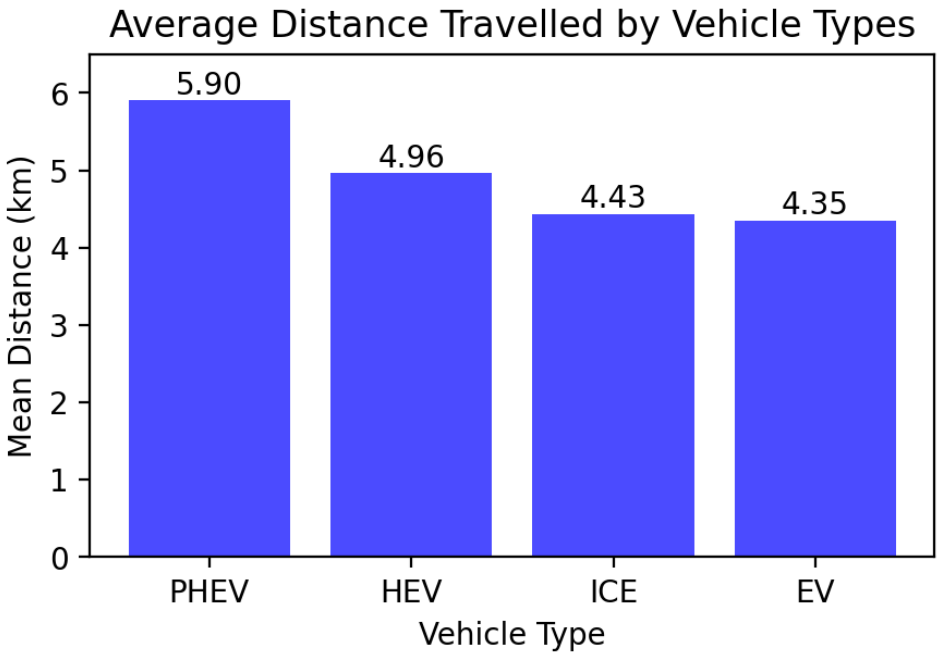
VED ML Data Loading & Preprocessing

Data Loading and Preprocessing | Data Visualization - Sample Plots | Exploratory Data Analysis

Average Distance Travelled by Vehicle Type

Calculate and display the average distance travelled for each vehicle type. This is done by grouping the DataFrame by 'Vehicle Type' and computing the mean of 'Distance[km]'. The result is then sorted in descending order of mean distance.

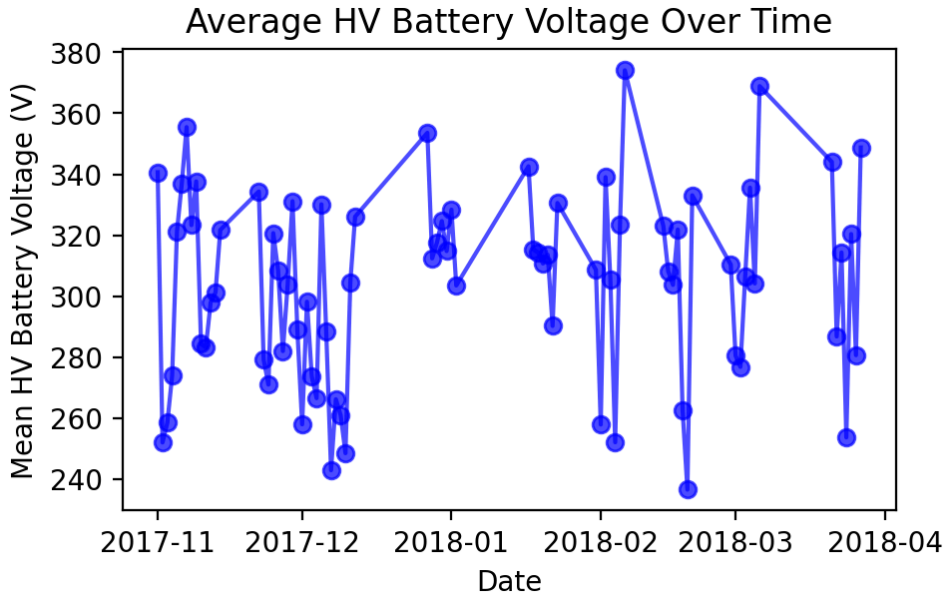
Plot a bar chart showing the average distance travelled by each vehicle type.



Average HV Battery Voltage Over Time

Calculate the average HV Battery Voltage for each day.

