

IOT Based Smart Crop ProtectionSystem For Agriculture

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S.No	TITLE	PROPOSED WORK	TOOLS USED/ ALGORITHM	TECHNOLOGY	ADVANTAGE/ DISADVANTAGES
1	Smart Crop Protection System Using IOT.	The IOT device is used to indicate the farmer by a message while someone enter into the farm and we are used SD card module that helps to store a specified sound to fear the animals.	<ul style="list-style-type: none"> • Arduino UNO • .NodeMCU • LCD display • Flame Sensor • PIR sensor • SD card Module • Solar panel. 	<ul style="list-style-type: none"> • Internet Of Things(IOT) 	<ul style="list-style-type: none"> • Cost effective method • Optimize water use • Substance high yielding. • High quality crop production • Need for each soil type is calibrated.
2	Protection of Crops from Wild Animals Using Intelligent Surveillance System	The system determines if the unauthorized person is an animal or human intruder based on Haar feature based cascade classifiers.	<ul style="list-style-type: none"> • Buzzer/AlArm • GSM Module • Rasperry pi • PIR Sensor • Arduino UNO • Light Sensor • LCD display • WIFI Modules. • Temperature sensor. 	<ul style="list-style-type: none"> • Internet Of Things(IOT) • ESffe ctive, accurate and adaptive. 	<ul style="list-style-type: none"> • Improve productivity • Poor living conditions and hygiene for livestock • Possibility of poor quality food products

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3	Smart CroP Protection USING Arduino	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.	<ul style="list-style-type: none"> passive infrared sensor (PIR) Smoke sensor Arduino UNO GSM MODULE BUZZER SOIL MOISTURE SENSOR 	<ul style="list-style-type: none"> Internet Of Things(IOT) 	<ul style="list-style-type: none"> Long life and low cost Simple drive circuit Smart watering system is a bit expensive Connectively and power dependences
4	IoT Based Intelligent Agriculture Field Monitoring System.	to design an IoT based smart farming to control high voltage electrical devices like pump, flap of playhouses etc.	<ul style="list-style-type: none"> Decision tree Extreme Gradient Boosting(XGB) Gradient Boosting(GB) Adaboost Random Forests K-Nearest Neighbors 	<ul style="list-style-type: none"> Internet Of Things(IOT) 	<ul style="list-style-type: none"> It is more efficient high crop yield Technical complexity Higher cost

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5	Implementation of IoT based smart crop protection and irrigation system	The purpose is to grant monitoring device for crop safety to animal outbreaks and environment circumstances	<ul style="list-style-type: none"> • Inductive Relay • Signal Relay • ARM Cortex-A • LED • Buzzer • LDR sensor • Moisture sensor • Ultrasonic sensor • SD card 	<ul style="list-style-type: none"> • Internet of Things(IOT) 	<ul style="list-style-type: none"> • Guideline of horticultural water system stays restrictive to the set up significant interests of Farming. • Monitor the system for crop security .

6	Protection Of Crop and Proper Usage Of Rain Water Using Wireless Sensor Networks	<ul style="list-style-type: none"> • Adopting this concept farmers can save time, water, and money. • The proposed system implemented uses WIFI and an Android mobile phone to report the details about irrigation. 	<ul style="list-style-type: none"> • Soil Moisture Sensor • Humidity and Temperature Sensor • Rain Sensor • Botfather • Kiel μVision 	<ul style="list-style-type: none"> • Internet of things (IOT), • wireless sensor network (WSN) 	<ul style="list-style-type: none"> • Increase salinity • Water logging • Hindrance in air communication to plant roots • Reduction in temperature to soil • Land becomes marshy • More nitrate formation in soil • Acidity of soil
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