Smart Voice Controlled Farm House Automation, Plant Watering and Street Light Control System

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Abstract: *Adopting an optimized irrigation system has become a necessity due to the lack of the world water resource. The system has a soil-moisture sensor. This project focuses on a smart irrigation system which is cost effective. Automation allows us to control various appliances automatically. The objective of this project is to control the water supply to each plant automatically depending on values of soil moisture sensors. Mechanism is done such that soil moisture sensor electrodes are inserted in soil. Automatic irrigation scheduling consistently has shown to be valuable in water use efficiency with respect to manual irrigation based on direct soil water measurements. The aim of the implementation is to demonstrate that the automatic irrigation can be used to reduce water use. The implementation is an automated irrigation system that consists of a soil moisture sensor which senses the soil humidity and automatically waters the field. Therefore, the object of this review study was to provide significant knowledge about early fault detection and diagnosis in aeroponics using intelligent techniques (wireless sensors). So, the farmer could monitor several paraments without using laboratory instruments, and the farmer could control the entire system remotely. Moreover, the technique also provides a wide range of information which could be essential for plant researchers and provides a greater understanding of how the key parameters of aeroponics correlate with plant growth in the system.*

Keywords: Irrigation, IoT, Raspberry Pi, Wi-Fi, Voice Control, Traffic Lights, Soil Moisture etc.

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