LITERATURE SURVEY

Real-Time River Water Quality Monitoring and Control System

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Team ID	PNT2022TMID07710
Project Name	IOT Based Real-Time River Water QualityMonitoring and Control System

1. **Water quality monitoring system based on Internet of Things**
   Author: Chengcheng Zhang, Jian Wu, Jiancheng Liu
   Publication: IEEE 2020

   Chengcheng et al presents a solution that integrates the design of STM32 single- chip microcomputer, sensors, WiFi wireless transmission and remote water quality management system. It monitors water quality turbidity, pH value, temperature and uploads the data to the management center through wireless communication.

2. **IoT Based Real-time River Water Quality Monitoring System**
   Author: Mohammad Salah Uddin Chowdurya, Talha Bin Emran b, Subhasish Ghosha , Abhijit Pathak a, Mohd. Manjur Alama, Nurul Absar a, Karl Andersson c, Mohammad Shahadat Hossain d
   Publication: Science Direct 2019

   Mohammad et al proposed a manual method for sensor-based water quality monitoring system with high frequency, high mobility, and low power. Here the data collected at the site can be displayed in a visual format on a server PC with the help of Spark streaming analysis through Spark MLlib, Deep learning neural network models, Belief Rule Based (BRB) system and is also compared with standard value.

3. **Efficient Cloud Based Real Time Water Quality Monitoring System Using Internet Of Things**
   Author: M.Usha Rani, Dr.R.Alageswaran, Sathish Kumar A
   Publication: JASC: Journal of Applied Science and Computations(2018)

   M.Usha Rani et al proposes water sampling system with required sensor. Whenever the water level in the lakes or ponds reaches the lower/upper level it is identified and notification is sent to the administrator. It can also predict overflow and water scarcity in future from the past results. The parameters like PH, calcium, sulphate and nitrate ions that is present in the water is also identified.

4. **Water Quality Monitoring System Using IOT**
   Author: Dr. Nageswara Rao Moparthi, Ch. Mukesh, Dr. P. Vidya Sagar
   Publication: IEEE 2018

   Dr. Nageswara Rao Moparthi et al implements Water Quality Monitoring System for municipal water tanks and drinking water reservoirs using an Arduino board and GSM module. This module can be easily implemented when a wireless oxygen sensor is used.

5. **Real-Time Water Quality Monitoring System**
   Author: Jyotirmaya Ijaradar1, Subhasish- Chatterjee
   Publication: International Research Journal of Engineering andTechnology (IRJET) (2018)

   Jyotirmaya et al proposed real-time water quality monitoring system for water health at residential places. It measure various chemical and physical properties of water like pH, temperature and particle density of water using sensors and send the data to cloud and trigger an alarm when discrepancies are found in water quality.