MUTHAYAMMAL ENGINEERING COLLEGE

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IBM (Nalaiya Thiran) Project Ideas 2022

PADMESH D(MECR19EC063)

1. Smart Garage Door

This **IOT project** provides It's annoying when you have to reach somewhere in a hurry, but first, you have to open the garage, take out your car, and close the door. Smart Garage Door is the best project you can work on. You can operate your garage door via your smart phone integrated with an IoT network. It also cancels the problem of carrying bulky key chains.

The system features laser and voice commands and smart notifications for monitoring purposes.

2. IOT Based Smart Agriculture System

This is an excellent **IoT project for beginners**. This smart agriculture system allows you to monitor soil moisture, humidity, and water level; automatically irrigate a piece of land; and wirelessly spray fertilizers or pesticides using your smart phone.

Backed by Arduino, this system consists of wireless sensor networks that collect data from different sensors at various nodes and send it through the wireless protocol. It also has a temperature sensor, moisture sensor, water level sensor, DC motor, and GPRS module to provide information about agriculture fields. It displays all information on an LCD screen and notifies users through SMS alerts on smartphones. This IoT-based system performs the routine agricultural tasks automatically and allows farmers to focus on more labor-intensive tasks.

3. Air & Noise Pollution Monitoring System

Environmental noise and air pollution levels are rising in urban areas and need to be controlled immediately. An IoT-powered air and noise pollution monitoring system can monitor the level of both air and sound pollution. This data can be saved on web servers for further use.

The system consists of air sensors that sense the presence of harmful gases and compounds in the air. It also monitors sound levels and reports them to the online server. The sensors interact with the microcontroller that transmits this data over the internet. The data can be used by authorities so that they can take measures to control the pollution.

4. Wheelchair Fall Detection

Sometimes, because of old age or an accident, people have to use a wheelchair. But many people fall from those wheelchairs due to various reasons.

To help them, you can work on the wheelchair fall detection project. While you are using a wheelchair, any jerk will be counted as a fall from the wheelchair that will trigger the alarm.

Sometimes the alarm triggers without anyone falling. You can stop the alarm within seconds.