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1	CSE	Dr.Raghavendra S	4VP15CS011 4VP16CS011 4VP16CS040 4VP16CS058	Fire Extinguishing Robotic Vehicle Using Iot	Functional	Fire safety is an important aspect to be taken into account because it would save the firmsfrom heavy loss and also it has an impact on saving human lives. Fire safety measures should be incorporated in many firms to prevent the uncontrolled ignition of fire. In recent days, fire extinguishing robot plays a major role in many areas. The system reduces the human effort and helps the humans in all possible ways. Early phase fire detection can be performed by using the fire extinguishing robot. The robot has the capability of taking intelligent actions in complex situations .Safety and security are the two important aspects to save human lives. In this project the fire extinguishing robot acts intelligently by transmitting the message to the android application, controllers and takes initial actions to stop fire. The entire system is designed in such a way that the robot serves instantly by taking immediate actions.Fire extinguisher robotic vehicle with night vision camera allows a user to control a fire extinguisher robot equipped with water tank and gun remotely wirelessly for extinguishing fire. The system uses a Wi-Fi module for remote operation along with microcontroller circuit for operating the robotic vehicle and water pump. The image captured by the camera is processed.
2	CSE	Dr. Mahesh Prasanna	4VP15CS045 4VP16CS015 4VP16CS047 4VP16CS055	Early Detection Of Brain Tumor Using Digital Image Processing	Functional	At present, processing of medical images is a developing and important field. It includes many different types of imaging methods. Some of them are Computed Tomography-scans (CT -scans), X-rays and Magnetic Resonance Imaging (MRI) etc. These technologies allow us to detect even the smallest defects in the human body. MRI is mainly used to get images of the human body and cancerous tissues because of its high resolution and better quality compared with other imaging technologies. Abnorm al growth of tissues in the brain which affect proper brain functions is considered as a brain tumor. Identification of brain tumor through MRI images is difficult, because of the complexity

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						of the brain. Therefore, we are fusing the MRI and CT scan images to get higher accuracy. In this project, we are putting forward an attempt to detect the brain processed tumor in the earliest stage possible using pre -MRI-CT fused image which is further subjected to different filtering and segmentation techniques along with CNN . There are different techniques previously used, but here is an attempt to get more accurate results by using most effective techniques.
3	CSE	Prof. Divya	4VP15CS404 4VP16CS019 4VP16CS045	Mobile Medical Application For Smart Insulin Regulation Using Iot	Functional	Glucose monitoring technology has been used by diabetic patients to monitor their blood glucose level for the past three decades. This project reviews the fundamental techniques of blood glucose detection and smart insulin regulation. The most common and widely used technique is the invasive technique that requires users to prick their finger to draw the blood. However, recently a lot of new technologies have been developed for non-invasive technique to monitor the blood glucose level and study in this area is growing rapidly. Among all, the optical and transdermal approach are the two most potential sensing modalities for non-invasive glucose monitoring that choose the very good prospect. The blood glucose level of a human can be measured by passing IR radiation. The glucose concentration in blood depends on the intensity of the wavelength specific to the radiation. The detected blood glucose level is communicated into the smart phone through the wireless channel and the smart phone control the safety critical devices such as insulin infusion pump through IOT based Mobile Medical Applications (MMAs).
4	CSE	Prof. Radhika Shetty	4VP16CS001 4VP16CS003 4VP16CS022 4VP16CS034	Getwork: A Minimalistic Modular Job Board	Functional	Unemployment is still one of the serious problems for both developed and developing countries in the world including India. The increasing number of unemployed graduates has become one of the serious problems in India. People are unable to get access to job opportunities due to inefficient distribution of information on

