

I, **Vinothkumar Palaniappan**, played a foundational role in the first iteration of the Metro Line Prediction project, with a particular focus on dataset design and feature engineering.

My core contributions included:

- **Dataset Structuring and Feature Identification:** I was primarily responsible for identifying the relevant attributes necessary for predicting metro line viability and usage. This involved analysing real-world urban planning patterns, understanding key demographic, geographic, and transportation-related variables, and compiling a structured dataset to effectively train the machine learning models.
- **Data Collection and Cleaning:** I assisted in curating a high-quality dataset by sourcing from multiple open data platforms, verifying consistency, and handling missing or inconsistent entries to ensure reliability and readiness for model training.
- **Documentation Support:** Toward the end of the first phase, I contributed to the project documentation, ensuring that the dataset preparation process, rationale behind selected features, and integration workflows were recorded for continuity and future enhancements.

During the second iteration, my involvement was limited due to my full-time internship and campus placement commitments. Though I exited midway through the second phase, my early groundwork in dataset creation and structuring laid a strong foundation for the project's continued development.