LITERATURE SURVEY

TEAM ID: PNT2022TMID22839

Team members:

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Literature survey on IoT Based Smart Crop Protection System for Agriculture:

1. Implementation of IIoT based smart crop protection and irrigation system:

Authors: Ipseeta Nanda, Sahithi Chadalavada, Medepalli Swathi, Lizina Khatua.

Date of Conference: 22-23 October 2020

Conference Location: International Conference of Modern Applications on Information and Communication Technology (ICMAICT)

A centralizing method in the area of IIoT (Industrial Internet of Things) contrived for understanding agriculture which is preceding the arrangements low-power devices . This paper yields a monitoring procedure for farm safety against animal attacks and climate change conditions. IIoT advances are frequently used in smart farming to emphasize the standard of agriculture. It contains types of sensors, controllers. On behalf of WSN, the ARM Cortex-A board which consumes 3W is the foremost essence of the procedure . Different sensors like DHT 11 Humidity & Temperature Sensor, PIR Sensor, LDR sensor, HC-SR04 Ultrasonic Sensor, and camera are mounted on the ARM Cortex-A board. The PIR goes high on noticing the movement within the scope, the camera starts to record, and the

data will be reserved on-board and in the IoT cloud, instantaneously information will be generated automatically towards the recorded quantity using a SIM900A unit to notify about the interference with the information of the weather conditions attained by DHt11. If a variance happens, the announcement of the threshold rate will be sent to the cell number or to the website. The result will be generated on a catalog of the mobile of the person to take the necessary action

2. A Literature Survey on Smart Agriculture Monitoring and Control System Using IOT:

Authors: Abhilash Lad, Sumitra Nandre, Krishna Raichurkar, Sumit Zarkhande, Dr. Priya Charles.

Date of Conference: 2022-02-25

Conference Location: International Journal for Research in Applied Science and Engineering Technology (IJRASET)

India is agriculture sector, on either side, is losing ground every day, affecting the ecosystem\'s output capacity. In order to restore vitality and put agriculture back on a path of higher growth, there is a growing need to resolve the issue. A large-scale agricultural system necessitates a great deal of upkeep, knowledge, and oversight. The IoT is a network of interconnected devices that can transmit and receive data over the internet and carry out tasks without human involvement. Agriculture provides a wealth of data analysis parameters, resulting in increased crop yields. The use of IoT devices in smart farming aids in the modernization of information and communication. For better crop growth moisture, mineral, light and other factors can be assumed. This research looks into a few of these characteristics for data analysis with the goal of assisting users in making better agricultural decisions using IoT. The technique is intended to help farmers increase their agricultural output.

3. A Literature Study on Agricultural Production System Using IoT as Inclusive Technology.

Author: CHANDHINI. K.

Date of Conference: Dec 2016

Conference Location: INTERNATIONAL JOURNAL OF INNOVATIVE TECHNOLOGY AND RESEARCH

The IoT (Internet of Things) based agricultural convergence technology is a technology to create a high value such as improvement of production efficiency, quality increase of agricultural products in the whole process of agricultural production. In addition, implementing precision agriculture, which is an alternative to the future agriculture, through the convergence technology allows prediction of supply and demand, real-time management and quality maintenance during the entire life cycle of agricultural products . We make a literature study on the cited title and present it in the form of this note.

4. SMART CROP PROTECTION SYSTEM FROM ANIMALS

Authors: 1Mr. Jayesh Redij, 2Mr. Pranav Shitap, 3Mr. Shikhar Singh, 4Mr. Durvesh Zagade, 5Dr. Sharada Chougule.

Date of Conference: April 2022

Conference location: International journal of creative research and thoughts

Animals like wild boars, buffaloes, cows, elephant, monkeys, birds, etc. damages the crop a lot which results in loss of production and so of farmer. It is very difficult for a farmer to keep an eye on the field every time. This system is designed to surveillance the field 24*7 which is not possible for a human being and diverts the animals without harming them. The system uses raspberry pi, PIR sensor to detect animal, camera module to look on animal, GSM module to send alert message to farmer, and a buzzer to divert the animals. This system ensures the safety of farm and decreases the loss of farmers.

5. Smart Crop Protection System

Authors: Mohit Korche , Sarthak Tokse , Shubham Shirbhate , Vaibhav Thakre , S. P. Jolhe

Date of conference: July to August 2021

Conference location: International Journal of Latest Engineering Science (IJLES)

Agriculture is the backbone of the economy but because of animal interference in agricultural lands, there will be huge loss of crops. This article provides a comprehensive review of various methods adopted by farmers to protect their crops. The article also discusses use of modern technology in agriculture. Finally, this article reviews smart crop protection system using sensors, microcontroller and gsm module.

Source:
1. Google scholar.
2.https://ieeexplore.ieee.org.