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						job offers but now the internet has made a huge impact on knowledge management and information dissemination all over the world. In today's competitive world, it is difficult for people to get job easily and also difficult for people to find suitable jobs that match with their skills. It has also become for organizations to find people who are best in their fields and intelligent to be hired. The Internet has changed the way of connecting the employers and the employees making them easier to communicate with one another and with this improvement there comes the problem with control of middlemen, privacy, skill-set, fake jobs etc. Researching the solutions to this problem we are going to make a product named "GetWork".
5	CSE	Dr. Harivinod	4VP16CS002 4VP16CS026 4VP16CS046 4VP16CS063	Facial Expression Recognition Using Convolution Neural Network	Functional	The emotions evolved in human face have a great influence on decisions and arguments about various subjects. In psychological theory, emotional states of a person can be classified into six main categories: surprise, fear, disgust, anger, happiness and sadness. Automatic extraction of these emotions from the face images can help in human computer interaction as well as many other applications. Machine learning algorithms and especially deep neural network can learn complex features and classify the extracted patterns. In this paper, a deep learning-based framework is proposed for human emotion recognition. The proposed framework uses the feature extraction and then a Convolutional Neural Network (CNN) for classification. The experimental results show that the proposed methodology increases both of the speed training process of CNN and the recognition accuracy
6	CSE	Prof.Nithin Kurup	4VP16CS004 4VP16CS007 4VP16CS024 4VP16CS101	Autosence; A Novel Attendance System Using Face Recognition	Functional	The Autosense system framework takes the participation naturally utilizing face identification and recognition. This participation is recorded by utilizing a camera connected as a part of front of classroom that is continuously catching pictures of students, detect the faces in image and contrast the distinguished

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						appearances and the database and mark the attendance. Experiments are implemented and it shows the improvement of the performance of the attendance framework
7	CSE	Dr.Raghavendra	4VP16CS005 4VP16CS018 4VP16CS021 4VP16CS056	Classification Of Stars, Galaxies And Quasars Using Machine Learing	Functional	Astronomy is one of the oldest sciences and the first science to incorporate math's and geometry. It sits at the centre of humankind's search for its place in the universe. As we delve deeper into the space surrounding our planet, the tools we use become more complex. Astronomers have come a long way from tracking the night sky with the naked eye or cataloguing the stars with a pen and paper. Today satellites and telescopes produce data at an astonishing rate. However, classifying only the objects of interest among such vast quantity of data is an enormous task. In order to classify the objects into respective class with reduced human interaction, we go for machine learning techniques. This reduces the computational complexity of the problem. The proposed project is based on machine learning techniques. Our project mainly focuses on implementing a classification system using Machine Learning (XGBoost) model trained using the dataset created by the Sloan Digital Sky Survey (SDSS). The proposed method classifies the target for given photometric and spectroscopic input data. The model classifies the input data into one of the 3 classes (Galaxy, Quasar, Star). We place great emphasis on the technology or the methodology involved in classifying the class of the input data, however we have designed a web interface for presentation and to improve User Experience (UX).
8	CSE	Dr. Mahesh Prasanna	4VP16CS008 4VP16CS013 4VP16CS014 4VP16CS048	Smart Traffic Interceptor	Functional	The growing effluences of urban India have made the ownership of vehicles a necessity. This has resulted in unexpected civic problem-that of vehicle identification, verifyingvehicle documents and driver authentication. The traditional traffic interceptor lacks in many ways to mitigate frauds and reduce defaulters. As a result

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						of which the escaping rate of defaulters increases and genuine owners/drivers have to face unnecessary inspections. Hence, we have a proposal to resolve the issues with comparatively high success rate. The proposed system has two major modules: Automatic Number Plate Recognition (ANPR) for verifying vehicle's validation and Fingerprint recognizer for driver's validation. An authentic database is queried for verification using the aforementioned credentials The aim is to design a system where for verifying vehicle's documents, number plate information is automatically scanned using a camera and an image processing mechanism is applied to use it as key value. Since, fingerprint information is one of the biometric evidences to validate a driver, we use scanner to fetch it for driving license verification purpose. If the driver/ owner is found as a defaulter, legal action will be initiated through SMS/mail with a CC to concerned authorities.
9	CSE	Prof.Radhika Shetty	4VP16CS009 4VP16CS028 4VP16CS033 4VP16CS039	"smart Bus"	Functional	Bus is one of the transportation system where it is meant for public transportation. Buses are the foremost wide used public transportation in many cities nowadays. . To improve the standard of Bus Company, a smart ticketing system that can monitor and predict the passenger travel expenses. Current follow in Bus Transit System operators demonstrates that manual ticketing is time consuming and usually inaccurate. The utilization of automatic ticketing systems grow speedily and show nice potential. To depict the matter additional clear, when a passenger enters the bus, he/she will tap the rfid card using rfid reader and scans again when he reaches the destination. When the card is scanned at the source location, the location is tracked using the GPS module. And even the destination location is tracked while scanning the card one again. Using the source and destination location, the distance travelled by that particular passenger is

