Final year B.E. Project Work 2020-21

Team members:

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Project topics:

1.Face Recognition Attedance System

Project area: Artificial intelligence and machine learning

Description : The system is developed for deploying an easy and a secure way of taking down attendance. The software first captures an image of all the authorized persons and stores the information into database. The system then stores the image by mapping it into a face coordinate structure. Next time whenever the registered person enters the premises the system recognizes the person and marks his attendance along with the time. It the person arrives late than his reporting time, the system speaks a warning “you are xx minutes late! Do not repeat this.”

2. Intelligent Neonatal Monitoring System Based on Android Application using Multi Sensor

Project area: Internet Of Things(IoT)

Description: The purpose of the project is to develop an Intelligent Neonatal Monitoring System based on temperature and pulse rate data.In the Neonatal Intensive Care Unit(NICU) , there are premature babies and other ill babies who need extra care from the doctors, nurses as well as medical supplies. Therefore, an intelligent neonatal monitoring system should be a good solution in order to help them to observe neonates frequently and consistently. This system transmits the vital signs of the neonate such as body temperature and pulse rate to the Internet of Things (IoT) called Thing Speak.The body temperature and the pulse rate will be detected by LM35 temperature sensor and pulse sensor respectively. These information will be sent to the IoT via ESP8266 WiFi Shield.IoT helps the doctors and nurses to be connected with the neonat e's vital signs and it is helpful in monitoring the neonates at any time and anywhere through the internet.

3. Plant Seedling Classification

Project area: Machine learning

Description: This paper conducts a comprehensive study on the application of deep convolutional neural networks(DCNN) in agriculture sector to determine the species of a seedling from an image which will help in identifying weeds from plant seedlings .Although the issue of identifying weeds from plant seedling may not seem concerning but weeds restrict plants from growing well and it results in bad yield due to increase in population there is a pressing demand for improvising agriculture techniques which will result in better yield by incurring minimal cost.If we have promising results in plant seedling classification we will be able to completely automate the hard time consuming labor of weed control. Our goal is to accurately differentiate weeds from crop seedlings based on their images in a reasonable time frame. There are challenges along the way to achieve this goal. For instance, some weeds looks nearly identical to the

crops seedlings. Also, the image background contains a lot of noises, which could influence the accuracy of classification.

4. Covid tracker app

Project area: Artificial intelligence

Description: COVID-19 tracker application for digital contact tracing during the COVID-19 pandemic, i.e. the process of identifying the number of people ("contacts") who may have been in contact with an infected individual.It also shows the detailed number of infected people in the district,state as well as in the country.By using people will be aware about the situation. As the virus that causes COVID-19 began to spread from person to person in communities (community transmission), scientists needed to track the disease and try to slow its spread. To do so, they needed a common definition for a case of COVID-19. Having a case definition helps to make sure cases are counted the same way everywhere.