

# **IOT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE**

## **LITERATURE SURVEY**

**TITLE:** IIOT Based Smart Crop Protection and Irrigation System

**AUTHOR:** Ipseeta Nanda

### **DESCRIPTION:**

This will be an integrative approach in the field of IIOT designed for perceptive Agriculture which are proceeding the arrangements in course of open source and on low powers devices This project work contains various sorts of sensors, controllers in addition to positioner on behalf of WSN and ARM Cortex-A board which consumes 700mA or 3W power is the main temperament of the classification. Different sensors like DHT 11 Humidity & Temperature Sensor, PIR Sensor, LDR sensor, HC-SR04 Ultrasonic Sensor and cameras are interfaced with the board

**PUBLISHED IN:2020**

**TITLE:** Smart Crop Protection System

**AUTHOR:** Mohit Korche

### **DESCRIPTION:**

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.

**PUBLISHED IN:2021**

**TITLE:** Smart Crop Protection System from Animals using PIC

**AUTHOR:** Mukesh Mahajan

**DESCRIPTION:**

Crops in farms are many times ravaged by local animals like buffaloes, cows, goats, birds etc. This leads to huge losses for the farmers. It is not possible for farmers to barricade entire fields or stay on field 24 hours and guard it. So here we propose automatic crop protection system from animals. This is a microcontroller based system using PIC family microcontroller. This system uses a motion sensor to detect wild animals approaching near the field. In such a case the sensor signals the microcontroller to take action.

**PUBLISHED IN:2020**

**TITLE:** Smart Intrusion Detection System for Crop Protection by using Arduino

**AUTHOR:** Srushti Yadahalli

**DESCRIPTION:**

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, this paper 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.

**PUBLISHED IN:2020**

**TITLE:** Smart Irrigation And Crop Protection Using Arduino

**AUTHOR:** R R Thirrunavukkarasu

**DESCRIPTION:** This paper aims at designing and executing the advanced development in communication system for smart irrigation and crop protection from animals that invaded to farms like cows, goat, elephants, etc. and The famers can't protect the entire farm by staying in farm for all day. So, the PIR sensor is kept in the field to watch out the animal motions. When it detect any movement recorded in the PIR senor. it starts alarming. And therefore soil moisture sensor detects moisture level in soil when it starts getting wet. it will be automatically starts water pump. However more amount of water in farm will spoil the crops so, servo motor opens the canal when heavy rain flows detected by rain sensor. added upon gas sensor is used to detect the fire in farm.

**PUBLISHED IN:2021**