

Group 16: Week 1 Report

Project: Lane detection by clustering tracks- pNEUMA

Members:

- Adyan Shamin
- Ajay Adithya S
- Khanjan Purohit

Dataset Overview:

- **File Name:** 20181024_d1_0900_0930.csv
- **Source:** <https://open-traffic.epfl.ch>
- **Format:** CSV (Comma-Separated Values)
- **Contents:** Vehicle-related data from a specific time window (09:00 - 09:30)

Initial Steps:

1. **Data Loading:**
 - The dataset has been loaded using pandas.
 - Columns are displayed with `pd.set_option('display.max_columns', 200)` to view all data.
2. **Preliminary Exploration:**
 - Initial data points are accessed using `df.iloc[1][0]`.
 - File reading is performed manually using Python's `open()` function to inspect line structure.
3. **Data Structure Investigation:**
 - The delimiter used in the CSV file is ;.
 - The dataset's structure is being analyzed by printing lines from the file.

Next Steps:

- Perform data cleaning and preprocessing.
- Identify key features relevant to policy-making.
- Apply exploratory data analysis (EDA) using statistical and visualization techniques.
- Consider suitable machine learning models for predictive insights.