**Smart Farmer-IoT Enabled Smart Farming**

**Application**

**Literature survey:**

[1] K. Lakshmi Sudha et. al, “Smart Precision Based Agriculture Using Sensors”; It focuses on developing devices and tools to manage, display and alert the users using the advantages of a wireless sensor network system.

[2] Sushanth & G. Sujatha, “IoT Based Smart Agriculture”; The paper aims at making use of evolving technology i.e., IOT and smart agriculture using automation. Monitoring environmental conditions is the major factor to improve yield of efficient crops. The feature of this paper includes development of a system which can monitor temperature, humidity, moisture and even the movement of animals which may destroy the crops in agricultural fields through sensors using an Arduino board.

[3] M.K.Gayatri & J.Jayasakthi, “Providing Smart Agriculture Solutions to Farmers for Better Yielding Using IoT”; The cloud computing devices that can create a whole computing system from sensors to tools that observe data from agricultural field images and from human actors on the ground and accurately feed the data into the repositories along with the location as GPS coordinates.

[4] Chetan Dwarkani Met. al, “Design and Development of Precision Agriculture System Using Wireless Sensor Network”; This idea proposes a novel methodology for smart farming by linking a smart sensing system and smart irrigator system through wireless communication technology.

[5] Dr. V.Vidya Devi & G. Meena Kumari, “RealTime Automation and Monitoring System for Modernized Agriculture”; It proposes an idea about how an automated irrigation system was developed to optimize water use for agricultural crops. In addition, a gateway unit handles sensor information.

[6] S. R. Nandurkar et. al, “Agricultural Protection System Based on IoT”; It is designed for an IoT based monitoring system to analyze crop environments and the method to improve the efficiency of decision making by analyzing harvest statistics.

[7] Monika Jhuria et. al, “Image Processing for Smart Farming: Detection of Disease and Fruit Grading”; In this paper image processing is used as a tool to monitor the diseases on fruits during farming, right from plantation to harvesting. The variations are seen in colour, texture and morphology.

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[3] R.V. Krishnaiah Sanjukumar, "Advance Technique for Soil Moisture Content Based Automatic Motor Pumping for Agriculture Land Purpose", International Journal of VLSI and Embedded Systems-IJVES, vol. 04, September 2013.

[4] Fan TongKe, "Smart Agriculture Based on Cloud Computing and IOT", Journal of ConvergenceInformation Technology (JCIT), vol. 8, no. 2, Jan 2013.

[5] Davide adami, Fabio Vigoli, and Stefano Giordano, “IoT solution from crop protection against wild animals attack”, 2018.

[6]Dr. V.Vidya Devi & G. M Kumari, “Real- Time Automation and Monitoring System for Modernized Agriculture” ,International Journal of Review and Research in Applied Sciences and Engineering (IJRRASE) Vol3 No.1. PP 7-12, 2013.

[7]S. R. Nandurkar et. al, “Design and Development of Precision Agriculture System Using Wireless Sensor Network”, IEEE International Conference on Automation, Control, Energy and Systems (ACES), 2014.

[8] BezaNegashGetu, Hussain A. Attia, “Automatic Control of Agricultural Pumps Based on Soil Moisture Sensing”, IEEE conference publication,2015.

[9] HemlataChanne1,SukheshKothari2,DipaliKadam3, “Multidisciplinary Model for Smart Agriculture using Internet-of-Things (IoT), Sensors, Cloud-Computing, Mobile-Computing & Big-Data Analysis”, International Journal of Int.J.Computer Technology &Applications, Vol 6 (3),May-June 2015.

[10] Joaquín Gutiérrez, Juan Francisco Villa-Medina, Alejandra Nieto-Garibay and Miguel ÁngelPorta-Gadara, “Automated Irrigation System Using a Wireless Sensor Network and GPRS Module”, IEEE Transaction on Instrumentation and Measurement,Vol.63, No.1, January2014.