

Literature Survey

Team No : PNT2022TMID08084

College Name : ADHIYAMAAN COLLEGE OF ENGINEERING,HOSUR

Department : ELECTRONICS AND COMMUNICATION ENGINEERING

Team Names :BALASURIYA V(TL), BHARATH KUMAR P, DINESHKUMAR C, GOWTHAM B

S.No	TITLE	PROPOSED WORK	TOOLS USED/ ALGORITHM	TECHNOLOGY	ADVANTAGES/ DISADVANTAGES
1.	INTERNET-OF-THINGS (IOT) BASED SMART AGRICULTURE TOWARDS MAKING THE FIELDS TALK	To Maintain The Field Water Level	Soil Moisture Sensor,waterlevel Senser	Arduino Technology	<ul style="list-style-type: none"> • Advantage: To Help The Farmer To Manage Inadequate Water Supply • Disadvantage: Expensive And Difficult To Manage To Farmers
2.	A RESEARCH PAPER ON SMART AGRICULTURE USING IOT	To Measure Soil Moisture And To Maintain The Level Of Water In Field	Internet Of Things (IOT), Smart Agriculture Using IOT, Arduino, Soil Moisture Sensor, Water Level Sensor	IOT And Smart Agriculture Using Automation	<ul style="list-style-type: none"> • Disadvantage: Position In Terms Of Farm Size, Technology, Trade, Government Policies, Climate Conditions Etc. • Advantage:this System Works Well In The Ideal Conditions And Further Improvement Can Be Made When The Conditions Are Not Ideal Like Proper Illumination Or Lightning.

S.No	TITLE	PROPOSED WORK	TOOLS USED/ ALGORITHM	TECHNOLOGY	ADVANTAGES/ DISADVANTAGES
3.	SMART FARMING USING IOT, A SOLUTION FOR OPTIMALLY MONITORING FARMING CONDITIONS	Our Aim Was To Create A Prototype Model, Which Can Be Easily Installable In The Field And Is Also Easy To Use As Farmers Might Not Have The Technical Knowledge.	Esp32s Node MCU, Which Is Wireless And Wi-fi Enable	. It Is An Iot Device With The Concept Of "Plug And Sense". Live Data For Different Parameters Can Be Seen On Laptop And Smart Phones	Advantage:thus, We Can Conclude That This Porotype Will Definitely Help Farmers In Small Farmland To Effectively Monitor Their Crops With The User-friendly App And Other Alert Means. Disadvantage:fault Sensor Or Data Processing Engines Can Cause Faulty L Decisions Which May Lead To Over Use Of Water, Fertilizers And Other Wastage Of Resources.
4.	SMART AGRICULTURE USING IOT	This Project Remotely Measure And Monitor Water Moisture Levels In The Soil To Ensure That Crops Are Getting Optimalwater Resources	<ul style="list-style-type: none"> Automatic Control Of Agricultural Pumps Based On Soil Moisture Sensor 	A Control System In An Intelligent Farming By Using Arduino Technology	<ul style="list-style-type: none"> Advantages:to Save Farmer's Effort, Water And Time Has Been The Most Important Consideration Disadvantage: The Major Challenge Lies In Trapping The Field Animals Such As Rats, Snakes Etc

S.No	TITLE	PROPOSED WORK	TOOLS USED/ ALGORITHM	TECHNOLOGY	ADVANTAGES/ DISADVANTAGES
5.	SMART AGRICULTURE SYSTEM USING IOT TECHNOLOGY	SMART (S-specific, M-measurable, A- Attainable, R-realistic T-time Bound) Soil Moisture Sensor, Raindrop Sensor, Humidity Sensor, Temperature Sensor, Arduino, Networking, WIFI And IOT (Internet Of Things)	ARDUINO UNO BOARD, Soil Moisture Sensor, RAINDROP SENSOR, TEMPERATURE & HUMIDITY SENSOR	Use Of Wireless Sensor Networking System	<ul style="list-style-type: none"> • Advantage:to Convert Loss Making Traditional Farming Into High Crop Yielding And Profit Making Proposed Smart Agriculture System Is Brought Out • Disadvantage:left The Traditional Agriculture Farmers Much More Expensive And Risky.
6.	IMPLEMENTATION OF SMART FARMING USING IOT	Use Of Soil Moisture Sensors In Identifying The Conditions For Supplying Water To Fields.	<ul style="list-style-type: none"> • Two PIR Sensors Are Used • One Of The Them Is Named As „WEST PIR“ And Other Is Named As „EAST PIR 	In Future, Instead Of The ARDUINO UNO Microcontroller, The Raspberry Pi 3 Microprocessor Is Used	<ul style="list-style-type: none"> • Advantag:this Design Improves The Real-time Performance Of The User To The Agricultural Environment Change • Disadvantage:more expensive

THANK YOU