



NARASARAOPETA ENGINEERING COLLEGE

(AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

2023-2024

BATCH NUMBER	DG5
TEAM MEMBERS	Baddepudi Deepthi(20471A05J8) Shaik Farzana (20471A05M8) Kattula YaminiSaisri(21475A0501) Madhavabhotla S.V.L.Bharani(21475A0520)
GUIDE	Y.Chandana M. Tech
TITLE	Water Quality Prediction
DOMAIN/TECH NOLOGY	MACHINE LEARNING
BASE PAPER LINK	https://www.sciencedirect.com/science/article/pii/S0957582022010473
DATASET LINK	https://www.kaggle.com/datasets/vanthanadevi08/water-quality-prediction

SOFTWARE REQUIREMENT S	Browser: Any latest browser like Chrome Operating System: Windows 10 Server or later Python (COLAB)
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HARDWARE REQUIREMENT S	Processor: Intel® Dual Core 2.0GHz minimum Hard Disk: 1TB minimum RAM: 8GB or more
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ABSTRACT	<p>Water quality prediction is essential for various sectors, including public health, agriculture, and environmental management. Machine learning, a subset of artificial intelligence, has shown promising results in predicting various water quality parameters, such as pH, turbidity, dissolved oxygen, and pollutant concentrations. By utilizing historical data and environmental factors, machine learning models can forecast water quality conditions, enabling proactive and efficient decisionmaking.</p> <p>The application of machine learning in water quality prediction is vast and includes real-time monitoring of drinking water sources, early detection of pollution events, optimizing water treatment processes, and managing water resources in agriculture. Additionally, machine learning can assist in forecasting the impact of climate change on water quality, facilitating more informed adaptation and mitigation strategies.</p> <p>By harnessing the power of data and advanced algorithms, we can better understand the dynamics of water quality, mitigate potential risks, and enhance the quality of life for communities worldwide.</p>
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