**LITEARTURE SURVEY**

|  |  |  |  |
| --- | --- | --- | --- |
| **Title of the paper** | **Author’s** | **Published year** | **Inference** |
| IoT-Enabled Smart Agriculture: Architecture, Applications, and Challenges | Vu Khanh Quy , Nguyen Van Hau , Dang Van Anh , Nguyen Minh Quy , Nguyen Tien Ban , Stefania Lanza , Giovanni Randazzo and Anselme Muzirafut | 27 March 2022 | This study presents a survey of IoT solutions and demonstrates how IoT can be integrated into the smart agriculture sector. They discussed the vision of IoT-enabled smart agriculture ecosystems by evaluating their architecture (IoT devices, communication technologies, big data storage, and processing), their applications, and research timeline |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title of the paper** | **Author’s** | **Published year** | **Inference** |
| Smart farming for improving agricultural management | Elsayed Said Mohamed a,⇑ , AA. Belal a , Sameh Kotb Abd-Elmabod b , Mohammed A El-Shirbeny a , A. Gad a , Mohamed B Zahran a | 17 August 2021 | This work focuses on the new approaches regarding smart farming (SF) from 2019 to 2021, where the work illustrates the data gathering, transmission, storage, analysis, and also, suitable solutions. IoT is one of the essential pillars in smart systems, as it connects sensor devices to perform various basic tasks. The smart irrigation system included those sensors for monitoring water level, irrigation efficiency, climate, etc. Smart irrigation is based on smart controllers and sensors as well as some mathematical relations |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title of the paper** | **Author’s** | **Published year** | **Inference** |
| Smart Agriculture and Smart Farming using IoT Technology | Dankan Gowda .V , Sandeep Prabhu M , Ramesha. , Jayashree M Kudari and Ansuman Samal | 2089 (2021) 012038 | The Internet of Things (IoT) enables the production of agricultural process-supporting systems. Referred to as remote monitoring systems, decision support tools, automated irrigation systems, frost protection systems, and fertilisation systems, respectively. This article is meant to serve as an introduction to IoT-based applications in agriculture by identifying need for such tools and explaining how they support agriculture. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title of the paper** | **Author’s** | **Published year** | **Inference** |
| Implementation of Smart Farming using IoT | A. Vani1 , N. Sukesh Reddy2 , M. Parsharamulu3 & N.Mahesh4 | 12 June 2021 | The paper entitled “Implementation of smart farming using IoT” will be used by farmers for monitoring water supply to the fields and also providing protection for the fields from animals. It uses Thing speak platform to find the soil moisture, find the entry of animals into the fields. The need for this projects to reduce the work of farmers and increase the crop production. . In the proposed system the greenhouse parameters like water level and humidity are monitored continuously and data is uploaded continuously to server system using IOT gateways technology |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title of the paper** | **Author’s** | **Published year** | **Inference** |
| IoT based SMART FARMING SYSTEM | Mrs. Tania Sarkar,  Yasir Fahim | December 2018 | The aim / objective of this report is to propose IoT based Smart Farming  System assisting farmers in getting Live Data  (Temperature, Soil Moisture) for efficient environment  monitoring which will enable them to increase their overall yield and quality of products. The IoT based Smart Farming System being proposed via this report is integrated with Arduino Technology  mixed with different Sensors and a Wifi module producing live data feed that can be obtained online from  Thingsspeak.com. The product being proposed is tested on Live Agriculture Fields giving high accuracy over 98% in data feeds. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title of the paper** | **Author’s** | **Published year** | **Inference** |
| Smart Farming System using IoT for Efficient Crop Growth | Abhiram MSD,  Jyothsnavi Kuppili,  N.Alivelu Manga | May 24,2020,  2020 IEEE International Students' Conference on Electrical, Electronics and Computer Science | In this paper, an IoT based advanced solution for monitoring the soil conditions and atmosphere for efficient crop growth is presented. The developed system is capable of monitoring temperature, humidity, soil moisture level using NodeMCU and several sensors connected to it. Also, a notification in the form of SMS will be sent to farmer's phone using Wi-Fi about environmental condition of the field. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title of the paper** | **Author’s** | **Published year** | **Inference** |
| IoT Enabled Smart Farming and Irrigation System | M. Rohith1 , R Sainivedhana2,  Dr. N. Sabiyath Fatima | July 01,2021 | The ultimate significance of this paper is that most of the manual work is reduced and watering process is automated with the help of devices as a result of which healthy plants can be grown, Water and electricity usage are saved by this paper. Even elderly people can easily do farming. This methodology with the use of IOT technology had made us achieve a healthy farming. Increase in agriculture also helps us to increase the economical state of the country. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title of the paper** | **Author’s** | **Published year** | **Inference** |
| IOT Based On Smart Agriculture | Mr.N.Sivakumar, Mr.P.Thiyagarajan, Ms.R.Sandhiya | International Journal of Scientific & Engineering Research Volume 9, Issue 4, April-2018 | It is used to get information’s about environmental conditions such as light, dust, humidity or sudden changes in temperature. Motion Sensors will create alert SMS/Text messages.That alert messages will be send to farmer’s phone when they detect motion. This model sends an alerting message to the farmer when the moisture level increases or decreases in the field. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title of the paper** | **Author’s** | **Published year** | **Inference** |
| Smart Agriculture Using Internet of Things | Ibrahim Mat, Mohamed Rawidean Mohd Kassim, Ahmad Nizar Harun, Ismail Mat Yusoff | 2018 IEEE Conference on open systems (ICOS) | Smart farming is a capital-intensive and hi-tech system of growing food cleanly and sustainable for the masses. It is the application of modern ICT (Information and Communication Technologies) into agriculture.The hardware and software of the IoT for smart farming will be presented besides sharing the successful results. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title of the paper** | **Author’s** | **Published year** | **Inference** |
| IOT BASED MONITORING SYSTEM IN SMART AGRICULTURE | Prathibha S R1, Anupama Hongal 2, Jyothi M P | © 2017 IEEE  2017 International Conference on Recent Advances in Electronics and Communication Technology | The paper aims making use of evolving technology i.e. IoT and smart agriculture using automation. Monitoring environmental factors is the major factor to improve the yield of the efficient crops. The feature of this paper includes monitoring temperature and humidity in agricultural field through sensors using CC3200 single chip. Camera is interfaced with CC3200 to capture images and send that pictures through MMS to farmers mobile using Wi-Fi. |