Capstone Project Ideas

My mentor and I discussed multiple ideas (like bike share data, Walmart sales data, NYC flight data and others) and I finally submitted the following 3 data sets. This is my first data science project and wanted a cleaner data set and be able to apply all the concepts learned to enhance my understanding. Also, we wanted to have a data set that is not worked on much. And most importantly one that interests me and grows my learning. The first data set met those requirements and so that became my capstone project.

1. Fuel Economy Data Set :

The Environmental Protection Agency publishes fuel efficiency data on all the car models it has tested, going back to the 1980s… minus all the Volkswagen, Audi, and Porsche diesels caught cheating. The data typically includes three estimates: for city driving, highway driving, and a city-highway combination.

<https://www.fueleconomy.gov/feg/download.shtml>

​ Proposing to use data set to understand what are the best fuel efficient cars and the various factors effecting the fuel efficiency. This is interesting problem to solve because it will help save the environment and help the consumers wanting environmental safe cars to make a educated choice.. Also saves them money.

1. London Air Quality Data Set :

The London Air Quality Network, run by researchers at King's College London, gathers data on levels of nitrogen dioxide, ozone, fine particulate matter, and other pollutants from more than 100 monitoring sites.

Proposing to understand the factor affecting the Air quality, so it can be monitored and actions can be taken to correct it. This is interesting problem to solve because it will benefit the environment and assist in better health.

<https://www.londonair.org.uk/london/asp/datadownload.asp>

1. ​Gender Pay Gap Data Set :

The UK government has begun requiring all companies with at least 250 employees in Great Britain (i.e., England, Scotland, and Wales) to report the pay differences between their male and female workers. The reports include the percentage gaps in hourly earnings, differences in bonus pay, and the proportions of male and female employees in each pay quartile.

<https://gender-pay-gap.service.gov.uk/Viewing/download>

​Understand the factors influencing the gender gaps and answer why there is a gap and how it can be reduced. This is interesting problem to solve because it increases the awareness for employees at work or seeking job to understand their real worth and what they should look out for to get what they deserve.