DEVELOPMENT OF AN AI -BASED SYSTEM FOR MONITORING AND MANAGING CARBON EMISSIONS IN PLACES IN TAMIL NADU

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This project takes a modern, high-tech approach to detecting air pollution in India, using advanced tools and, in particular, the Bi-Long Short-Term Memory (Bi-LSTM) algorithm. This system collects real-time data on various air pollutants, with the Bi-LSTM algorithm—a deep learning tool known for recognising long-term dependencies and time-based patterns— significantly enhancing accuracy and efficiency in analysing and predicting pollutant levels. Thanks to this cutting-edge machine learning technique, the system can not only track current pollution levels but also predict possible changes, providing valuable insights into air quality. By building on Bi-LSTM-based methods, the project aims to transform air quality monitoring in India, supporting learnt decisions, quick responses, and constant efforts to reduce the impact of air pollution across different regions.

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