LITERATURE SURVEY
Smart Farming using IoT

By:-
THANOJ K R
G.V.VISWA BHARATH

Source: Ijraset

Authors: Abhilash Lad, Sumitra Nandre, Krishna Raichurkar, Sumit Zarkhande, Dr. Priya Charles

Abstract:

India is agriculture sector, on either side, is losing ground every day, affecting the ecosystem\'s output capacity. In order to restore vitality and put agriculture back on a path of higher growth, there is a growing need to resolve the issue. A large-scale agricultural system necessitates a great deal of upkeep, knowledge, and oversight. The IoT is a network of interconnected devices that can transmit and receive data over the internet and carry out tasks without human involvement. Agriculture provides a wealth of data analysis parameters, resulting in increased crop yields. The use of IoT devices in smart farming aids in the modernization of information and communication. For better crop growth moisture, mineral, light and other factors can be assumed. This research looks into a few of these characteristics for data analysis with the goal of assisting users in making better agricultural decisions using IoT. The technique is intended to help farmers increase their agricultural output.

2. Authors:

S.Kavya , Easwari Engineering College; Dr. K.M.Anandkumar, Easwari Engineering College; Dr. S.Sobitha Akila, Easwari Engineering College; G.Dinesh, Easwari Engineering College

Abstract:

Agriculture is the most important sector of the Indian economy that provides employment to almost half the population of the country. Traditional way of farming had less concentration on humidity, water level and climatic condition which affects a farmer dreadfully. This farming will lead a loss to farmer because of labour insufficiency, water scarcity, inefficient knowledge about pest, crop selection for their land. To overcome these issues smart farming comes into existence. Automation of the farming process is called as smart farming. Internet of Things help in collecting information about various conditions like weather, moisture, temperature and fertility of soil. Based on this information farmer can irrigate their crop with required amount of water, add required amount of fertilizer, and cultivate suitable crop based on the soil nature. This paper discusses about various technologies used in smart farming, various application in smart farming and issues of IoT in agriculture.

3.

Source:2016 IEEE 3rd World Forum on Internet of Things (WF-IoT)

Authors:

1.Andreas Kamilaris

GIRO Joint Research Unit, IRTA-UPC, Barcelona, Spain

2.Feng Gao

Insight Centre for Data Analytics, National University of Ireland, Galway, Ireland

3.Francesc X. Prenafeta-Boldu

GIRO Joint Research Unit, IRTA-UPC, Barcelona, Spain

4.Muhammad Intizar Ali

Insight Centre for Data Analytics, National University of Ireland, Galway, Ireland

Abstract:

With the recent advancement of the Internet of Things (IoT), it is now possible to process a large number of sensor data streams using different large-scale IoT platforms. These IoT frameworks are used to collect, process and analyse data streams in real-time and facilitate provision of smart solutions designed to provide decision support. Existing IoT-based solutions are mainly domain-dependent, providing stream processing and analytics focusing on specific areas (smart cities, healthcare etc.). In the context of agri-food industry, a variety of external parameters belonging to different domains (e.g. weather conditions, regulations etc.) have a major influence over the food supply chain, while flexible and adaptive IoT frameworks, essential to truly realize the concept of smart farming, are currently inexistent. In this paper, we propose Agri-IoT, a semantic framework for IoT-based smart farming applications, which supports reasoning over various heterogeneous sensor data streams in real-time. Agri-IoT can integrate multiple cross-domain data streams, providing a complete semantic processing pipeline, offering a common framework for smart farming applications. Agri-IoT supports large-scale data analytics and event detection, ensuring seamless interoperability among sensors, services, processes, operations, farmers and other relevant actors, including online information sources and linked open datasets and streams available on the Web.

4.

Authors:1.Anand Nayyar

Assistant Professor, Department of Computer Applications & IT KCL Institute of Management and

Technology, Jalandhar, Punjab

2.Er. Vikram Puri

M.Tech(ECE) Student, G.N.D.U Regional Center, Ladewali Campus, Jalandhar

Abstract:

 Internet of Things (IoT) technology has brought revolution to each and every field of common man's life by making everything smart and intelligent. IoT refers to a network of things which make a self-configuring network. The development of Intelligent Smart Farming IoT based devices is day

by day turning the face of agriculture production by not only enhancing it but also making it cost-effective

and reducing wastage. The aim / 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 Thingsspeak.com.sss

The product being proposed is tested on Live Agriculture Fields giving high accuracy over 98% in data

feeds.