Analyzing Texture and Identifying the Disease of a Leaf using CNN

Dr. G. Umarani Shrikanth
Dept. of Computer Science
St. Peter's College of Engineering and Technology
Chennai, India

N.J.Jennifer
Dept. of Computer Science
St. Peter's College of Engineering and Technology
Chennai, India

M. Snega
Dept. of Computer Science
St. Peter's College of Engineering and Technology
Chennai, India

Vaishnavi Vijayan
Dept. of Computer Science
St. Peter's College of Engineering and Technology
Chennai, India

Abstract*—Plant disease is a major issue. Detection of Wetness and Dryness along with plant diseases, growth of leaf and color change is also essential. Detection of these isbenefited in monitoring large fields and also helps us detect disease symptoms once they appear on plant leaf. This process deals with four stages. Initially, for an input RGB image, color transformation structure in generated. Then, the pixels in green are masked and unfastened bysome specific threshold value followed by segmentation process. The texture data are reckoned for useful segments and drawn out feature are passed through classifier. This paper focus on the comprehensive survey various methods developed to solve the various diseases found on leaves.

Keywords: Scale-invariant feature transform; Convolution Neural Network; Rectified linear unit; Masking; Polling.

I. INTRODUCTION

Plant disease diagnosis is prime concern in the field of agriculture and it is main area of research. In Maharashtra there is loss 45% of cotton farm due to diseases on cotton plant. If misidentification takes place then this leads to loss of work, money and leads to major problem to crop. We are going to make system which can easily, accurately identifies the disease on plant. In this leaf image acquisition takes place then we proposed to proceed for image analysis part in which we are doing pre-processing of image, threshold of image using Mumford–Shah algorithm.

Scale-invariant feature transform algorithm extracts the feature. Using this result of SIFT feature the diseased and normal leaf is identified. In classification, using CNN process, the comparison of processed leaf image and database of different diseased leaf and normal leaf takes place. After this what type of disease is occur on plant is identified then what kind of precaution has to be takes on that plant. This system can reduce farmer's effort in identifying the disease on plant and taking precaution about pest and disease. In this paper the disease and wetness of leaf using image processing is studied.

II. LITERATURE SURVEY

The authors in [1] have proved that the image can be formed into networks. Using the process diffusion, the texture is layered. Image is carved as directed network and in further pixel isdetermined as a node. The directed network was the major contribution to this work which gave improved performance. The results surveyed showed that the method proposed was widely used in texture datasets. It also seemsto be a trust worthy method for plant species classification.

The image of textured surfaces was recognized by a texture representation introduced in [2]. During the stage of feature extraction, Harris and Laplacian regions were found, where those regions act as a texture component that has an elliptic shape and the pattern in distinctive appearance. In certain cases, where affine invariance is not required for recognizing the texture, the original elliptical shape is used.

The authors in [3] presented an efficient approach to gray scale that depends on local binary patterns. This was used for deleting the 'uniform' patterns for angular space quantization and spatial resolution. It was robust and simple in computation. The performance was increased by combining the binary texture with rotation invariance.

In this approach [4], a systematic filter selection method is proposed by reconstructing the image from sieved images based on the traits gained by exposing each filtered imagewith non-linear transformation measuring some quantity of energy around every pixel. A square-error clustering algorithm is also used to amalgamate segmented images by incorporating spatial adjacency information.

The authors in [5] proposed that the images which are blurred can be restored by a decomposition model using missed pixels. It was also assumed that the image underlying is the superposition of cartoon and texture component. An efficient numerical algorithm was introduced in additional by thesplitting version from an augmented Lagrangian method, in

Network Security:Optimistic Link Selection for Security – QoS Measures in Relaying Network

Dr. G Umarani Srikanth
Prof.Dept of CSE St. Peter's College of Engineering and technology Chennai, India

S. ChenchuLakshmi, Dept of CSE St. Peter's College of Engineering and technology Chennai, India

B. Gayathiri, Dept of CSE St. Peter's College of Engineering and technology Chennai, India

Abstract—*This paper identifies the best route for the data transfer from the source node to the destination node in any network. Initially source node will send dummy packets to analyze the best available route that connect the destination node. It goes through the following parameters like capacity, cost, throughput, battery level to transfer the packets to the destination. Based on the nodes dynamic behavior Self Routing system is implemented. In real time data will be send from source to destination by secured way.*

Keywords— Quality of Service, Network Security, Multi-relay, Cryptographic, Physical layer security, Wireless Sensor Network, Network Construction, Dynamic Routing.

