words, etc.

Our Model is a text based fake news detection application. There are variety of Fake news that may be on text, image, sound etc. There are plenty of ways to spot fake news and they might be fact checking, go through the news deeply and search in trusted websites, or if it is forwarded from one person to other to so on then back propagation should be performed etc. America as researched and said how much percent people will react to the fake news in what way. 64% of people are greatly confused by the fakes, 24% of people are somewhat confused because of the fake news and 11% of people are not that confused towards fake news. Americans are confident in spotting fake news following percent. 39% of people can great confidently spot the fake news, 45% of people are somewhat confident to spot the fake news, and 15% of people are not at all confident to spot fake news. There are many researches and projects that is been taking place to stop this fake news or help people to spot fake news so that people won't be mis leaded believe in fake news spread by some people.

2. Literature Survey

As many projects and researches has been taken place in spotting fake news many different machine learning algorithms also have been used. Most of the researchers has built a model or done a project based on Naïve Bayes, SVM algorithms.

Mykhailo Granik, Volodymyr Mesyura said they had achieved about 74% accuracy for predicting real or fake news using Naïve Bayes classification.

Akshay Jain, Amey Kasbe had said that by using n_grams better accuracy can be obtained. The n_grams is nothing but the combination of title and text. Using this method they had obtained a better results comparatively.

This Fake news becomes a famous issue because of the attention it got in American Presidential Selection in the year 2016. During this election time, much more of different fake news are discussed and posted in social medias. Some posts are even concluded that Trump had won the president referendum due to influence of fake news [4] [5]. Due to uncontrolled excitement created by the social media, after this some interest shown on fake news and its problems and also concerns has been raised about the bad effects of wide growth of false news.

The concern on boosting up of faux news is sensible, taking into account the wide growth climb of the web therefore the quick usage of social medias like blogs, Twitter, micro blogs and Facebook and WhatsApp , which has to the served in creation and transmission of stories as well as knowledge, thus giving a very big effect on the expansion of access to stories through the social media platforms. The report on fake news released in the year 2017 [6] reveals a rapid growth

H.O.D.
Dept. Of Information Science & Engineering
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225

International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056
Volume: 07 Issue: 08 | Aug 2020 www.irjet.net p-ISSN: 2395-0072

SMART ASSISTANCE FOR DUMB AND DEAF

Krithi K Shetty[1], Manjunath H R[2], Shetty Tanvi Shridhar[3], Likitha P[4], Akshay Shenoy[5]

[1]*Student, Info. Science and Engineering, Alva's Institute of Engineering and Technology*
[2]*Senior Assistant Professor, Info. Science and Engineering, Alva's Institute of Engineering and Technology*
[3-5]*Student, Info. Science and Engineering, Alva's Institute of Engineering and Technology*

Abstract— Communication is the main medium by which we can share our contemplations or pass on the message yet for an individual with handicap faces trouble in communication with typical person. The issues looked by the hard of hearing and unable to speak individuals right now and the challenges of their communication with typical people started our advantage and drove us to attempt to discover an answer for their challenges and to limit them as much as conceivable. Since they speak to a huge piece of society and they have to convey their thoughts in the easiest manner by straightforward gadgets. So our venture points to connect this hole by empowering communication among moronic and hard of hearing individuals from one perspective and typical individuals on other hand by presenting an reasonable electronic gadget that makes an interpretation of the fingers presses into the content and discourse.

Keyword-Communication, Assistive device;

1. INTRODUCTION

The improvement of the gadgets that help the hard of hearing and quiet individuals to speak with typical individuals started quite a while prior. They discover troubles to communicate their considerations or to pass on their message to others so thatt the analysts endeavor various courses so as to deliver a gadget that may give them a superior nature of the life to work in essential circumstances. To accomplish this, the framework joins the utilization of a lot of various modules, for example, motion acknowledgment, communication via gestures investigation and combination, discourse examination and amalgamation, haptics, into a creative multimodal interface accessible to crippled clients. In the late years, there is a fast increment in the quantity of discourse - crippled casualties because of a few reasons like by birth, oral illnesses, mishaps, and so forth and requirement for the Electronic Assistive.

This venture is helpful for the hard of hearing and idiotic, it can likewise be utilized for the (speechless) patients with half of their bodies deadened and who can't talk however can move their fingers. The undertaking has been utilized Glove which will help those individuals who are experiencing any sort of discourse deformity to convey through their hand pressures. The glove will record hand press made by the client and afterward the glove will make an interpretation of these press into visual structure just as in sound form. Demonstrated the utilization of flex power sensors to distinguish the finger's presses.

The hard of hearing is an individual who has issues or imperfections hearing, and a hard of hearing quiet isa term which was utilized generally to recognize an individual who was either hard of hearing or both hard of hearing and couldn't talk. The articulation proceeds to be utilized to allude to hard of hearing individuals who can't talk an oral language or have some level of talking capacity, however decide not to talk in light of the ominous or undesirable consideration and their talking cause clumsiness. Such individuals convey utilizing communication via gestures; the favoured term today is essentially "hard ofhearing".

A gesture-based communication is a language which predominantly utilizes hand developments and body language to impart importance and thought. This can include at the same time consolidating arms or body, and outward appearances to smoothly communicate a speaker's contemplations. The gesture-based communication and the communicated in language have There are similitudes between them, yet there are additionally a few critical contrasts among marked and spoken dialects. Communication via gestures has gotten a typical and wide use on the planet and is at the centres of neighbourhood hard of hearingsocieties.

2. RELATED SURVEY

Glove based systems uses data gloves to detect the positions of hand gestures accurately as its positions are measured simultaneously. The Glove based methods uses sensor devices to digitize finger motions. Hand configuration and rotation can be easy to collect using extra sensors. However, the devices are expensive. Some gesture recognition systems also tried to decipher gestures using glove-based devices. These devices are very sensitive and usually connected to a computer with