

MUTHAYAMMAL ENGINEERING COLLEGE

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IBM (Nalaiya Thiran) Project Ideas 2022 PRABU A (MECR19EC065)

1.IoT Connected Healthcare Applications

IoT technology spread its wings to the Medical sector to save many lives. The aim of developing this project is to monitor the health condition of a person anywhere and send the information to a specialized doctor to check up. Using this frequency of visiting doctor decreases. We developed a project using Wearable sensors with solar harvesting and Bluetooth low energy transmission that creates a wireless body area network (WBAN). Using this project you can detect the heartbeat, Blood pressure, hemoglobin content, etc., All these reports can be used for analyzing a person's health.

2. Solar Tracking System

These consist of three main parts. These are the single axis, dual axis and four axis. Of these, dual axis and single axis are the main ones used. This method allows us to generate electricity through the sunlight at maximum efficiency. This is because the solar panel opens automatically toward sunlight. For that, the light sensitive sensor are incorporated into these system.

3. IoT based Water Quality Management System using Arduino

In this paper, we present a design and development of a low-cost system for real-time monitoring of the water quality management in IoT. The system consists of several sensors that are used to measure physical and chemical parameters in the water. The parameters such as temperature, PH, turbidity, the Level sensor of the water can be measured. The measured values from the sensors are processed by the microcontroller. The Nodemcu esp8266 is used as a core controller. Finally, the sensor data is uploaded on the internet using the WI-FI module.

4.IoT Based Fire Detection System Using FPGA

Building a cloud-based Fire monitoring system is very important to reduce the cost of maintaining servers, to avoid data losses and to make access easy with multiple internet-connected devices (computer, tablet, mobile phone) at the same time anywhere in the world. Using the Internet of Things (IOT). Here, we are going to design a fire detection system and data to upload it to a ThingSpeak cloud using FPGA