EFFICIENT WATER QUALITY ANALYSIS AND PREDICTION USING MACHINE LEARNING.

LITERATURE SURVEY.

S.NO	APPROACH	DESCRIPTION	AUTHOR	YEAR	ADVANTAGE	DISADVANTAGE
1.	Efficient Water Quality Prediction for Indian Rivers using Machine Learning.	The AI calculation Is utilized for anticipating the outcome. For Example, Gradient Boost, Random Forest, Decision tree and Deep Learning Algorithms were used.	Yogalakshmi S Mahalakshmi A	2021	Elective Technique for AI foresees water quality utilizing negligible and effectively accessible water quality.	Incorporating the findings of this exploration in an enormous scope of IOT-based internet observing framework utilizing the sensors.
2.	Smart Urban Water Quality Prediction System using Machine learning.	A webpage interfaced with the Machine Learning model is created to upload sensor values and the corresponding water quality is predicted.	Bharat Singh, Nirmitha, Kaviya S	2021	This project can be used in urban areas to predict the quality of the drinking water of disease such as dysentery, typhoid due to the consumption of water.	The lifetime of the low cost sensors are less and might require the frequent purchase of few sensors. Internet connectivity and times may be a problem, since data won't be updated.

3.	Prediction of irrigation water quality parameters using Machine Learning models in a semi-arid environment.	Predict the irrigation water quality parameters that are used for assessing water suitability in agricultural purposes using measurable input variables such as Electric Conductivity (EC) and pH parameters.	AliEl Bilali, Abdeslam Taleb	2020	Implementing sensors to measure the input features at water resources that are used for agricultural purposes.	It can be Expensive. Not all the models have been able to numerically predict the magnesium absorption ration (MAR) and permeability index (PI), so classification models may able to improve the accuracy of predictions.
4.	Predicting and Analyzing Water Quality parameters using Machine Learning models in semi-arid environment.	Water quality prediction model with the help of water quality factors using Artificial Neural Network (ANN) and time-series analysis.	Khan, Yafra, Chain Soo see	2016	Reliable one with the prediction accuracy. The future of water quality modelling seems to be very bright and remarkable.	There needs to be a more user-centric approach towards tackling the water quality issues, by using user-friendly tools and an interactive environment so that the solution actually benefits in tackling water quality issues.
5.	Predicting the water quality and monitoring it.	Plan and foaster a minimal expense framework for the ongoing observing of water quality utilizing the Internet of Things (IOT) and Machine Learning (ML)	Geetha.G out hami et al	2017	Implementing sensors to measure the input features at water resources. And using Machine Learning we can monitor it.	The lifetime of the low cost sensors are more and might require the frequent purchase of few sensors. Internet connectivity and times may be a problem, since data won't be updated