

AIR QUALITY IN DUBLIN USING IOT AND MACHINE LEARNING



PROBLEM STATEMENT

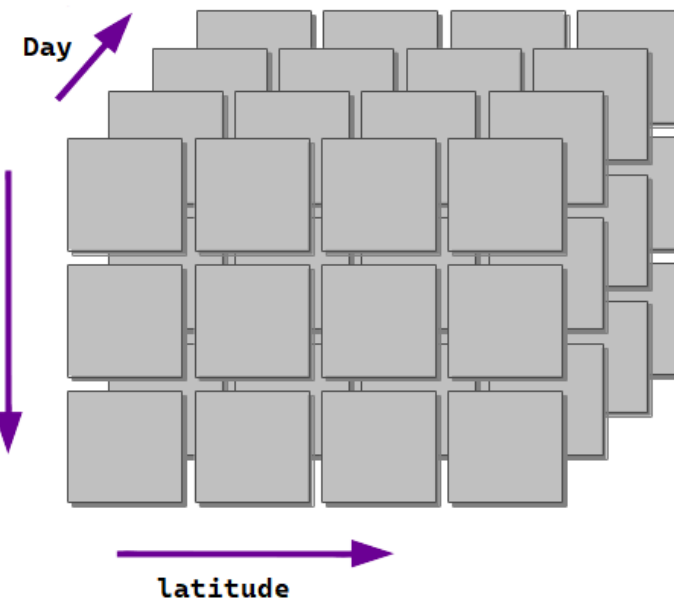
- Data Collection using DPD vehicles equipped with sensors
- Air Quality Indicators: pm2.5 and pm10, GPS coordinates, date and time

Handling Missing Values: (~80% missing values)

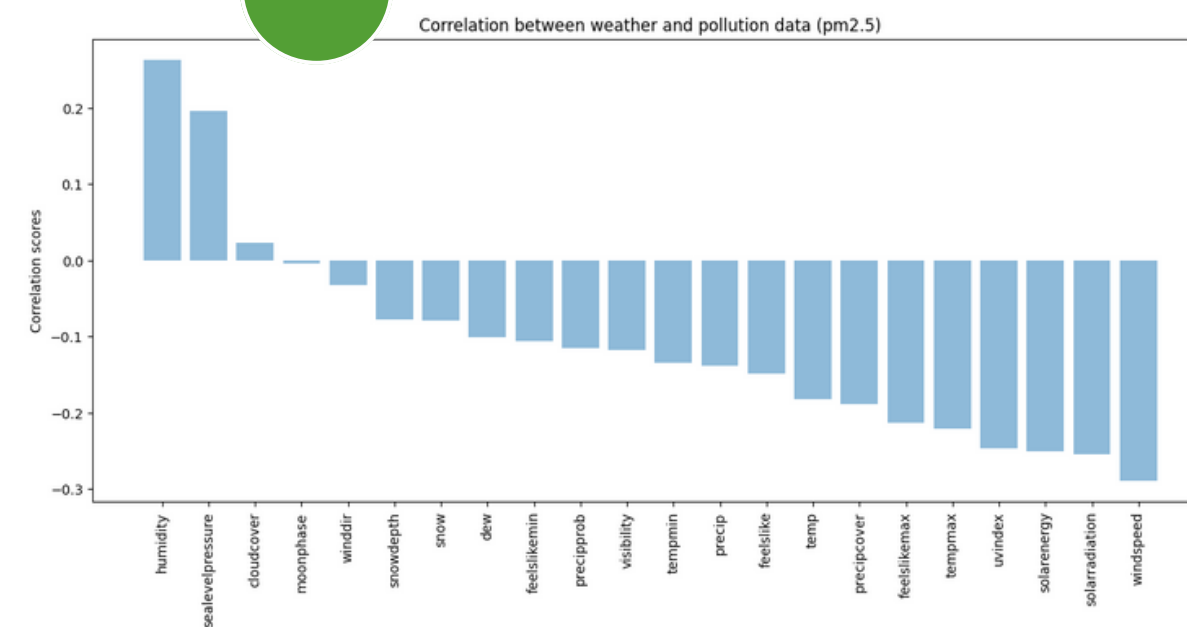
- Spatial Missing Values: Unequal distribution of data
- Temporal Missing Values: Days with little or no data

Objective:

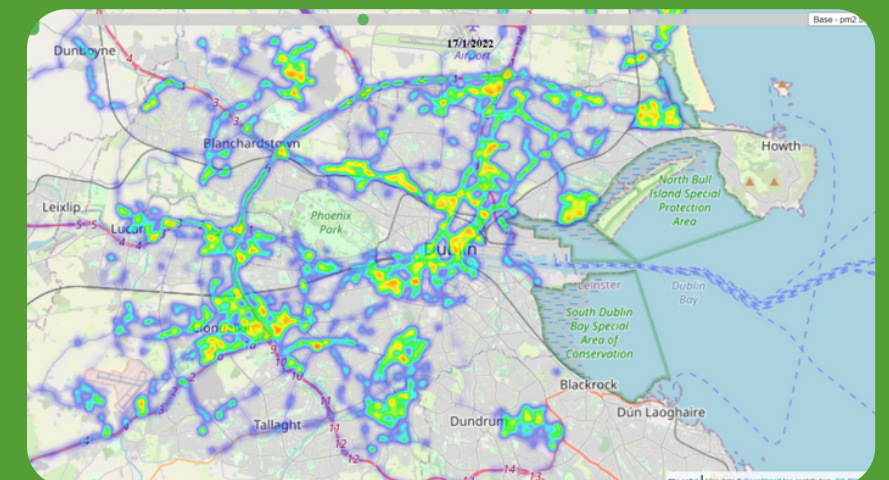
Create a complete and reliable dataset for in-depth analysis of air quality in Dublin