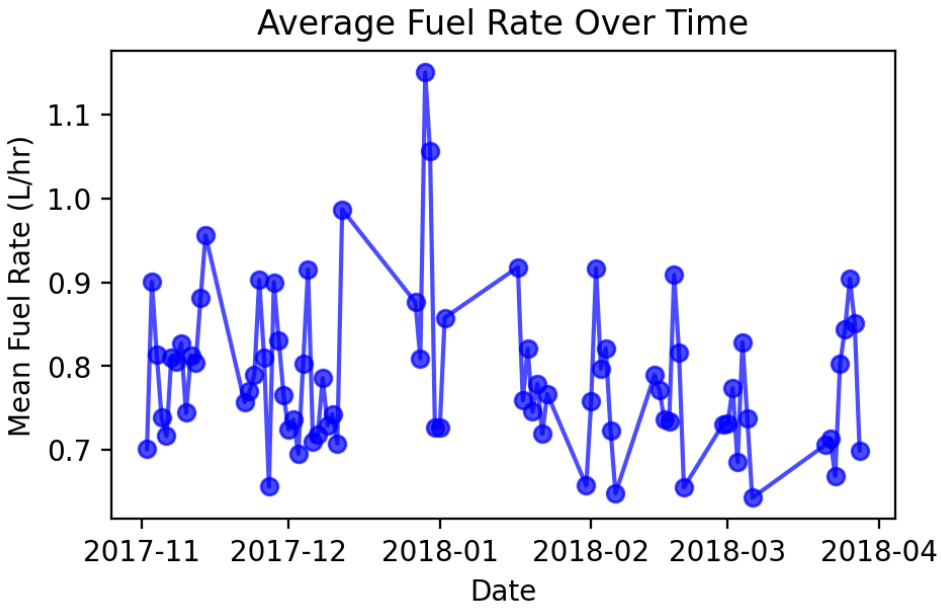
Plot the average HV Battery Voltage over time.



Average Fuel Consumption Rate (FCR) Over Time

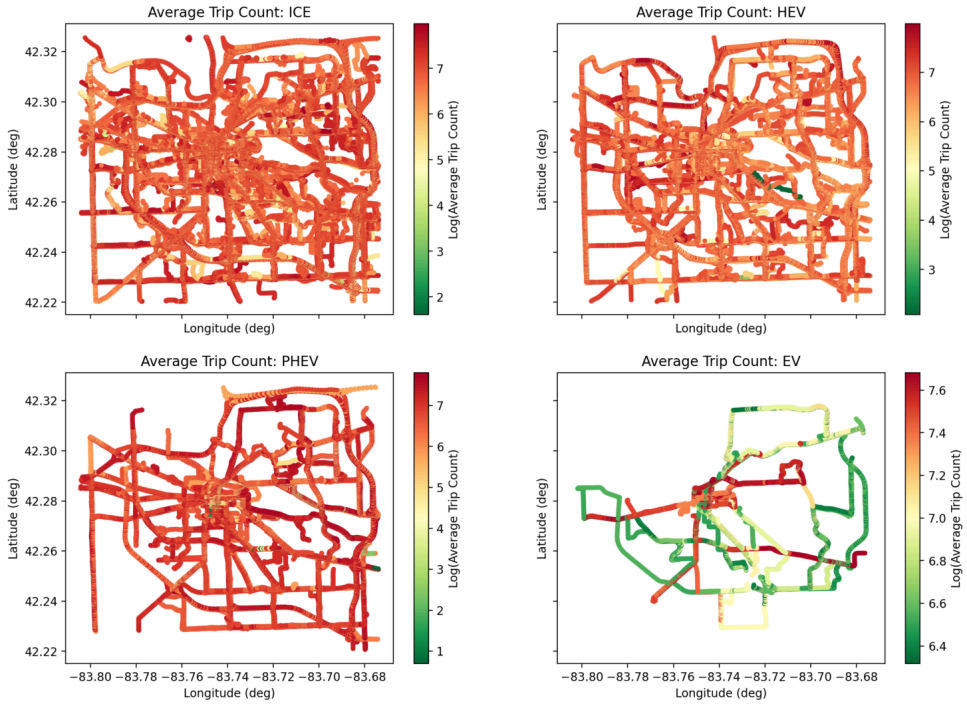
Calculate the average Fuel Consumption Rate (FCR) for each day.

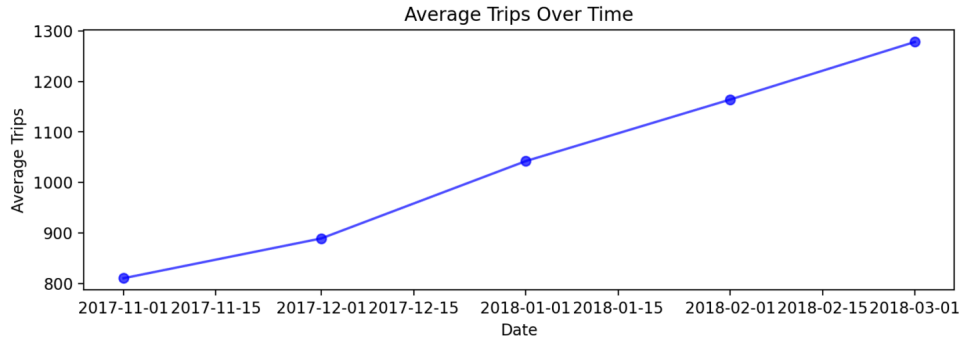
Plot the average Fuel Consumption Rate (FCR) over time.



Average Trip Count by Location (Heat Map)

The following visualization shows the average trip count by location for each vehicle type using a scatter plot on subplots. It iterates over unique vehicle types, filters the data for each type, and plots longitude and latitude with color representing the logarithm of the average trip count. Subplot titles and axis labels are set, and a colorbar is added for each subplot. The layout is adjusted for clarity.



Average Trips Over Time

The following plot shows the average number of trips over time using a line plot. The data is grouped by month and the average trips per month are calculated and visualized.