Patent Search

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Abstract:

The primary goal of this endeavor is to increase yield by utilizing modern technologies to enhance present farming techniques. This system offers a model of a smart that enables farmers to perform farm tasks automatically with less manual inspection. Because a greenhouse is a closed structure, it shields the plants from harsh w including wind, hail, UV rays, and insect and pest infestations. Automatic drip irrigation is used to irrigate agricultural fields. It works in accordance with the soil moist threshold that is set properly, ensuring that the plants receive the ideal amount of water. Using drip irrigation, the right amount of nitrogen, phosphorous, potassium minerals can be applied based on information from the soil health card.

Complete Specification

Description:IoT-based smart greenhouses are considered to increase agricultural yield and make sure crop physical condition by provide real-time monitoring and automated control systems. These smart systems are equipped with sensors that monitor environmental conditions such as soil moisture, temperature, humidity, a intensity. This real-time monitoring helps farmers respond promptly to issues, preventing crop damage and ensuring optimal growth conditions. Although still emer IoT-based smart greenhouses have the potential to revolutionize agriculture by improving resource efficiency and crop management. Automated climate control an irrigation systems can regulate environmental conditions based on sensor inputs, ensuring the precise delivery of water, nutrients, and light, which decrease waste reduces operational costs. Through predictive analytics and AI algorithms, the system can also forecast potential diseases and optimize harvest cycles, providing val insights to farmers for proactive decision-making. The ability to monitor conditions remotely using cloud platforms and wireless networks ensures that farmers stay connected to their crops, even from a distance. This combination of real-time monitoring, predictive analysis, and automation ensures sustainable agricultural pract paving the way for a smarter and more efficient farming future. , Claims:1. The model of a smart green house that enables farmers to perform farm tasks automat with less manual inspection.

2. The proposed system has sensors monitor key environmental variables, including soil moisture, light intensity, humidity, temperature, controller and IoT.
3. As per the claim 2, any type of sensors, controllers can be used in the proposed system.
4. As per the claim 1 and claim 2, we claim that any type of outputs devices can be connected through relay such as alarm, fan, bulb and pumps etc.
5. As per the claim 2, we claim that any embedded processor/controller with any suitable algorithms can be used for the above-mentioned process.
6. As per the claim 2, we claim that the any form of process can be added/removed with smart wearable life saver

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