**AQI Worldwide Monitoring**

**Background:** Air pollution is a critical global concern, with far-reaching impacts on human health, ecosystems, and climate. Monitoring and predicting air quality is vital for mitigating these adverse effects and informing policy interventions.

**Abstract:** This project aims to analyze and forecast Air Quality Index (AQI) levels worldwide using machine learning and data analytics. By leveraging data from sensors and public APIs, the system identifies pollution trends, predicts AQI fluctuations, and provides actionable insights. Advanced statistical models and machine learning algorithms are employed to uncover seasonal patterns and anticipate pollution spikes. Interactive dashboards and visualizations present the data in a user-friendly format, enabling policymakers and citizens to make informed decisions. This project demonstrates how AI can empower environmental sustainability efforts.

Key Features:

* Integration of real-time environmental data.
* Machine learning models for trend analysis and AQI prediction.
* Visualization tools to display air quality levels on interactive maps or dashboards.