IBM – NALAYATHIRAN PROJECT

Problem Statement :

IoT-Based Smart Crop Protection System for Agriculture

Domain :

Internet of Things

PROJECT OBJECTIVE

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PROJECT OBJECTIVE

This will be an integrated approach to IIOT designed for Perceptive agriculture. Farming is driving consensus with the impact of open source and in low power devices. The work in this project will be used to monitor yields, precautions to protect farms from animal attacks and climate change conditions. Advances in the Industrial Internet of Things (IIoT) are widely used in various fields. Smart agriculture that emphasizes farming standards. this project work includes various types of sensors, controllers, and positioners when ordered for WSN and ARM Cortex-A boards consuming 700mA or 3W power The main temperament of the classification. Various sensors such as DHT 11 humidity and temperature sensor, PIR sensor, LDR sensor, HC-SR04 ultrasonic Sensors and cameras are connected to the circuit board. IOT devices are still available Anecdotal evidence around farmland. passive infrared sensor detects motion within 10 meter radius Camera raises when motion is detected within 10 meters The switch is turned on, it takes a photo first and then starts processing it Images stored both onboard and in the IoT cloud, A message to Recorded amount to notify intrusion using SIM900A module (if the detected picture is not a human) the system will generate a buzzer to notify people Temperature and humidity data are received from dht11 temperature and humidity sensor. Data collected by sensors is passed to ARM CortexA through a system that can be wired or a wireless communication system. in data such as temperature, humidity, and soil moisture values, if there is a difference occurred compared to a predefined threshold rate before sending an announcement to the farmer's mobile phone and website. the result Adjusts the Farmer Mobile Database to perform the necessary actions The Internet of Things (IoT) is an evolving paradigm aimed at achieving this. Connect different intelligent physical components in multiple domains Modernization. Automatically manage and track farmland Many IoT-based frameworks with minimal human intervention is introduced. In this paper key components, new technologies, security issues, challenges, Future trends in agriculture. detailed report on recent advances are covered in this paper. the goal of this This survey is designed to help a potential researcher identify relevant his IoT issues. Adopt the right technology based on your application needs. Also, the importance of IoT and data analysis for smart Agriculture was emphasized.