I. INTRODUCTION

Information is made sure about by applying the key-based enciphering (cryptographic) strategies in the upper layers of the system convention stack. In spite of the fact that these cryptographic techniques have indicated their adequacy in wired systems, the inborn trouble of mystery key conveyance/the executives without unified control and complex encryption calculations included may altogether constrain their applications in decentralized remote systems. This spurs the presentation of physical layer security (PLS) innovation as of late as the corresponding way to deal with further improving the security in remote interchanges. The way of thinking behind PLS is to abuse the common haphazardness of commotion and the physical attributes of remote channels (like blurring) to give data hypothetical security, which has been viewed as the most grounded type of security regardless of the registering capacities of busybodies. Therefore, PLS procedures are profoundly encouraging to ensure never-ending secure correspondence for remote systems. In the original work, wynerpresented the wiretap channel model as a fundamental structure for the investigation of PLS dependent on the Shannon's idea of flawless mystery. Thusly, many exploration exercises have been dedicated to investigating the PLS under other channel models, for example, non-corrupt channel, Gaussian channel, multi-radio wire channel and transfer channel. Spurred by these early investigations, different methodologies for improving PLS have been proposed in writing, which principally incorporate channel precoding/beamforming, agreeable sticking, channel coding and connection/transfer choice. This undertaking centers around the connection/transfer determination for making sure about the correspondence in remote helpful systems. The principle preferred position of connection/hand-off choice is its usage effortlessness, as the refined transmission strategies or express synchronization process isn't required.

The protected correspondence in a two-bounce agreeable remote system, where a cradle supported transfer advances information from the source to goal, and a detached spy endeavors to block information transmission from both the source and relay Limitations of leaving framework are Less security and Congestion happening.

Server will powerfully course the way with the goal that the parcels are moved to the goal progressively. The favorable circumstances are more security, cost is viable, effectively recognize the best course.

II. OBJECTIVE OF THE PROJECT

The aim of the project is to provide route from source to destination by finding energy, battery level, cost and throughput of the node.

III. LITERATURE SURVEY

This paper [1]- The mystery blackout execution of support helped multirole different info numerous yield agreeable frameworks within the sight of a latent meddler. Because of the inaccessibility of the channel state data of busybody's channel, a cradle supported joint transmit radio wire and transfer determination plot dependent on the fundamental channel is proposed to improve the mystery execution. In particular, they model of the advancement of the transfer cushions as a Markov chain and infer new definite and asymptotic shut structure articulations for the mystery blackout likelihood, which gives a productive method to evaluate the impact of framework parameters on the mystery blackout likelihood. In addition, basic asymptotic outcomes are additionally misused under two extraordinary situations.

This paper [2]- They propose two agreeable secure transmission plans to ensure a two-jump support helped arrange helped by a vitality collecting hand-off. In the main plan, they accept that the information on the vitality reaping

Survey of Sentiment Analysis Using Deep Learning Techniques

Publisher: IEEE

M. Indhraom Prabha ; G. Umarani Srikanth
View All Authors

Abstract

Document Sections

Abstract:
This paper presents a detailed review of deep learning techniques used in Sentiment Analysis. Sentiment analysis is one of the most researched areas in natural language processing. Natural language processing has a wide range of applications like voice recognition, machine translation, product review, aspect oriented product analysis, sentiment analysis and text classification like email categorization and spam filtering. The conventional methods used for sentiment analysis is lexicon based processing. However, with the advancements in the field of artificial intelligence, the machine learning algorithms started to play a major role in sentiment analysis applications. Currently deep learning technique is the latest hotspot being used for predicting the sentiments. Several research works have been carried out in the Natural Language Processing (NLP) using the deep learning methods. The most popular deep learning methods employed includes Convolution Neural Network (CNN) and Recurrent Neural Network (RNN) particularly the Long Short Term Memory (LSTM). These techniques are used in combination or as stand-alone based on the domain area of application. The focus of this survey is on the various flavors of the deep learning methods used in different applications of sentiment analysis at sentence level and aspect/target level. Furthermore, the advantages and drawbacks of the methods are discussed along with their performance parameters.

Published in: 2019 1st International Conference on Innovations in Information and Communication Technology (ICIICT)
Date of Conference: 25-26 April 2019
Date Added to IEEE *Xplore*: 20 June 2019
ISBN Information:
INSPEC Accession Number: 18761334
DOI: 10.1109/ICIICT1.2019.8741438
Publisher: IEEE
Conference Location: CHENNAI, India, India

Survey on Breast Cancer Based on Extreme Learning Machine Features
Publisher: IEEE
G. Umarani Srikanth ; Haritha A.
View All Authors

Abstract
Document Sections

Abstract:

Extreme Learning Machine algorithm which it is an optimization based learning framework for compression, feature, clustering, regression and classification. It is an artificial hidden nodes and proposed to overcome these issues and offer better generalization performance by Unique minimum solution. In this paper Computer-aided diagnosis (CAD) based on Convolutional Neural Network (CNN) feature and they are based on deep, morphological, texture and density features. Mammography concept is been more used and to detect early stage of breast cancer and can helps out whether they are Malignant or Benign in CAD system they are classified by normal or abnormal tissue with the help of mammography images. The main objective of this paper is to detect the stage of breast cancer tissue is harmful or not in this algorithm.