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						calculated. Based on the distance, the travel expense of that passenger is deducted from the card wallet. When the passenger scans his/her card, a message will be sent to his/her phone saying that the journey has started and mentioning the amount that has been deducted for the travel. Each passenger must have his/her own prepaid card. Without the card the travelling is difficult. A motion sensor is used at the doors of the bus.
10	CSE	Prof.Tapaswini	4VP16CS010 4VP16CS029 4VP16CS030 4VP16CS092	Food Calorie Detection	Functional	Food is one of the most important requirements of every living being on earth. The human beings require their food to be fresh, pure and of standard quality. The standards imposed and automation carried out in food processing industry takes care of food quality. Now a day, people across the universe are becoming more sensitive to their diet. Unbalanced diet may cause many problems like weight gain, obesity, diabetes, etc. So different systems were developed to analyze food images to calculate calorie and nutrition level. This system proposes an effective way to measure and manage daily food intake of patients and dietitians. The system will take the images of food and using image processing, segmentation and classification it calculates the nutrition and calorie content in the food. The proposed system will certainly improve and facilitate the current calorie measurement techniques. In this paper, food portion recognition system use for measuring the calorie and nutrition values. The user just to take a picture of the food image then to recognize the image to detect the type of food portion and classify convolutional neural network we are performing detection, food portion recognition and to calculate the calorie.
11	CSE	Prof. Savitha M	4VP16CS012 4VP16CS042 4VP16CS051 4VP16CS057	Phishing Website Detection Using Machine Learning	Functional	Phishing website is one of the internet security problems that target the human vulnerabilities rather than software vulnerabilities. It can be described as the process of attracting online users to obtain their sensitive information such as

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						usernames and passwords. In this project, we offer an intelligent system for detecting phishing websites. The system acts as an additional functionality to an internet browser that notifies the user when it detects a phishing website. The system is based on a machine learning method, particularly supervised learning. We have applied 4 algorithms such as Random forest, Decision Tree, KNN and Support Vector Machine algorithm and selected the Random Forest technique for detecting phishing websites due to its good performance in classification. Our focus is to pursue a higher performance classifier by studying the features of phishing website and choose the better combination of them to train the classifier. In this project the system classifies URLs of the websites into two different classes, phishing and legitimate URL and achieves better performance compare to the existing system.
12	CSE	Dr. Mahesh Prasanna	4VP16CS016 4VP16CS069 4VP16CS073 4VP16CS106	Online Medicine And Blood Bank Search Web Application	Functional	Searching for a particular medicine is not an easy task everywhere. Sometimes you are in a place where you don't know where a medical store is especially when you are looking for a particular medicine. This is not only the problem of medicine, nowadays it is hard to find the blood we required. If a person went on searching for a blood bank and he finds out that the particular blood group blood he wanted wasn't there, so now all he did to come to that blood is completely waste of time. Our Project, Online medicine or blood bank search helps to the people who are facing this condition. Here in our web application we provide a user interface where the visitor can search for a particular medicine or a blood of any blood group he wants. The search result will give the result based on what the visitor searched. If he searches for a particular medicine It will show you the list of medical shops having that medicine, this will work same in the blood bank search also. On the other hand, Our Web Application helps the owners(users) of medical store an blood bank to get

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						more customers. They have to contact the admin and then the admin will give them the UserID and password. After that they can login and update their personal and store detail then it will reflect in the interface.
13	CSE	Dr. Mahesh Prasanna	4VP16CS017 4VP16CS049 4VP16CS054 4VP16CS060	Real Time System Controlling Using Web Camera	Functional	Many modules have been developed to help the physical world interact with the digital world. Here we present a novel approach for Human Computer Interaction (HCI) where, we control cursor movement using a real-time camera and color pointers. Our method is to use a camera and computer vision technology, such as image segmentation, background subtraction and color tracking, to control mouse tasks (left clicking, right clicking, double-clicking and scrolling actions) and we show how it can perform everything as current mouse devices can. A color pointer has been used for the object recognition and tracking, so as to implement the module without any physical contact with the system. Click events of the mouse have been achieved by detecting the number of pointers on the images. The application has been created on MATLAB environment with operating system as windows 10. This method mainly focuses on the use of a Web Camera to develop a virtual human computer interaction device in a cost effective manner.
14	CSE	Prof. Roopa G.K	4VP16CS023 4VP16CS027 4VP16CS038 4VP16CS053	Air Quality Prediction And Analysis Using Machine Learning”	Functional	The air quality in cities is degrading as a result of a complex interaction between natural and artificial environmental conditions. With the increase in urbanization and industrialization and lack of control on emissions and use of catalytic converters, a great amount of particulate and toxic gases is produced. Urban air pollution prediction becomes an indispensable alternative to curb its detrimental consequences. Modern studies in the field of environment science and engineering shows that deterministic models struggle to capture the relationship between the concentration of atmospheric pollutants and their emission

