## LITERATURE SURVEY

| Title & Author (s)  | Year | Technique (s)                 | Findings / Pros / Cons   |
|---|------|-------------------------------|--|
| IoT Applications in Agriculture – Chabla, Raquel, Karina and Moran, Cesar and Grijalva, Paola and Recalde, Tanya                | 2019 | IoT, Sensors, Cloud Computing | The objective of this paper is to offer an overview of the IoT applications in agriculture through topics such IoT-based software applications for agriculture available in the market, IoT-based devices used in agriculture, as well as the benefits provided by these technologies. |
| Using Cloud IoT For Disease Prevention in Precision Agriculture – Foughali, Karim and Fathallah, Karim and Frihida, Ali         | 2018 | WSN, DSS, Late<br>blight      | <ul> <li>The application of decision support system (DSS) for potato late blight disease prevention has proven its benefit.</li> <li>Present a new prototype of late blight prevention decision support system based on sensor network and cloud IOT.</li> </ul>                       |
| Development of IoT for smart agriculture a review - Lakhwani, Kamlesh and Gianey, Hemant and Agarwal, Niket and Gupta, Shashank | 2019 | ITU, IoT                      | The concepts help to interconnect physical objects equipped with sensing, actuating, computing power and thus lend them the capability to collaborate on a task in unison remaining connected to the internet.   |

| IoT Based Smart Agriculture System - Sushanth, G and Sujatha  | 2018 | IOT WSN Gateway<br>Sensors                   | <ul> <li>It is proposed to develop a Smart agriculture System that uses advantages of cutting edge technologies such as Arduino, IOT and Wireless Sensor Network.</li> <li>It includes development of a system which can monitor temperature, humidity, moisture and even the movement of animals which may destroy the crops in agricultural field through sensors using Arduino board</li> </ul> |
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| Iot based intelligent agriculture field monitoring - AshifuddinMondal, Md and Rehena, Zeenat  | 2018 | IoT, ThinkSpeak<br>Cloud                     | <ul> <li>This research work is to propose a smart farming method based on the Internet of Things (IoT) to deal with the adverse situations.</li> <li>This work presents an intelligent agriculture field monitoring system which monitors soil humidity and temperature.</li> </ul>  |
| Smart agriculture using clustering and IOT – Aher, Agraj and Kasar, Janhavi and Ahuja, Palasha and Jadhav, Varsha   | 2018 | IoT, Clustering, Cloud, Node                 | This paper focuses on remote monitoring system for the agricultural industry combined with some farmer friendly applications.  |
| A context-aware middleware cloud approach for integrating precision farming facilities into the IoT toward agriculture 4.0 – Symeonaki, Eleni and Arvanitis, Konstantinos | 2020 | WSN, IoT, Farm Management, Middleware, Cloud | This paper focuses on the issue of facilitating the management, process, and exchange of the numerous and diverse data points generated in multiple Precision Farming environments by introducing a  |

| and Piromalis, Dimitrios  |      |   | framework of a cloud-based context-aware middleware solution as part of a responsive, adaptive, and service-oriented IoT integrated system.  |
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| IoT-based framework<br>for smart agriculture –<br>Yang, Jian and Sharma,<br>Amit and Kumar, Rajeev                                | 2021 | IoT, WSN, ThinkSpeak Cloud                | <ul> <li>The proposed system presents a smart agriculture monitoring system that collects and monitors the soil moisture, environmental temperature, and humidity.</li> <li>The measured soil moisture, temperature, and humidity are stored in ThingSpeak cloud for analysis.</li> </ul>  |
| IoT Cloud Enabeled Model for Safe and Smart Agriculture Environment - Tawalbeh, Mais and Quwaider, Muhannad and Lo'ai, A Tawalbeh | 2021 | IoT, Cloud, Amazon Web Service            | The propose a secure cloudenabled IoT model with authorization and authentication techniques using the Amazon Web Service platform.  |
| Smart agriculture using iot - Deepa, Bammidi and Anusha, Chukka and Chaya Devi  | 2021 | Farm Automation, Node MCU, Sensors, Cloud | <ul> <li>An automated agriculture system is developed to monitor and maintain the important aspects of farming like temperature, humidity, soil moisture content and sunlight using IoT technology.</li> <li>The proposed system is expected to be helpful to the farmers in controlling an irrigation system in a better and accurate way.</li> </ul> |