

IOT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE

LITERATURE SURVEY

TEAM DETAILS:

TEAM ID : **PNT2022TMID19796**
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ABSTRACT

Agriculture is still one of the most crucial sectors of the Indian economy. It is important for human survival as well as economic growth. Traditional systems like humanoid scarecrows are used even today in an agricultural field to stop birds and animals from disturbing and feeding on growing crops. There are many loopholes in such ideas and so enhancing agricultural security has become a major issue these days. Thus, focuses on proposing a system which detects the intruders, monitors any malicious activity and then reports it to the owner of the system. It acts as an adaptable system which provides a practicable system to the farmers for ensuring complete safety of their farmlands from any attacks or trespassing activities. Hence, the key objective of the proposed project is to making agriculture smart using IoT technologies. The important feature of this project includes the prevention of crops from spoilage during rain and efficiently recycling the rain water for irrigation. Secondly, it gives alarm/buzzer when detect any human/animal intruder into the farm. Finally, the operation will be performed by interfacing Wi-Fi module, GSM module and sensors with Arduino. With the help of proposed work, current problems related to agriculture are solved by reducing human efforts, wastage of water and giving information to the farmer about the live condition of the field on the mobile device.

Book/Journal	Author's name	Inference
ICT for Agriculture and Environment,CITAMA 2019	Tanya Recalde, Karina Real-Aviles, Cesar Moran, Paola Grijalva, Raquel Gomez chabla	The objective of this paper is to offer an overview of the IoT applications in agriculture through topics such IoT-basedsoftware applications for agriculture available in the market, IoT-based devices used in the agriculture, as wellas the benefits provided by this kind of technologies.
Internet of Things (IoT)-Based Wireless Health: Enabling Technologies and Applications	Yousaf Bin Zikria, Tariq Umer, Adnan Abid, Shamyla Riaz, Muhammad Shoaib Farooq	The objective of this paper is the collection of all relevant research on IoT agricultural applications, sensors/devices, communication protocols, andnetwork types. Furthermore, it also discusses the main issues and challenges that are being investigated in the field of agriculture
Governance for Climate Smart Agriculture,2018	Edmond Totin, Alcade C. Segnon, Marc Schut, Hippolyte Affognon, Robert B. Zougmore, Todd Rosenstock ,Philip K. Thornton.	The review explored how institutional perspectives are reflected in the CSA literature.It has largely focused on knowledge infrastructure, market structure, and hard institutional aspects. There has been less attention to understand whether investments in physical infrastructure and actors' interaction, or how historical, political, and social context may influence the uptake of CSA options.

<p>Development of IoT based smart security and monitoring devices for agriculture.</p>	<p>Tanmay Baranwal, Pushpendra Kumar Pateriya Nitika.</p>	<p>This paper is oriented to accentuate the methods to solve such problems like identification of rodents, threats to crops and delivering real time notification based on information analysis and processing without human intervention. In this device, mentioned sensors and electronic devices are integrated using Python Scripts.</p>
<p>Role of IoT in Agriculture for the Implementation of Smart Farming.</p>	<p>Muhammad Shoaib Farooq, Shamyla Riaz, Muhammad Azhar Naeem, Kamran Abid, Adnan Abid.</p>	<p>The article presents many aspects of technologies involved in the domain of IoT in agriculture. It explains the major components of IoT based smart farming. A rigorous discussion on network technologies used in IoT based agriculture has been presented, that involves network architecture and layers, network topologies used, and protocols. Furthermore, the connection of IoT based agriculture systems with relevant technologies including cloud computing, big data storage and analytics has also been presented. In addition, security issues in IoT agriculture have been highlighted.</p>

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