

# Weather Prediction using Machine Learning

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**Abstract:** *This research leverages machine learning, incorporating the OpenWeather API, for advanced weather prediction. By harnessing historical and real-time meteorological data, including temperature, humidity, and wind speed, the model enhances accuracy. Various machine learning algorithms are explored for optimal Rainfall prediction, emphasizing efficiency and adaptability. Integration with the OpenWeather API enables real-time forecasting, with continuous updates for sustained precision. The development of a user-friendly interface broadens access to predictions, benefiting farmers, disaster management, and the public. This innovative approach, combining machine learning and the OpenWeather API, demonstrates a promising advancement in weather prediction for informed decision-making.*

**Keywords:** OpenWeather.

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