

S.NO	AUTHOR'S NAME	PROPOSED WORK
01	Daud et al	Gathered water samples from different areas of Pakistan and tested them against different parameters using a manual lab analysis and found a high presence of E. coli and fecal coliform due to industrial and sewerage waste.
02	Alamgir et al	Tested 46 different samples from Orangi town, Karachi, using manual lab analysis and found them to be high in and total fecal coliform count. After getting familiar with the water quality research concerning Pakistan, we explored research employing machine learning methodologies in the realm of water quality
03	Shafi et al	Estimated water quality using classical machine learning algorithms namely, Support Vector Machines (SVM), Neural Networks (NN), Deep Neural Networks (Deep NN) and k Nearest Neighbors (kNN), with the highest accuracy of 93% with Deep NN. The estimated water quality in their work is based on only

		three parameters: turbidity, temperature and pH, which are tested according to World Health Organization (WHO) standards.
04	Ahmad et al	Employed single feed forward neural networks and a combination of multiple neural networks to estimate the WQI. They used 25 water quality parameters as the input. Using a combination of backward elimination and forward selection selective combination methods, they achieved an R ² and MSE of 0.9270, 0.9390 and 0.1200, 0.1158, respectively. The use of 25 parameters makes their solution a little immoderate in terms of an inexpensive real time system, given the price of the parameter sensors.
05	Sakizadeh	Predicted the WQI using 16 water quality parameters and ANN with Bayesian regularization.

06	Rankovic et al.	Predicted the dissolved oxygen (DO) using a feedforward neural network (FNN). They used 10 parameters to predict the DO, which again defeats the purpose if it has to be used for a Real time WQI estimation of an IOT system.
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