Published in: 2019 1st International Conference on Innovations in Information and Communication Technology (ICIICT)

Date of Conference: 25-26 April 2019
Date Added to IEEE *Xplore*: 20 June 2019
ISBN Information:
INSPEC Accession Number: 18761377
DOI: 10.1109/ICIICT1.2019.8741497
Publisher: IEEE
Conference Location: CHENNAI, India, India

VDGOOD Journal of Computer Science Engineering

Intelligent Mirror Using Raspberry Pi and IoT

Syed Mohamed Hadi Reza [a], R. Rohith Kumar [b], B. Tamil Selvan [c], P. Preethy Rebecca [d]

[a,b,c,d]*Department of Computer Science and Engineering, St. Peter's College of Engineering and Technology, Chennai*

VDGOOD use only: Received date here; revised date here; accepted date here

Abstract

The Smart Mirror is based on general purpose household mirror. It belongs to home automation system to meet consumers needs towards modern and optimized life. It provides occupants with a series of intelligent experiences such as home appliance control, information acquisition, environmental monitoring, entertainment and remote operation. The intelligent home control platform. The Smart Mirror is designed to solve the problem of smart home communication and information integration in the family. Based on the development of Raspberry Pie, unidirectional mirror and the infrared frame and other hardware devices, the smart mirror, as a mirror display screen, offers a kind of safer, more comfortable, more conveniently, swift and open intelligent, information-based living space to household in the intellectual district.

***Keywords*: Artificial Intelligence, Raspberry Pi 3, IoT technology, Two-way Mirror, LCD display screen;**

1. Introduction

The Project has been developed with the idea of making consumer's home smart and to look more attractive using latest technologies by connection the normal mirror with the Internet through Raspberry Pi's Wi-fi connectivity. The Internet transformed our lives by connecting us more feasibly to information and other people in the virtual world via Internet. The current situation of innovation currently is to provide more information with less interaction to get it. The device that has been designed and developed is called as "Intelligent Mirror". It is a wall mounted mirror which displays relevant items to the user such as weather, time, date, temperature, humidity and news and other functionalities such as IoT emerged the idea of remotely monitoring objects through the Internet without having to connect the device with physical connections such as cables. The Intelligent Mirror can also be useful in Health care and Retail Industry sector.

KILL FIRE: Developing a Real-time and Automatic Early Warning System

Ms.P.Arthi
Department of Computer Science
UG Student
St.Peter's College of Engineering and Technology Chennai, India

Ms.R.Harshani
Department of Computer Science
UG Student
St.Peter's College of Engineering and Technology Chennai, India

Ms.P.Preethy Rebecca
Department of Computer Science
Associate Professor
St.Peter's College of Engineering and Technology Chennai, India

Abstract*— Conventional or Standard fire detection techniques use physical sensors for fire detection. Chemical atoms or molecules present in the air are obtained by sensors and are used by the regular fire detection systems to raise an alarm. Though, this also leads to false alarms; for example, a person smoking in a closed environment or burning of incense sticks may activate a usual fire alarm system. In order to control such false alarms of traditional fire detecting systems, a computer vision-based fire detecting procedure or algorithm is needed. This algorithm can be implemented simultaneously with typical fire detection systems to lower false alarm rate. It can also be installed as a free-standing system to sense fire by utilizing video frames received via a video acquisition device. A novel fire color model is invented in Kill Fire Algorithm.

Keyword— Fire detection, Color model, Bitmap images, Channels, Frames and Clones.

I. INTRODUCTION

In India 23% of nation's topographical zone is secured by timberlands and out and out India has 75 million hectares of woods. Timberlands assume an imperative job to lessen natural changes that are brought about by regular biological procedure and human impacts. Under different laws, backwoods are ensured in the nation. Photosynthesis is where plants and trees assimilate carbon dioxide and carbon is put away. In light of this explanation woods are viewed as an incredible way to battle an unnatural weather change. Amusingly, when similar woodlands are enduring an onslaught, they discharge huge measure of carbon dioxide and this contributes in expanding the carbon in air. Forestalling woods fires is considered as significant test since ordinary fire identification framework i.e., the recognition procedure is finished with the assistance of sensors which doesn't end up being that productive. And afterward the advancement of location framework concentrated quickly on computerized camera innovation and video handling dependent on content. Shading, geometry and movement are viewed as the three significant highlights that are associated with vision based framework right now made as the pre-handling stride.

