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Patent Search

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Abstract:

A novel approach to greenhouse automation using internet of things and deep learning is the proposed invention. The proposed invention focuses on studying the novel approach to greenhouse automation approaches. The invention focuses on analyzing the impact of greenhouse automation using algorithms of deep learning and the results of predictive unit will trigger the IoT unit. The IoT unit will send alert messages to the mobile phone of the concerned person.

Complete Specification

Description:[0001] Background description includes information that may be useful in understanding the present invention. It is not an admission that any of the information provided herein is prior art or relevant to the presently claimed invention, or that any publication specifically or implicitly referenced is prior art.

[0002] A novel approach is a new intervention either eclectic or unique method of treatment introduced in independent variables. A greenhouse is a structure that allows people to regulate climatic conditions, such as temperature and humidity. There are many different designs of greenhouses; however, in general these buildings include large areas of transparent material to capture the light and heat of the sun.

[0003] A number of different types of greenhouse automation analysis systems that are known in the prior art. For example, the following patents are provided for their supportive teachings and are all incorporated by reference.

[0004] IoT Enabled Sustainable Automated Greenhouse Architecture with Machine Learning Module: - In recent years, the information system has laid a profound foundation in agriculture with greenhouse development, leading to accelerated growth. The green infrastructure thus built is easily accessible remotely using the intelligent system of Internet of Things. In this proposed work, an IoT-based environment is designed, developed, and implemented with sensors which are connected to the laptop/computer or a mobile phone with Internet. Further to save electricity, a separate control unit is built which provides the devices an energy efficient way of functioning. Thus, information regarding growth of the plants, moisture content in the soil, energy consumed by each smart appliance in the farm, etc., is collected using data acquisition. The data thus gathered is then segregated depending on the applications and sent to the Firebase cloud. To monitor the environmental parameters within the greenhouse, we have used a cloud-based data collection mechanism. Interfacing the dashboard with the cloud platform, it is possible to analyze the power consumed by the system using the data present. When a discontinuity occurs with data missing for about an hour, the missing data is filled with the help of previous data.

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