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						sources. The recent advances in statistical modeling based on machine learning approaches have emerged as solution to tackle these issues. In this project, we have implemented different machine learning algorithms such as K-Nearest Neighbors, Decision Tree, Support Vector Machine and Logistic Regression, to forecast the Air Quality Index (AQI) of major pollutants like PM2.5, PM10, CO, NO2, SO2 and O3. Later, these algorithms are tested using mean squared error and root mean squared error. The algorithm which gives highest accuracy is used for predicting the air quality index of upcoming years.
15	CSE	Prof. Krishna Mohan	4VP16CS031 4VP16CS043 4VP16CS052 4VP16CS094	Android Controlled Surveillance Rover	Functional	The proposed project is intended to control a surveillance rover via android smart phone in close proximity to avoid risking the life of humans during critical surveillance. Though CCTV Camera is installed in many areas for surveillance there are many incidents in which those cameras detect activities but necessary actions cannot be taken immediately. By implementing this method of surveillance the security personnel can be secure in a monitoring room. This project is a combination of hardware and software which has microcontroller, motor shield, sensor, an android application and finally a Bluetooth module via which the hardware connects the software. There are two modes of operation, manual and auto. During manual mode, the rover shall be controlled by the master controller and during the auto mode the rover shall work avoiding obstacles and carrying out operation on its own. This is implemented using ATMEGA328 microcontroller which will be able to control the rover. Camera is placed over the rover for live streaming of the video and it is sent to the concerned authority. This provides the evidence to capture the suspect.
16	CSE	Prof. Raghavendra Katgal	4VP16CS032 4VP16CS036	Farmers Crisis Analysis Tool	Functional	Farmer crisis analysis is a web application that performs analysis on the farmers data collected from the government agencies and

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			4VP16CS065 4VP16CS067			third parties agencies from various geographic regions. The system makes use of farmer crisis data for to plot the severity on different visual graph and maps. The result of the analysis will be represented graphically region wise using leaflet.js/choropleth map. It also makes use of Google Map APIs for showing the selected area maps. This web application generates report of all the farmers along with their personnel information. The main aim of building this system is to give the information, which is to count the crisis of farmers per region, so that government bodies can predict policies for the betterment of the affected families. By calculating the crisis rate per region can be help full for government bodies to declare the suitable policies, which intern reduces the fatality of the farmers.
17	CSE	Prof. Bharathi K	4VP16CS035 4VP16CS041 4VP16CS044 4VP16CS061	"A Smart Reader For Visually Impaired People	Functional	The system framework consists of three functional components: First, scene capture-using a camera, the text which the user needs to read gets captured as an image and has to be sent to the image or data processing platform., second, data processing where text will be filtered from the surrounding and will be recognized by optical character recognition (OCR) software and finally, Speech output where a filtered text will be passed into this system to get an audio output. Segmenting process for a image of document written in hand into lines of text and group of words is a difficult task in case of optical character recognition. Recognition of this handwriting is a difficult job since various people may use different styles in writing, the shape, skew and direction of writing changes from person to another. In order for addressing this problem the segmenting task of document image is taken as digital (binary) assigning problem. This project can be further improved for various local languages.