A large portion of the fire discovery framework takes shading data as the underlying advance. Afterward, fluffy rationale upgraded approach is proposed in which the

Prevalent data taken is luminance. Instead of utilizing other shading space models, right now space model is liked. This model is exceptionally equipped for recognizing luminance from chrominance information. Segregation between genuine fire and fire like shaded articles is accomplished right now. Both smoke discovery and identification of fire pixel utilizing fluffy rationale can be utilized in equal for best outcomes. A proficient shading observation task in an inquiry tower situated on a model is required to build up a best fire location framework. There are numerous approaches to screen wide fires. By and large, some work force performed skyscraper (Fleming and Robertson 2003). This following framework is as yet utilized in certain nations, for example, the US, Canada, and Australia (Towers). Because of the searching for troublesome living condition in the towers and the instability of human perceptions, some view strategies, for example, Automatic Video Surveillance Systems (AVSS) for screen little woods has been proposed (Breejen, Breuers et al. 1998; Baumann, Boltz et al. 2008). Late advancement identified with fierce blaze the location] depends on satellite pictures. Instances of such reconnaissance frameworks (NASA; National Environment Satellite; Cracknell 1997) Less spatial and transient goals of satellite pictures causes deferred fire recognition it might have developed enormous when the fire was identified (Yu, Wang et al. 2005; Bagheri 2007).

Clear data can be increasingly point by point timberland fire checking and with a best grain spatial and fleeting end. Likewise, sensor hubs can be used in regions where satellite signs are not accessible. Fire Weather Index, accomplished in many years of ranger service, is one of these ongoing advances in ranger service. The multi-tactile nature of the technique expands the plausibility of recognizing fire with more noteworthy absoluteness and lower bogus caution. Creating a false alarm recognition system, gives exact output about the existence of fire. The semantic division of occasions on crisis settings includes the distinguishing proof of recently characterized occasions of intrigue. Right now, engaged semantic occasion is the nearness of fire in recordings. The writing presents a few techniques for programmed video fire recognition; however these strategies were worked under presumptions, for example, motion cameras and supervised helping circumstances that are regularly as opposed by the recordings gained by portable gadgets. To satisfy this hole, it initiates a fire

A Survey On Isolated Monitoring Of Glucose Bottle Level In Hospital Using GSM

[1]M.Prasanna, [2]D.Balaji ,[3]B.Mugesh Ram, [4]Ms.Preethy Rebecca

#1,2,3 UG Students, #4 Faculty, Department of CSE
St.Peters College of Engineering and Technology's

Abstract--Patient tracking systems are the need of the hour to oversee losses. The planned method focuses on how to observe & open alert or warning to doctors just about the sufferers. GSM alerting mechanism is forecasted in this weight sensor is utilized as level sensor. When the transceiver yield is negative then the Arduino regulator identifies the fluid stage is too low and it alerts the witness through the mounted LCD and mobile phone at the organized room indicates the room number of the patient for quick mending using IoT (Internet ofThings).

Keywords-- ***Glucose bottle, level sensor, weight sensor, Arduino Controller ,GSM modem , LED Lights-Red, Green***

INTRODUCTION

A leak is used for the patient when the patient becomes unhealthy. In the occasion of operations the food cannot given to the patient. In such occasion drip can be provided to the unhealthy patients to recover them from their physical condition. Same way if it overflows again it causes any difficulty, for which we use an alert routine flow. The sensing of the level of bottle is taken at first and the bottle without fluid is taken as the set summit. When the fluid reaches the level same as the set point, the sensor makes available the signal and the programmable IC starts functioning.

LITERATURE SURVEY

Habbu S et al., [1] presents a system which blood glucose equal (BGL) through noninvasive way using Photoplethysmography (PPG). Earlier studies have displayed grown judgment of lifeblood glucose equal with visual sensor. A visual device founded information achievement scheme remains build then the PPG indication of the satisfied remains logged. The chief concept of this tabloid is to explore different facial appearance ofa PPG signal with single pulse examination practice for effective opinion of BGL readings. A PPG information of 611 folks stays logged over length of 3 records all. BGL worth opinion is consuming dual varieties of representative collections, (i) Period besides occurrence domain skin texture and (ii) Single Pulse Analysis (SPA). Impartial network is skilled using over mentioned projected attribute sets and BGL readings view is performed. First we legalize our attitude using the same skin texture used by Monte Moreno in his previous work.

