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Dataset: PS_Lv3_UMDOTS_Escooters
Team Number: **DC21074**

Project Abstract

VeoRide Inc provides rental e-scooter services for use both on and off campus. I conducted an analysis using 62 days of data collected from the various mobility vehicles provided by VeoRide. The data included ride time, distance, and geographic coordinates. Identifying popular routes and locations could allow VeoRide to better understand customer preferences and adapt service locations accordingly. The goal of this analysis was to discover patterns that describe how the service is used across campus. For this project, I used a Python package called 'GMplot' to map the geographic coordinates on a map of the UMD campus area. GMplot lets users plot coordinates and paths on Google Maps. Matplotlib is another library that provides a number of data plotting techniques for geo-spatial analysis. I focused on creating visualizations that show how transportation patterns changed over time. The geospatial visualization allowed for a quicker, more informative understanding of transportation. The map visualizations were supplemented with bar charts. The project began with feature engineering and ended with an analysis of the dataset's ride trends. I found that October 2020 had much more rides then October 2019, despite the COVID-19 pandemic. I also found a significant relationship between average distance traveled and on/off campus location. With further analysis, I wish to increase the accuracy of the dataset's on and off-campus classifications. This will require a better understanding of the UMD campus and additional datasets.