**Project 3- Data Viz**

**Presentations will be Feb 5th**

**Github Link:** <https://github.com/RaghenM/Project_3_Data_Viz_Group_1.git>

**Group Members**

* Raghen
* Vinita
* Joe
* Tim

**What question are you trying to answer?**

Which states in the US are the most supportive of alternative energy vehicles? (Map with markers and drop-down for fuel types)   
Vinita- Could be built in GeoPandas possibly- need to look at docs or could convert the CVS to Json and do map in leaflet

* In the US, what are the most ideal states to own and or drive an electric car? (Choropleth or cluster markers)   
  Joe- Look at GeoPandas or Plotly in using Python. If we cannot figure out Choropleth then we may be able to do a cluster marker
* What states have the largest population of fast charging stations? (have a toggle that shows super charger stations)

Raghen- Look to see if Plotly or GeoPandas has this ability to do this.

**What data set are we planning to use?**

NREL is a national laboratory of the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, operated by the Alliance for Sustainable Energy LLC.

API: <https://developer.nrel.gov/docs/transportation/alt-fuel-stations-v1/>

**Parameters used to generate data file:**

1. Passenger vehicles (class 1-2)
2. US
3. Station Available
4. Fuel types: (Biodiesel, Ele, Ethanol (E85), Renewable Diesel)
5. Station Public

**What data Viz are we planning to use?**

Combo of JS and some new python library (GeoPandas)

**Helpful documentation links:**

GeoPandas: <https://geopandas.org/en/stable/docs/user_guide/mapping.html>

Statewise Choropleth map in Python example code: <https://plotly.com/python/choropleth-maps/>

Note: scroll down a bit to 'United States Choropleth Map"