Goodarzi et al., [2] in their study have mentioned that by monitoring the life blood glucose ranks of diabetics eternal diabetes-connected difficulties such for example loss of sight and damage of extremities container stand postponed or else level ducked. Hence several investigators abstain targeted on the progress of a noninvasive radar toward observe the body fluid glucose equal constantly. A noninvasive capacity during the casing, the earlobe or else the latexes take established to stay also defective or unfeasible, concentration has freshly moved to simply aggressive devices which determine the glucose pleased in serum otherwise interstitial liquid. This knowledge does not permit to obtain a large digit of wavelengths over a big range.

Haxha et al., [3] represent that diabetes mellitus claims millions of exists each day. This one disturbs the cadaver in dissimilar behaviors near many solemn diseases besides hasty death. Soul and organ meats disease which exist produced through diabetes stand by an upsetting amount, claim millions of live around the world. The paper they have a comparison of a non- invasive size practice to conclude the glucose stages now being figure. Current approaches used in the direction of count the glucose equal in the gore remain largely offensive which engross attractive the blood samples with finger pricking. They account a spectroscopy based non-invasive glucose monitor system to count the glucose absorption. This education settles a connection flanked by the instrument productivity power then the glucose awareness level.

Lekha et al., [4] in his paper represents the diabetes exists single of the well-known illnesses about the realm. Invasive methods want a limb stab plasma example. Its a repeatedly tender technique that crops the possibility of contamination.

Pai et al., [5] proposed that all nonstop glucose monitor (CGM) plans used for diabetes running the electrical signal

DISEASE DETECTION WITH DRUG PREDICTION USING BIG DATA AND MACHINE LEARNING

S. Ambika
Department of Computer Science
UG Student
St. Peter's College of Engineering and Technology
Chennai, India

E. Tamil Selvi
Department of Computer Science
UG Student
St. Peter's College of Engineering and Technology
Chennai, India

I. Keerthana
Department of Computer Science
UG Student
St. Peter's College of Engineering and Technology
Chennai, India

Ms. Mary Selvan
Department of Computer Science
Associate Professor
St.Peter's College of Engineering and Technology
Chennai, India

Abstract — The aim is to provide a tool to help doctors and patients in exploring and choosing medicines. To attain this goal , the approach that allows a patient to question for drugs that satisfy a set of conditions based on drug properties and also analyze the disease and best drug advised to that specific patient through Big Data analysis and implementing an application to know about disease based on symptoms. Based on the symptoms system will predict the type of disease and suggest the specialist doctor based on the rank method. After that best drug will recommended by the system.

Keywords —Support Vector Machine, SVM Algorithm

I. INTRODUCTION

With fast improvement of the remote sensors, brilliant gadgets and system innovations, the Internet of Things (IoTAs) is one of the significant in IoT, e-social insurance has been broadly investigated its favorable circumstances in counteraction and simple checking of the ailments, impromptu finding and giving brief clinical consideration in instances of mishaps . E human services incorporates many exploration fields, among which the broad one is illness chance forecast as it can assist with foreseeing the malady chance and improve the determination productivity. In this manner, in this paper, we center around this mainstream research field.

As a rule, the malady chance expectation basically comprises of two stages: sickness model preparing and remote infection forecast. In the period of malady model preparing, a colossal number of authentic clinical information containing patients' manifestations and affirmed ailments are gathered by the asset plentiful outsider, e.g., cloud stage, and afterward the preparation result is extricated from the gathered information by methods for huge information mining innovations. After that medicinal services suppliers, e.g., emergency clinic or clinical organization, use the preparation result to foresee the illness hazard for undiscovered patients dependent on the individual indications gathered by clinical checking gadgets or specialist visits. That is, in the entire procedure of illness chance forecast, affirmed patients give their verifiable clinical information to malady model preparing, while undiscovered patients can utilize the ailment expectation administration to get the potential infections by giving the gathered side effects.

II. OBJECTIVE

The goal of the project is to identify the patient sickness by analyzing symptoms and propose the best medication by both English and ayurvedic drug. To recommend specialist in various field high ranking methodology is used.

III. LITERATURE SURVEY

The article [1]'digital frameworks' with collaborating objects is accomplished by presenting the Internet of Things application and shrewd network.
We at that point depict the keen network engineering, and characterize how to accompany secure and 'incredible systems administrations and related difficulties, and imagine a couple of significant worth included keen network administrations.

In this paper [2] As of late in WBANs offer unparallel chances and difficulties to the improvement of 'common electronic Healthcare checking framework'. In E- Healthcare framework, each patient subtleties are kept secretly, profoundly verified. Thus, protection assumes an imperative job in 'E- Healthcare system'. Using this plan we can without much of a stretch screen patients physical condition.

