Responsible Team Member Progress Report

Plan

This trimester, I plan to monitor the data preparation and integration processes to make a significant technical contribution to the success of our research on the correlation between air pollution and respiratory illness. This involves keeping geographic and temporal alignment, solving missing or inconsistent data, and combining the World Air Quality Index data with AIHW respiratory hospital admission records. Regression modelling approaches will be used to detect possible relationships, and geographical visualizations, such heat maps, will be used to clearly and practically explain our findings. To ensure a long-lasting technical effect, I also hope to help establish templates for visualisation and replicable scripts that may be utilized after this trimester.

Progress Update

Current progress on your planned lasting technical contributions:

• Initial project scoping and Agile workflow setup

Participated in the initial meeting with the team leader to define the project scope, objectives, and key deliverables. Contributed to setting up an Agile workflow to ensure regular progress tracking and adaptability in task prioritisation.

Data source identification and assessment

Researched and evaluated multiple Australian-based datasets from sources such as the World Air Quality Index and AIHW. Assessed datasets for completeness, licensing, and alignment with project requirements, ensuring they are suitable for later regression and geospatial analysis.

Repository and collaboration infrastructure

Contributed to setting up the project's GitHub repository, establishing folder structures and version control workflows for storing datasets, scripts, and documentation. This will help ensure replicability and maintain technical continuity beyond this trimester.

Data ethics and legal compliance review

Investigated data usage regulations, privacy implications, and licensing terms for selected datasets. Documented ethical considerations for the team to ensure compliance with Australian regulations on health and environmental data use.