**Project – Association between density of charging stations and socioeconomic factors**

**One Page Proposal**

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* **Team Members:**
  + Trevor Kleinstuber
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* **Database**
  + **Open Charge Map** 
    - Url: <https://openchargemap.org/site/develop/api#intro>
  + **Washington State**
    - Url: https://catalog.data.gov/dataset/electric-vehicle-population-data
  + Bonus: Mapping Pokemon Go locations to charging stations
    - Optimal place to have electric vehicle charged AND catch the best pokemon(s)
* **Ideal visuals**
  + **Big picture**
    - At least two HTML page
      * First page
        + Scroll down to animate
        + Density of charging stations

Markers for charging station

* + - * + Density of vehicle population

Heatmap

* + - * Second page
        + Dashboard

More detailed/nuanced

Stratified by counties

Median income

Circles which has a Tooltip that includes a box that labels counties and median income

* + - * + Starting at the Washington state level

Zoom into counties

Stratified by above characteristics

* + - * + Dropdown menu

To select different counties and allow the audience to zoom into each county

* **Additional JS library not previously used**
  + Animate on scroll
* **Specific Requirements for the Project**
  + Your visualization must include a Python Flask–powered RESTful API, HTML/CSS, JavaScript, and at least one database (SQL, MongoDB, SQLite, etc.).
  + Your project should fall into one of the below four tracks:
    - A custom “creative” D3.js project (i.e., a nonstandard graph or chart)
    - **A combination of web scraping and Leaflet or Plotly**
    - **A dashboard page with multiple charts that update from the same data**
    - A “thick” server that performs multiple manipulations on data in a database prior to visualization (must be approved)
  + Your project should include at least one JS library that we did not cover.
  + Your project must be powered by a data set with at least 100 records.
  + Your project must include some level of user-driven interaction (e.g., menus, dropdowns, textboxes).
  + Your final visualization should ideally include at least three views.