## EFFICIENT WATER QUALITY ANALYSIS AND PREDICTION - USING MACHINE LEARNING

## PROBLEM STATEMENT:

Water constitutes 70% of the earth's surface. It is considered as one of the most important resources for sustaining life. Rapid Industrialization and urbanization have led to contamination of water at an alarming rate which causes grieving diseases. Water quality degradation is one of the most critical problems currently faced by India. India is ranked 120th among 122 countries in water quality index, with nearly 70% of water body contaminated. So, there rise a necessity for water quality treatment and analysis. Owing to the dearth of real time water quality assessment and decision support systems in India, water quality assessment is currently carried out only in research laboratories where data is processed in non-real time. For this purpose, data analysis with a number of machine learning algorithms have been applied to predict the quality of water.