[3] The security and insurance confirmed data accumulated from the WBAN, either while set aside inside the WBAN or during their transmission outside of the WBAN, is a huge unsolved concern, with challenges starting from severe resource objectives of WBAN contraptions, and the intrigue for both security/security and good judgment/convenience. At this moment explore two huge data security issues: secure and dependable passed on data storing, and fine-grained scattered data get the chance to control for sensitive and private patient helpful data.

In this article, [4] For a serious long time, social

MULTI FACTOR ANALYSIS TO PREDICT BEST CROP USING RAINFALL, LOCATION AND SOIL TYPE USING MACHINE LEARNING AND BIG DATA

S.Aiswarya
Department of Computer Science
UG Student
St.peter's College of Engineering and Technology
Chennai, India

T.S.Aswitha
Department of Computer Science
UG Student
St.peter's College of Engineering and Technology
Chennai, India

Ms.J.Wisely Joe
Department of Computer Science
Assistant Professor
St.peter's College of Engineering and Technology
Chennai, India

Abstract*—Machine learning presents good numerical and logical compounds which is used to analysis of large complementary, different and unorganized data file on the Big Data scale and it gently gains in obtaining the agriculture. The paper initiates its fundamental abstractions and detailed view of machine learning applications and estimating how machine learning communicate with big data computers to clarify the fundamental research of the biotech in the plant science. The application is to recognize the types of soil, water source of that land, whether that land is based on rain water or bore water and to suggest what type of crop is suitable for that soil. So through this application we can provide solutions for the people to know about the agriculture. We can estimate the type of crop which is suitable for that particular soil, weather condition, temperature and so on. So far, we are using machine learning with the set of datasets to identify the crop for the suitable soil.

Key Words: Crop Prediction, Support Vector Machine, Decision Tree Algorithm.

I. INTRODUCTION

Data mining is an essential for modern research area or the world for analysing processing, examining, extracting and measuring many number of datasets. It is used to get the relation between them, classifications, and collections, etc. Calculated factors between different attributes are mainly used to predict and the results are in certain patterns. Particularly, the above strategy can be used in agriculture field to find the relationship between the crops and soil andcan make important predictions which can be used for farmers to do a profitable business.We can add scientific factors and possibilities into consideration for analysing the relationship between soil and crops. In agriculture, always the decisions are made based on the history of the farming and nothing related to scientific factors.The decisions of farmers do not based on the soil quality or suitability and that mostly leads the loss or less yield from crops.

In data mining, enormous amount of previous data from every field can be collected and stored. The algorithms or technologies can give the common factors between any two attributes in a fraction of time. Also the strategies can be used to analyse the results and conclude a decision which will be a favourable one. We can use this analytical potential of algorithms for finding valid results, analysis reports, accurate predictions to help the farmers. Predefined parameters were already given by government agriculture research centers. Many algorithms are available to find the correlation and association among the data present in huge datasets .They are decision tree algorithms, Naive based algorithms, classification rule algorithms, Neural Network based algorithms, Supports Vector Machine and Genetic Algorithms etc., We can use different functions which can jointly work with existing algorithms and can be used for crop

VDGOOD Journal of Computer Science Engineering

Computer Vision Based Attendance Monitoring System

Jushwin Rassa J[a*], Kamaleshwaran K[b], Vigneshwar V[c], Mr. A.Moorthy,

UG students, St.Peter's College of Engineering and Technology, Chennai,India.

VDGOOD use only: Received 14-Mar-2020; revised 30-Mar-2020; accepted 20-Apr-2020

Abstract

Today there is a need for automation systems and for this we can automate on how the attendance is done. The face detection system has also delivered a security enhancement, where this can be used in the system to provide greater security. There is no need of manual interventions and the attendance is taken automatically and is stored in the database.

Keywords: Attendance; Krizhevsky; Kanade-Lucas- Tomasi; GPU; JAFF.

1. Introduction

The Computer Vision Based Attendance Monitoring System is used for observing the students attendance every day without any error. In this system we use Logitech as the camera for face recognition. Manual intervention is not needed in this system. The attendance is taken automatically and is stored in the database. When a student wants to enter the organization he has to pass through the attendance system where the camera analyzes your face and then the camera checks for your face in the database. After checking if you are in the database the attendance will be put present and then you will be allowed to enter the campus. Attendance proxy is nearly impossible in this system. Here viis used for image processing in python. Numpy, Flask, matplotlib, Scipy is also used in python for this system. Json is used for the server programing in the system.

