

# **Efficient Water Quality Analysis and Prediction using Machine Learning**

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What is the aim of the project?	The proposed methodology achieves reasonable accuracy using a minimal number of parameters to validate the possibility of its use in real-time water quality detection systems.
What are the boundaries of the problem?	There is no boundary limit for the issue because if anyone drinks unpurged or contaminated water, they will be affected.

What is the issue?	The most important behavioral risk factors of this disease can only be identified by taking samples of the contaminated water and then researching that water by using datasets and then only we can find the issue.
Where is the issue coming from?	It majorly occurs to the people on the riverside who use the river water. If the water had any harmful chemicals present, it would affect the people with a disease.

<p>Why is it important that we fix the problem?</p>	<p>It is very crucial to develop an application that detects the disease because rapid urbanization and industrialization have led to a deterioration of water quality at an alarming rate, resulting in harrowing diseases. Water quality has been conventionally estimated through expensive, time-consuming lab and statistical analyses. In this, we are simply doing the project to find the chemicals using data science.</p>
<p>Which solution can be used to address this issue?</p>	<p>This study aims to predict water quality components using Bi-S-SRU (Bi-directional Stacked SRU) deep learning prediction model.</p>
<p>What methodology was used to solve the issue?</p>	<p>The estimated water quality in our work is based on nine parameters: pH, Hardness, Solids, Chloramines, Sulfate, Conductivity, Organic carbon, Trihalomethanes, Turbidity, and pH.</p>

