IBM NAAN MUDHALVAN

PROJECT TITLE: SMART WATER SYSTEM

COLLEGE: PERI INSTITUTE OF TECHNOLOGY

DEPT: ELECTRONICS AND COMMUNICATION ENGINEERING

DOMAIN: INTERNET OF THINGS (IOT)

Submitted By

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PHASE-2

2.1 Innovation:

- In this, we present the theory on real time monitoring of water quality and quantity using IoT. The system consists of Arduino, microcontroller, different type of sensors like water flow sensor, pH and turbidity sensor and ultrasonic sensor. The Arduino is the main processor of the system which control and process the data generated by the sensors. A Wi-Fi module is connected to the Arduino device which help to transfer the data to the cloud over internet. The ultrasonic sensor helps to measure the water level when the water flow reach certain level then the water flow can be stopped automatically by turning the motor off or close the water flow in pipe by the help of Arduino. The water flow sensor measure the quantity of water flow through the pipe in a given time, this data will be sent to cloud for storage and analysis purposes. The other sensor like temperature, pH and turbidity sensor measure the water quality and help to determine whether the water is useful for drinking or any agricultural purposes.

2.2 How To Use Cloud?

- This system is using Wi-Fi module (Esp8266) to send the sensor data to the cloud. All the sensors are connected with Wi-Fi module. Wi-Fi module needs the internet. So here Mobile data or Wi-Fi is the access point for the internet. And after all this data sends to the cloud. The following figure show the data stored in cloud

2.3 Conclusion:

- In this paper, a prototype water monitoring system using IoT is presented. So this application will be the best challenger in real time monitoring & control system and use to solve all the water related problems.