2. Literature Survey

S[1]. The purpose of this study is to introduce a method based on facial recognition to identify students' understanding of the entire distance learning process. This study proposes a learning emotion recognition model, which consists of three stages: Feature extraction, subset feature and emotion classifier. A Haar Cascades method is used to detect the input image, a face, as the basis for the extraction of eyes and mouth, and then through the Sobel edge detection to obtain the characteristic value. Through Neural Network classifier training, six kinds of different emotional categories are obtained.

Water Quality Monitoring System Using Arduino

S.Barath Raj
Department of Computer Science
UG Student
St.Peter's College of Engineering and Technology
Chennai, India

P.Hari Prasad
Department of Computer Science
UG Student
St.Peter's College of Engineering and Technology
Chennai, India

S.Prasath
Department of Computer Science
UG Student
St.Peter's College of Engineering and Technology
Chennai, India

A.Moorthy
Department of Computer Science
Faculty
St.Peter's College of Engineering and Technology
Chennai, India

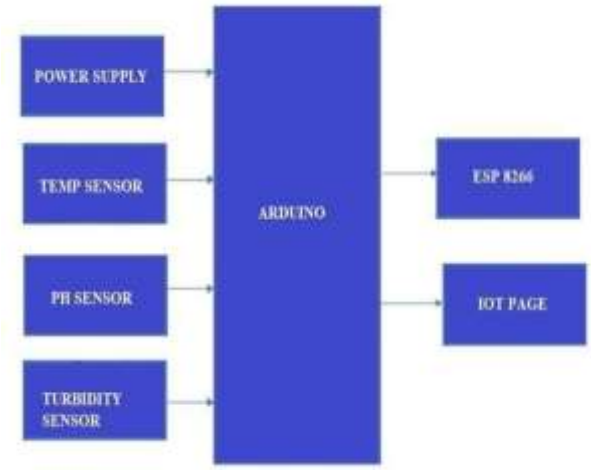
***Abstract**-- In the contemporary ecosphere, Water contamination is one of the foremost reasons for numerous categories of water-borne viruses such as dengue, cholera and malaria etc., for hominid. 40% of deceases in universal are produced by water contaminations. So, the eminence of the drinking water wants to be restrained in real time although it is provided to customers. In this project, we propose a development and extension of a real time water eminence computing structure at compact cost using Internet of Things (IoT). To figure out the parameters of the water such as temperature, pH, turbidity. The centralised arrangement obtains the monitored standards from several devices over a period of time. Through the Wi-Fi structure, the sensor output data is sent to the concerned authority for additional stages to advance the water quality.*

Keywords— ***Wi-Fi Module, pH sensor, Temperature sensor, Turbidity sensor***

INTRODUCTION

Our body is composed of about 60% water. In this 21st period untidy or polluted water is taken for the drinking requirements that is nonetheless there is no assortment or purifying in numerous evolving countries. People are been exaggerated by several diseases through this polluted water like cholera, typhoid, dysentery, polio, meningitis and guinea worm disease. Unclean water for washing can cause skin and infectious eye disease such as Trachoma. Many of the water quality monitoring devices and automatic water saving devices are facing a lot of problems. The fresh water can be appraised through the benefit of pH sensor. These sensors are connected to the microcontroller Arduino Uno board. And this device is made more adaptable, the real time data is collected, processed and stored in the database such that these data's can be continuously monitored.

Block Diagram:



Data are collected through the sensors that are been used and then these data are sent to the server and displayed in web page through the Wi-Fi module. The LCD screen is castoff to monitor the standard drinking water, over PC or mobile phones using a link. A WLAN component is castoff to link microcontroller and waiter.

ARDUINO UNO

Arduino is an open free software that is used for raising cathodic schemes. Arduino comprises together a microcontroller and a program, or IDE (Integrated Development Environment) that attains on monitor, which is used to alter and sync computer code to the physical board. The Arduino program had develop foremost with people just initial out with electronics. The Arduino does not require a distinct part of hardware called as programmer in demand to pass in new coding onto the board – this can be principally cast-off by USB cable. The Arduino IDE practices a learner's version of C++, assembly it calmer to acquire to achieve. Thus

e-ISSN: 2582-5208
International Research Journal of Modernization in Engineering Technology and Science
Volume:02/Issue:05/May-2020 www.irjmets.com

SMART LUGGAGE TRACKING AND ALERT SYSTEM USING ARDUINO

S.Karthick[*1],Jibin Joel[*2], S.Balaji[*3], T.P.Anish[*4]

[*1,2,3]UG Students, Department of Computer Science and Engineering, St. Peter's College of Engineering and Technology, Chennai, India

[*4]Assistant Professor, Department of Computer Science and Engineering, St. Peter's College of Engineering and Technology, Chennai, India

ABSTRACT

Luggage Tracking is developed to avoid loss or mishandling of Passengers Luggage which creates stress for the passengers. The proposed system consists of a Microcontroller called Arduino which gets connected to the luggage through an GPS that provides the location details to the GSM. The retrieved data is processed to the cloud database, each user is provided with userID and password. Ifthe user needs to know his status of the luggage, he or she can log into his/her ID and identify the position of the misplaced luggage. In addition to it a Fingerprint sensor is used to make the luggage more secure.

