Smart water quality monitoring system for Real time Applications

The monitoring of the water standard is a complex process as it has several laboratory testing methods and time consuming. To overcome this difficulty, a real time monitoring of water goodness by using IoT has been proposed. Internet of things together with the Sensor water meters for the effectiveness, govern the quality of water. Here we are executing, system for monitoring the water goodness through different sensors -turbidity, pH, temperature, conductivity. Internet of Things (IoT) and its services are has become a part of our everyday life, ways of working, and business. The research is going on, in developing crucial building blocks and models for the next generation. Internet services are supported by a plethora of connected things and with the help of efficient and intelligent mobile network usage IoT has revolutionized the world. IoT is changing the future of technologies and how objects behave around us. Hence we can access any kind of information and command objects at the touch of fingertips.

IoT Based Real-time River Water Quality Monitoring System

Current water quality monitoring system is a manual system with a monotonous process and is very time-consuming. This paper proposes a sensor-based water quality monitoring system. The main components of Wireless Sensor Network (WSN) include a microcontroller for processing the system, communication system for inter and intra node communication and several sensors. Real-time data access can be done by using remote monitoring and Internet of Things (IoT) technology. This project can be extended into an efficient water management system of a local area. Moreover, other parameters which wasn’t the scope of this project such as total dissolved solid, chemical oxygen demand and dissolved oxygen can also be quantified. So the additional budget is required for further improvement of the overall system.

Real Time Water Quality Monitoring System

Water pollution is one of the biggest fears for the green globalization. To prevent the water pollution, first we have to estimate the water parameters like pH, turbidity, conductivity etc, as the variations in the values of these parameters point towards the presence of pollutants. At present, water parameters are detected by chemical test or laboratory test, where the testing equipments are stationary and samples are provided to testing equipments. Thus the current water quality monitoring system is a manual system with tedious process and is very time consuming. In order to increase the frequency, the testing equipments can be placed in the river water and detection of pollution can be made remotely. An important fact of this system is the easy installation of the system that is the base station can be placed at the local residence close to the target area and the monitoring task can be done by any person with very less training at the beginning of the system installation. Performance modelling is one important aspect in different environment to be studied in the future as different kind of monitoring application requires different arrangement during system installation.