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IBM (Nalaiya Thiran) Project Ideas 2022

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1. Mining Worker Safety Helmet

The safety helmet is equipped with an RF-based tracking system that helps transmit the data over the IoT network. An atmega microcontroller-based RF tracker circuit receives the data that is sent by the helmet nodes. Based on this data, the system maps the current location of workers in real-time as they move through the mining site.

The helmet also includes a panic (emergency) button. If you press this button, an emergency sign will show up over the IoT web interface. This will alert the management to take the necessary steps for ensuring the workers' safety.

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. Soil Moisture Detection

If you keep forgetting to water your plants then don't worry you can automate the watering process with Python. Soil moisture sensors can be used to detect the moisture in the soil and you can then water the plants according to the soil moisture.

4. Server Room Temperature Monitoring System

Servers are continuously working day and night without any break. It is a great help to have a temperature monitoring system on the server so that we can remotely see the statistics of the server room.

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