KEYWORDS: Luggage Tracking, RFID Tags, Arduino UNO, Alert System, GSM module, GPRS, Fingerprint Sensor, IoT Cloud

I. INTRODUCTION

LuggageTracker is proposed in such a way that itsa lightweight device with latest technology and advanced security system made for human traveling where people lose their luggage in public areas like airports, railway stations. So, it is very essential to track the luggage in case ofloss and theft. The android software provides the location status ofluggage. It also has a Fingerprint Sensor to keep their important things safe and secure and if anyone who accesses the fingerprint other than you it will send a message to your mobile phone. In addition to it also stores the unauthorized and authorized location details in the cloud.

II. SYSTEM ARCHITECTURE

Fig-1 : System Architecture

EFFECTIVE ANALYSIS OF BUSINESS TAX MONITORING SYSTEM WITH GST AND AMOUNT TRACKING

Poornima Janaki.A
UG Student
Department of CSE
St. Peter's College of Engineering and Technology
Chennai, TamilNadu, India

Priyadharshini .B
UG Student
Department of CSE
St. Peter's College of Engineering and Technology
Chennai, TamilNadu, India

Mr.Anish T.P.
Assistant Professor
Department of CSE
St. Peter's College of Engineering and Technology
Chennai, TamilNadu, India

***Abstract*—First and foremost, this system is to identify cash transaction, and not the account transaction. Cash transaction is done in place of billing counters. In every generated bill, GST is included. This system initiates measures to present tax evasion, done by traders. The input of the system is, cash integrated with QR code. The QR code in each cash is linked with the value of the currency, serial number and an additional feature expiry date. Now when this cash is used in billing counter, a QR reader is used to scan the QR code. And the cash amount transaction is stored in the database. And hash codes will also the generated for each user. This database and hash codes are the output of the system. There will be an application for QR code reader, which will also have an ID number for it. All the cash transaction will be stored in this database. When government wants to check for evasion committing traders, they use this ID number to retrieve the cash transaction database. Thus tax evasion committers are identified.**

Keywords—**Evasion,Traders,Customer, QR code, Hashcode**

I. INTRODUCTION

The difference between income tax and GST tax is an income tax is direct tax and GST is an indirect tax. Example when you go to a restaurant, you pay the price of the food and GST mentioned in the bill, and in turn the restaurant owner pays the GST amount to the government. The enactment of GST in India has been condemned by businessmen because of troubles like tax refund delays. More documentation and administrative effort. GST is a objective based tax or consumer based tax, where the tax amount is paid to the state who consumes it. The purpose of GST implementation is to cut back the cascading result of tax to build the economy stronger and powerful.

GST is a single tax that restore all the indirect tax levied at central and state level in India. The tax in distribution of goods and services. Goods and service tax identification number or GST number is a unique identifier allotted to a business or trade or person register under the GST act –GST is divided into five different tax slabs for assemblage of tax- 0%.5%,12%,18%, and 28%. However, there are some goods kept outside the GST. They are, consumed by humans(i.e. not for commercial use). Petrol and petroleum products(i.e. petrol, natural gas, crude oil, high speed diesel,).

One of the biggest revamp, that our country has observed is said to be GST. GST is the tax imposed on the manufacture, sales and usage of goods and services at national level where no dissimilarity is made in goods and services by cultural and state government, in India. GST was predominantly implemented because to eradicate all other indirect taxes proceeded early. Finally all those tax traps has come to an end with only one indirect tax called GST.

There are several reasons for implementation of GST. Let take a look at some of them. The structure and uniformity of tax rates was not proper. There is a plunge of taxes because of "tax on tax". No solvency will levy duty and service tax are paid at the state of production that are obtainable to the vendors while paying the state level sales tax or VAT. Payment of state taxes of state taxes of one state cannot be compensated in other states. Hence the price of goods are unreasonably high to the degree of tax on tax.

The advantages of GST system are as GST is a transparent tax, it reduces or minimizes the rate of indirect tax. For registered retailers the GST cost is low. Therefore, hidden taxes will not be there and business cost is also low. As the prices of the product goes down, consumers will be benefited, which helps companies also because consumers