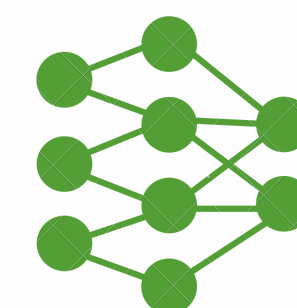
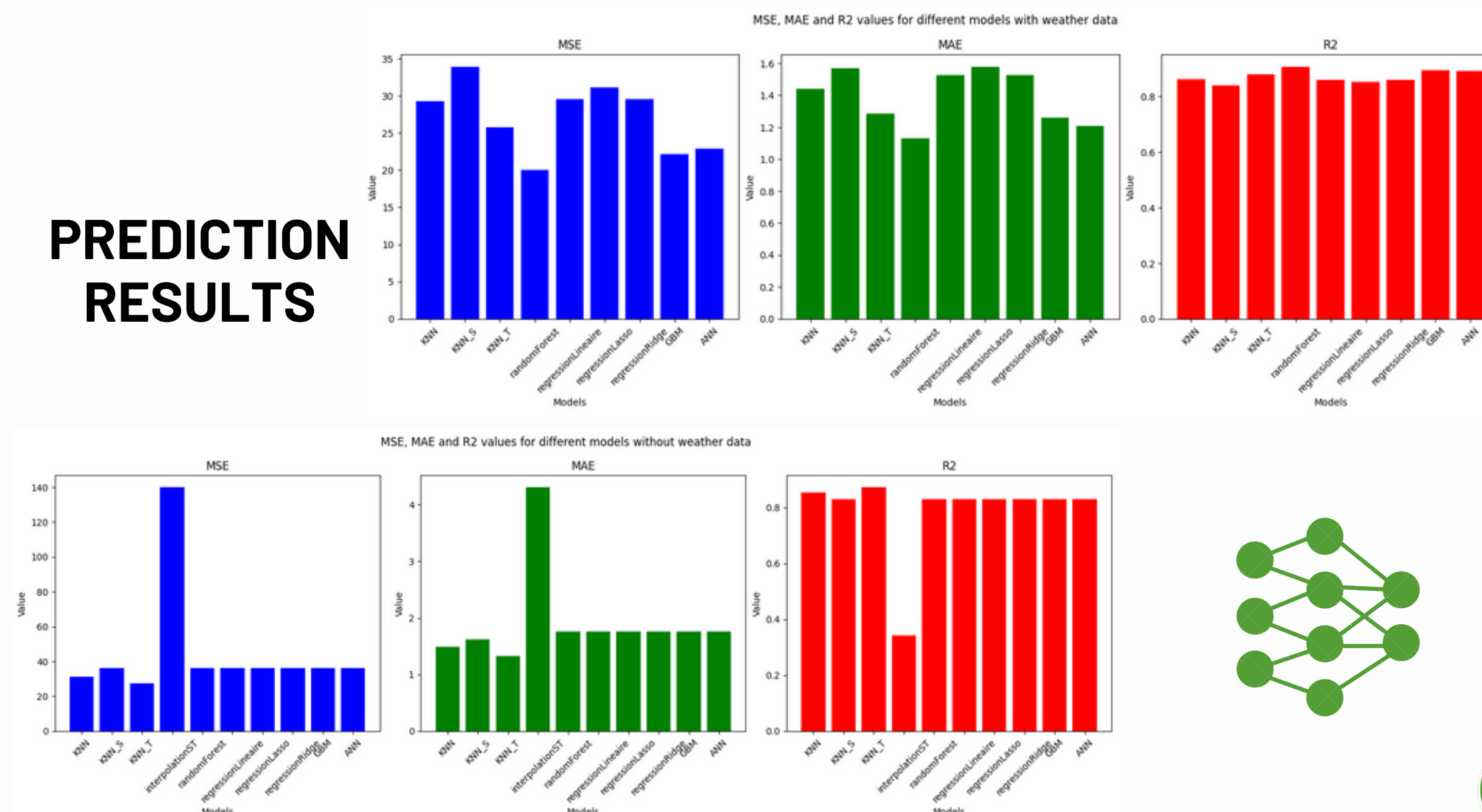
3D MATRIX



CORRELATION WITH WEATHER DATA



PREDICTION RESULTS



PREDICTION RESULTS

