Abstract:

Detection of water quality was manually performed where water samples were obtained and sent for examination to the laboratories which is time taking process, cost and human resources. Such techniques do not provide datain real-time. The proposed water quality monitoring system is consistingof a microcontroller and basicsensors, is compact and is very useful forpH, turbidity, water level detection, temperature and humidity of

theatmosphere, continuous and real-time data sending via wireless tech-nology to the monitoring station.This projected the water quality observation interface sensors with quality observation with IOT setting. WQM selects parameters of water like temperature,pH level, water level and CO2 by multiple different device nodes. This methodology sends the information to the web server. The data updated at intervals within the server may be retrieved or accessed from anyplace within the world. If the sensors do not work or get into abnormal conditions, then a buzzer will be

ON.So for this project we are going to effectively analyse the two components involved in an real time quality monitoring system.For the hardware part we are going totake an pH sensor to analyse the hydoxilic content in river water and an ping pin to connect it to the ardino uno RD which is an controller used to control the sensor nodes.For the software part we are going to use Node RED in a perfectly efficient platform named IOT Watson platform . Neural network models in Big Data Analytics and water quality management and following it is the Real-time monitoring of water quality by using IoT

integrated Big Data Analytics is where we propose our project software phase.So after we develop the software code we are going to load in the hardware component and its important to tell that we need an bigger data storage for all those temperature,turbidity,and pH values of river water.For that purpose we bring iot Watson platform interconnected to NodeRed that is directive to Web UI forming the cloud services and storage.we are going to use python language since its Simple in nature also it's Highly Compatible.As it's Object-Oriented it performs easy compilation and

Increases Speed and Productivity.Lots of Libraries and Built-in Data Structures for which it greatly account for our data storage issue.In our project we use WSN technology to perform a low and consistent energy management for wireless connection of sensor nodes. Also we perform an special technology-based methodology to construct a battery that's much efficient and shock proof.Overall creating a much efficient product that we present to people which is beneficial and both Safe and Affordable.