

TITLE : IOT ENABLE SMART FARMING APPLICATION

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LITERATURE SURVEY

- 1) Athrva Dalvi et. al.,(2020) have proposed a paper titled “Smart Farmer System”. The objective of this paper is to implement a system that would help the farmers to maximize their yields along with maximized profits. The system proposes to predict the accurate crop prediction based on the past and live data. Methodology used here is the past and live data that is analyzed using supervised machine learning algorithm, SVM. Both the live data as well as the big data is stored and retrieved from cloud. Also, the system proposes to make use of soil moisture sensors along with the weather conditions to automate the process of irrigation, which is one of the most time-consuming activities in farming.
- 2) Ritika Srivastava et. al.,(2020) have presented a paper titled “A Research paper on Smart Agriculture using IOT”. Objective is to develop a system which can monitor temperature, level of water, moisture and even the movement if any happens in the field which may destroy the crops in agricultural field. Methodology is Arduino UNO System along with few sensors like Soil moisture sensor and Water level Sensor is used to sense the agricultural field.
- 3) Vu Khanh Quy et. al., (2022) have reviewed on “IoT-Enabled Smart Agriculture: Architecture, Applications, and Challenges”. The study presents a survey of IoT solutions and demonstrates how IoT can be integrated into the smart agriculture sector. IoT-enabled smart agriculture ecosystems is achieved by evaluating their architecture (IoT devices, communication technologies, big data storage, and processing), their applications, and research timeline is analysed. The findings of this research constitute important guidelines in research and promotion of IoT solutions aiming to improve the productivity and quality of the agriculture sector as well as facilitating the transition towards a future sustainable environment with an agroecological approach.
- 4) Adithya Vadapalli et. al., (2020) have published a journal titled “Smart Agriculture System using IoT Technology”. The Smart Irrigation System is an IoT based technology which is capable of automating the irrigation process by analysing the moisture of the soil and the climate condition can be incorporated by small players in farming and enjoy high yield profit earning. Wireless Sensor network in the process of development in smart and precision agriculture can be used to monitor regularly the changes in environmental conditions such

as climate, hydrology, plant physiology, humidity, temperature, rains dampness of soil and others. As a process input, it can also demonstrate as a controller in the providing the inputs for seeds, fertilizers, pesticides etc. The WSN application shall aid the data collection process to for information needed by the farmers for cultivation and also as Input feeder control system on agricultural machinery.