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18	CSE	Prof.Savitha M	4VP16CS037 4VP16CS062 4VP16CS080 4VP16CS108	"Multimodal Sentiment Analysis"	Functional	Sentiment is a thought, attitude or judgment provoked by a feeling. Sentiment analysis is the computational technique for extracting, classifying, understanding and determining the opinions expressed in various contents. Multimodal sentiment analysis is a new dimension of the traditional text-based sentiment analysis, which goes beyond the analysis of text, and includes other modalities such as audio and visual data. With the extensive amount of social media data available online in different forms such as videos and images, the conventional text-based sentiment analysis has evolved into more complex models of multimodal sentiment analysis,which can be applied in the development of virtual assistants, analysis of YouTube movie reviews,analysis of news videos, and emotion recognition such as depression monitoring,among others.In this project, the system takes input either in the form of text, audio or video. User can select the input file. Based on the type of the input file sentiment for the given input is classified. Applying Naive Bayesian classifier on the text file it gives the sentiments behind the text file using training data. When the input is audio, using Google Speech–to-Text API convert the audio file into text file and apply the same Naïve Bayesian classifier which gives the sentiment of the audio file. When video is given as input, the given video is pre-processed and converted into frames and later using CNN classifier, sentiment of the video is obtained.
19	CSE	Prof. Pramod Kumar	4VP16CS059 4VP16CS097 4VP16CS098 4VP16CS112	Online Event Management System	Functional	Online Event Management System is a software project that serves the functionality of an event manager. The system allows only registered users to login and new users are allowed to register on the application. This is proposed to be an android application. The project provides most of the basic functionality required for an event. It allows the user to select from a list of event types. Once the user enters an event

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						type eg(Wedding, birthday party, dance shows etc), the system then allows the user to select the date, time, place of the event and the event equipment's and also allows to select the seller for different services. All this data is logged in the fire store database, here every user has identified by a unique identification number for his booking. This data is sent to the administrator and they may interact with the client as per his requirements and his contact data is stored in the database.
20	CSE	Dr. Harivinod	4VP16CS064 4VP16CS072 4VP16CS091 4VP16CS095	Detection Of Diabetic Retinopathy Using Convolutional Neural Network	Functional	Diabetic Retinopathy is a diabetes complication that affects eyes. It is caused by damage to the blood vessels of the Light-sensitive tissue at the back of the eye (retina). At first, Diabetic Retinopathy may cause no symptoms or only mild vision problems. Eventually, it can cause blindness. The diagnosis of Diabetic Retinopathy (DR) through color fundus images requires experienced clinicians to identify the presence and significance of many small features, which along with a complex grading system, makes this a difficult and time consuming task. This project is an attempt towards finding an automated way to detect this disease in its early phase. In this project, we propose a CNN approach to diagnosing DR from digital fundus images and accurately classifying its severity. The automatic classification of Diabetic Retinopathy using color fundus image, and obtained an accuracy of 70% of our dataset, outperforming the results obtained by using classical approaches.
21	CSE	Prof.Sandesh Karanth	4VP16CS066 4VP16CS110 4VP16CS113 4VP16CS114		Functional	The quality of food grains is referred to the every aspect of the profit of supply and marketing. The purity is one of the factors whose inspection is more difficult and more complicated than that of other factors. This evaluation process is, however, tedious and time consuming. The farmers are affected by this manual activity. A model of quality grade testing and identification is built which is based on features such as the major axis, minor axis, parameters

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						and area with image processing and neural network technology. Investigation is made on rice by image processing and Neural Network which is implemented based on the features extracted from rice granule. Images are acquired for rice using Camera. Image Pre-processing techniques, Canny edge detection, Feature extraction are performed on the acquired image using image processing method. The features are presented to the neural network for training purposes. The trained network is then used to identify the unknown impurities and its quality.
22	CSE	Prof. Bhanupriya	4VP16CS070 4VP16CS075 4VP16CS076 4VP16CS079	Smart College Bus"	Functional	Smart college bus is a bus consisting of three modules with fingerprint authentication for door, drowsiness detection of the driver and notification.In automated door system an important and very reliable human identification method is fingerprint identification. Fingerprint of every person is unique. Automatic door is developed by which student can enter/exit the bus by using his/her fingerprint authentication. The first process is called enrolment. The system learns about all students' fingerprint, so each student's fingerprints are scanned, analyzed then stored in a fingerprint database. The second process is verification at the time of entering/leaving bus. The fingerprint scanner takes the fingerprint of the student and checks it against all the prints in the fingerprint database stored during enrollment and also checks whether student location/college location matches with current location. If both conditions are matched then automatically door opens and at the same time notification will be sent. Drowsiness at the wheel is a major cause of road accidents. Driver drowsiness is therefore considered as a high priority road safety issue. We use eyelid movement of the driver for the detection of drowsiness. The results have shown high reliability of the blinking behavior in assessing the level of drowsiness. In this system we implement detection of motion of the eyelid. If the

