Washington D.C. Traffic Accident Dashboard

Sam Clark and Joanne Choi

Overview

- Develop a dashboard that will displays pertinent DC traffic accident information based on machine learning algorithms that will show likelihood of a car crash occurring based on criteria input by the user
- Purpose: Provide a useful tool for the workforce to help make informed decisions regarding their commute to DC

Datasets

- DC Vehicle Collision Data from opendata.dc.gov
  - [Crashes in DC](#)
    - 2016 - 2019
    - 129145 rows
- Weather Data from National Weather Service Forecast Office
  - [Baltimore/Washington](#)
  - Daily weather conditions from 2016 - 2019

EDA

EDA Summary

- Restrict data to 2015-2019
- Most number of car crashes occurred on Wednesdays and 2AM
- Least number of car crashes occurred on Sundays between 6AM and 12PM
- Precipitation and car count are heavily correlated
- Interactive map will be a good tool for DMV commuters to explore historic crash data

Next Steps

- Modeling data
- Building out the dashboard
- Continue working on the paper

Thank you!