MUTHAYAMMAL ENGINEERING COLLEGE

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IBM (Nalaiya Thiran) Project Ideas 2022

PRATHOSHINI T (MECR19EC066)

1.Home Automation System

A human touch-based automation system is the most popular IoT project. The system automates all the functions of the appliances in the house such as fan, light, TV, geyser, and many more which are connected through the IoT network. This project gives you the power to control and manage all the appliances of the house with a single click on the smartphone from any location in the world. An AVR family microcontroller, inbuilt touch sensing input pins, and a Wi-Fi connection combine the house automation system.

2.Night Patrol Robot

There is no denying the fact that the crime ratio is maximum in night and night patrol robots is the perfect solution to it. A robot is equipped with a night vision camera and performs a 360-degree scan, identifies, and analyzes in case of some wrong activity, and generates alarming sounds. The robot can capture the image of the intruder and generate an alarm while sending the data to the user. Night patrol robots act like smart artificial security guards to protect your home, office, or other property.

3.Mining Worker Safety Helmet

The most dangerous place to work nowadays is mines, as working there is extremely unsafe due to hazardous conditions. A microcontroller-based circuit is fitted in the mining worker safety helmet which tracks the environment of the mining site and evaluates the safety parameters. Also, the RF-based tracking system in the helmet helps in transferring data through the IoT network.

The worker's current location is detected in real-time while they are working the mining site. In case of emergency, the helmet can be equipped with a panic button to create an alert to the management, and rescue operations can begin immediately shared over IoT's web interface.

4.Smart Parking System using IoT

Due to extreme traffic on roads, it is almost impossible to find a vacant parking spot without any hitch. The IoT-based smart Parking System is the solution to tackle all the parking issues. It is designed to avoid parking space hunting for appropriate parking. The system shares the whole picture of the area and gives an image of vacant parking areas so that drivers can ride the car to exact free space.