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						eyelid is closed as per the aspect ratio it alerts the driver. The aspect ratio is calculated as per the timing of closing of the eyelid. If eyelids of drivers are closed for a threshold period of time then it is considered that driver is feeling sleepy and corresponding audio alarm is used to make the driver alert. The system further allows the parents to be notified when student reaches college and college authorities when the student reaches home.
23	CSE	Prof. Nagaraj	4VP16CS068 4VP16CS082 4VP16CS0874VP16CS096	Gps/Gis Mapping Of Farmer Land Records	Functional	Documentation is related to "GPS/GIS Mapping of farmer land records" application software. The main purpose of this project is to focus on methods and concerns to put forward GPS/GIS mapping solution for APMC authorities to identify farmer's land records. This technology can help the authorities to refer and track geographical structure of land lot for various uses. The document consists of the survey on the present sectors where this technology is widely used, existing land record system in APMC and project planning, designing, implementation and testing report. The system is developed with test server for land and owner details. If the system is approved by the government eventually it can access the API to communicate with Bhoomi system - RTC. So that the application can work with the live data to validate all the data generated by the system. This is useful during the loan disbursal or repayment process in APMC
24	CSE	Prof. Pramod Kumar	4VP16CS071 4VP16CS077 4VP16CS093 4VP16CS111	Currency Detector App For Visually Impaired	Functional	Visually Impaired are those people who have vision impairment or vision loss. Problems faced by visually impaired in performing daily activities are in great number. They also face alot of difficulties in monetary transactions. It is difficult for them to recognize the fake currencies and value of the currencies due to similarity of paper texture and size between different categories. This money detector app helps visually impaired person to recognize and detect money. Using this

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						application blind person can give voice command to open camera of the smartphone and to click picture of the note and he can know the value of the note by speech. This Android project uses speech to text conversion to convert the command given by the blind. Speech Recognition is a technology that allows users to provide spoken input into the systems. This android application uses text to speech concept to read the value of note to the user and then it converts the text value into speech. For currency detection, this application uses vision API technique to detect currency based on images or paper using mobile camera.
25	CSE	Prof. Prabhakar	4VP16CS074 4VP16CS102 4VP16CS104 4VP16CS116	Smart Class Room	Functional	Biometric student attendance system increases the efficiency of the process of taking student attendance. This project presents a simple and portable approach to student attendance in the form of an Internet of Things (IOT) based system that records the attendance using fingerprint based biometric scanner and stores them securely over database. This system aims to automate the cumbersome process of manually taking and storing student attendance records. It will also prevent proxy attendance, thus increasing the reliability of attendance records. The records are securely stored and can be reliably retrieved whenever required by the teacher. The knowledge about the power wastage is used to suggest the smart classroom in which the operation of the electrical and electronic devices is automated. In our method we first estimated what are all the devices a classroom consists (i.e.) fan, light, projector. Some existing method had already controlled this kind of devices using infrared remotes. Though the infrared remotes are used, power wastage due to human negligence is possible. Hence by replacing the infrared remote with wireless sensor effective automation can be achieved in the class room. The smart

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						classroom system controls automatic ON/OFF of fan and light system based on the presence and absence of the human inside the room and based on the temperatures of the room
26	CSE	Prof. Krishna Mohan	4VP16CS078 4VP16CS099 4VP16CS103 4VP16CS107	A Machine Learning And Computer Vision Approach To Detect Parkinson's Disease	Functional	Parkinson's disease (PD) is one of the most common neurodegenerative diseases of the central nervous system (CNS). While Parkinson's cannot be cured, early detection along with proper medication can significantly improve symptoms and quality of life. One of the earlier and most common symptoms of Parkinson's is tremors and rigidity in the muscles which directly impact the visual appearance of the hand drawn spirals and waves. The project makes use of hand drawn images of spirals and waves to detect Parkinson's disease. It is based on the fact that two of the most common Parkinson's symptoms include tremors and muscle rigidity which directly impact the visual appearance of a hand drawn spiral and wave. This variation in visual appearance will enable us to train a computer vision and machine learning algorithm to automatically detect Parkinson's disease. Histogram of Oriented Gradients image descriptor is used to quantify the variation in visual appearance and extract the features of each of the input images. A machine learning model is trained using a Random Forest Classifier with about 100 decision trees in the forest which will in turn be able to classify a new input image as Parkinson's positive and Parkinson's negative. The proposed method automates the detection of Parkinson's disease eliminating the additional hardware used to recognize voice, measure physical activities and track pen speed and pressure in the existing systems

