

# LITERATURE SURVEY

TITLE OF THE PAPER	AUTHORS AND YEAR	PROBLEM ADDRESSED BY THE PAPER	COMPONENTS USED	FUTURE SCOPE
IoT Based Smart Sensors Agriculture Stick for Live Temperature and Moisture Monitoring using Arduino, Cloud Computing & Solar Technology	Anand Nayyar (Duy Tan University) And Er. Vikram Puri - 2016	The objective of this paper is to propose a Novel Smart IoT based Agriculture Stick assisting farmers in getting Live Data (Temperature, Soil Moisture) for efficient environment monitoring which will enable them to do smart farming and increase their overall yield and quality of products.	The Agriculture stick being proposed via this paper is integrated with Arduino Technology, Breadboard mixed with various sensors and live data feed can be obtained online from Thingspeak.com.	Future work would be focused more on increasing sensors on this stick to fetch more data especially with regard to Pest Control and by also integrating GPS module in this IoT.
Smart Farming using IoT, a solution for optimally monitoring farming conditions	Jash Doshi, Tirthkumar Patel and Santosh kumar Bharti -2019	The product will assist farmers by getting live data (Temperature, humidity, soil moisture, UV index, IR) from the farmland to take necessary steps to enable them to do smart farming by also increasing their crop yields and saving resources (water, fertilizers).	ESP32s Node MCU, breadboard, DHT11 Temperature and Humidity Sensor, Soil Moist sensor, SI1145 Digital UV Index / IR / Visible Light Sensor, Jumper wires, LEDs and live data feed can be monitored on serial monitor and Blynk mobile.	We can connect this whole system to Soracon Lagoon dashboard to get further in depth analysis with the of GSM module and IoT SIM card on our personal computers.
An IoT Based Smart Farming System Using Machine Learning	A.Dahane, R.Benameur, B.Kechar and A.Benyamina -2020	The main objective of this paper was to design a new EDGE-Fog-IoT-Cloud based architecture dedicated to the smart farming.	DHT22 Sensor, LDR Sensor, Water level Sensor, Relay Switch, Water pump, Power supply 9 V, Water flow sensor, Soil moisture sensor, LCD display, MQ2 sensor, LEDs, Jumpers. The mega arduino card and NRF module are in the Box.	One of future research directions related to experiments is to collect the physical parameters of our own farming system in upcoming days.

A research paper on Smart Agriculture using IoT	Ritika Srivastava, Vandana Sharma, Vishal Jaiswal and Sumit Raj -2020	To provide efficient decision support system using wireless sensor network which handle different activities of farm and gives useful information related to farm. Information related to Soil moisture, Temperature and Humidity content.	Arduino, Soil Moisture Sensor, Water level Sensor.	The further improvement can be made when the conditions are not ideal like proper illumination or lightning.
Smart Farming Using IOT	CH Nishanthi, Dekonda Naveen, Chiramdasu Sai Ram, Kommineni Divya and Rachuri Ajay Kumar -2021	A proposed innovative agriculture system is brought out to convert loss-making traditional farming into high crop yielding and profit-making.	LDR is used to sense the light intensity for the farm, and also IR sensor is used to detect the pest, birds, and humans by their body temperature and alerts the user through the message format to their mobile	This can be further implemented using ESP8266 Wi-Fi Module which is an independent system on chip with built-in TCP/IP protocol stack which allows the microcontroller to access the Wi-Fi network.