

TEAM ID	PNT2022MID31710
PROJECT NAME	Real-Time River Water Quality Monitoring and Control System
DATE	10/11/2022

TITLE	PUBLICATION DETAILS	METHODOLOGY /ALGORITHMS	MERITS	DEMERITS
Smart Automatic Control and Monitor Water Purification Using Wireless Sensor System	018 First International Conference on Secure Cyber Computing and Communication (ICSCCC)	<ul style="list-style-type: none"> <li><input type="checkbox"/> The design model has worked on the wireless sensors system to find out the quality measures of water.</li> <li><input type="checkbox"/> It implements PH, Turbidity, ultrasonic and temperature sensors for providing good quality of water in tank.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Inexpensive (&lt;\$1,000) and easy to use</li> <li><input type="checkbox"/> Fast response times</li> <li><input type="checkbox"/> Not influenced by color or turbidityCost efficient</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Low resolution, accuracy, and precise</li> <li><input type="checkbox"/> Subject to ionic interferences</li> </ul>
Water quality monitoring using wireless sensor networks: Current trends and future research directions	K. S. Adu-Manu, C.Tapparello, W. Heinzelman, F. A. Katsriku, and J.-D. Abdulai CM Transactions on Sensor Networks (TOSN), vol. 13, p. 4, 2017	<ul style="list-style-type: none"> <li><input type="checkbox"/> Survey of the current state of the art in the design and implementation of WSN- based WQM systems. Describing a framework for WSN-based WQM systems and discussing the technologies used at each stage in the monitoring process</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Modern smart water monitoring systems analyze data continually and instantly alert users to changes in the system, giving peace of mind.</li> <li><input type="checkbox"/> Improved accuracy of measurements, If sampling is the sole way that water quality is checked.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> As it is wireless in nature, it is prone to hacking by hackers.</li> <li><input type="checkbox"/> It can not be used for more speed</li> <li><input type="checkbox"/> communication as it is designed for loess speed applications.</li> </ul>

Smart Sensor Node of WSNs for River Water Pollution Monitoring System	2019 International Conference on Advanced Communication Technologies and Networking (CommNet), 2019, pp. 1-5, doi: 10.1109/COMMNET.2019.8742371.	<input type="checkbox"/> The authors have utilized Wireless Sensor Networks (WSN) and have exploited the advantage of its interoperability and communication to multiple sensors. <input type="checkbox"/> With this, they have also monitored the water level and flow rate for the purpose of generating flood alerts	<input type="checkbox"/> Accurate pollution detection. <input type="checkbox"/> Using WSN for to communicate easily	<input type="checkbox"/> Process is difficult in bigger scale.
An IoT Based Smart Water Quality Monitoring System using Cloud	Ajith Jerom B and Manimegalai R 2020 International Conference on Emerging Trends in Information Technology and Engineering (ic- ETITE)	<input type="checkbox"/> The proposed system monitors the quality of water relentlessly with the help of IoT devices, such as, Node MCU.. <input type="checkbox"/> The prototype is designed in such a way that it can monitor the number of pollutants in the water. Multiple sensors are used to measure various parameters to assess the quality of water from water bodies. <input type="checkbox"/> The results are stored in the Cloud, deep learning techniques are used to predict whether the water suitable.	<input type="checkbox"/> Cost efficient <input type="checkbox"/> Analyse the problem in each part quality system	<input type="checkbox"/> Less accuracy