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27	CSE	Prof. Roopa G K	4VP16CS083 4VP16CS086 4VP16CS109 4VP16CS115	Automatic Fire Detection And Prevention For Industries	Functional	This system uses camera for detecting fires. So, we do not need any other sensors to detect fire. The Raspberry Pi controller processes the camera input and detects fire using heat signatures.System processes the camera input and then processor processes it to detect fires. The heat signatures and fire illumination patterns are detected in images to determine if it is a fire and take action accordingly. On detecting fire system goes into emergency mode and sounds an alarm. The process of oxidation of any material in the exothermic process of combustion, releasing heat and light as by products, is called Fire. The light parameter and the color of the flame help in detecting fire. Fire detection using color information has many applications in computer vision and other domains. Our color model-based method used for fire detection has many advantages over conventional methods of smoke detection etc., such as simplicity, feasibility and understandability. In order to enhance the performance parameters of fire flame detection based on a live video stream, we propose an effective color model-based method for fire detection. Each and every pixel is checked for the presence or absence of fire using color features, and periodic behaviour in fire regions is also analysed. Dynamic boundary check is also done to detect the edges of the fire Region of Interest (ROI). Candidate fire regions are detected using the chromatic and dynamic measurements. The proposed method is also included different fire prevention system.

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28	CSE	Prof. Santhosh Meherwade	4VP16CS084 4VP16CS085 4VP16CS088 4VP16CS089	Automated Identification Of Fall Armyworm	Functional	The identification of pests in the maize field is a major challenge in the field of agriculture. Therefore, it is very important to protect the crop by monitoring the pest and minimizing the use of pesticides. Recently Fall Armyworm (FAW) is found in India, especially in Shivamogga (Karnataka), Kerala. It is one of the most dangerous pests and it can destroy the maize field completely within a week. This project focuses on the automatic identification of FAW in an earlier stage by using the android app. The user (farmer) clicks the image of the pest and uploads it to the Anvil Cloud Service via an android application. Once it is uploaded, the image processing is done in the Anvil Cloud by using Supervised Machine Learning technique called Convolution Neural Network (CNN). The result will be displayed on the android app. If the result is positive, remedies are also provided in the form of text.
29	CSE	Prof.Prabhakar	4VP16CS090 4VP17CS402 4VP17CS405 4VP17CS406	Health Monitoring System	Functional	The main aim of this “Patient Health Monitoring System” is to build up a system fit for observing vital body signs, for example, body temperature, heart rate, pulse oximetry. Application of engineering and technology has proved its significance in the field of biomedical. It not only made doctors more efficient but also helped them in improving total process of medication. This paper presents a current invention for monitoring the patient health by continuous observation. The basic idea behind this project is, it implies that whether a person is at home, on a trip, or at his work place, he/she can stay connected with the doctor and he can take immediate action if necessary. The Telemedicine system for doctors provides solution for this. It continuously provides following information to doctors. The main motive of the proposed method is early detection of the abnormal heart rate can help to prevent from the serious disease. The heart rate monitor is

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						needed to determine the range of rate. This range of heart should be compatible with normal rate to prevent from serious injury. Such digital display of target heart rate did not provide for ease of reading the display under the most conditions. This proposed method is an innovation to respond to these problems by providing novel wearable bio medical signal sensor devices for monitoring heartbeat, blood pressure condition at home easily, which displays the heart rate by LED sensor and enabling a user an indication if any abnormality through GSM, and also blood pressure monitored. The proposed innovation will be programmed to automatically suggest the user about their health condition. The heart rate, blood pressure level measured by the sensor is processed by the controller that data was read every second and stored on controller. The data from controller unit was sent to base node via GSM network. Arm controller hardware and GSM module are packed in suitable case and can send a message and immediate call to doctor's mobile if any abnormal condition of patient.
30	CSE	Prof. Bharathi K	4VP17CS400 4VP17CS401 4VP17CS403 4VP17CS404	"WI-FI Based Secure Wireless Communication In Military Navy"	Functional	The WiFi based secured wireless communication using RSA encryption allows us to communicate wirelessly with security feature. The data transfer during communication between two system is encrypted using RSA encryption which is highly secure. The data can be decrypted with correct key only, otherwise it returns some garbage value. This is two way communication system where we can transmit as well as receive at both ends. We have used Atmega microcontroller interfaced with xbee along with LCD display to send message and key, also have USB keyboards connected to each system.

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