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Water Quality Monitoring using Machine Learning

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Abstract : Although water is the most important element present for the survival of mankind, there has been a tremendous increase in its contamination level due to rising population and urbanization.

In our research paper we will focus on the monitoring of water using machine learning technology. Technology has led to the development of various tools which will create a better scope for future generations to make things smarter and faster. The main goal of the water monitoring system using machine learning is to enhance the prior technology that uses sensors.

Machine learning used along with sensors makes the water monitoring system more advanced as the water quality based on certain water parameters, like the chemical level and the contamination source, can be known within a few seconds by the cloud if it detects any illogical balance in water. Therefore, through proposed system we will try to know the contamination source in Yamuna river considering some water parameters as important factors. The main aim of the paper is to observe the role of machine learning in water quality monitoring which is more advanced than sensor technology used in traditional systems.

Keywords: Machine Learning, Water Monitoring.

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Introduction:

Water is important for the survival although its contamination due to various human activities has been increasing at an alarming rate. Different water companies which supply water had taken many preventive measures to stop the growth of water contamination by using traditional method of using different water sensors to monitor relevant water quality which doesn't provide an automated system. It's here that machine learning comes into play. The word "Machine learning" was first given by Arthur Samuel in 1952 which means training the system to perform a