## **Research Proposal**

Dataset: <a href="https://trends.google.com/trends/yis/2018/GLOBAL/">https://trends.google.com/trends/yis/2018/GLOBAL/</a>

For the Final Project, I'd like to see the popularity in Google search trends by each region from the Google Trends in the global over time. Each region would be displayed over a different category of interest by their search keywords in Google, and also, neighboring countries might be shared with similar interests. This hypothesis started with simple thoughts about people's Google search habits. People's searching habits on Google might be an efficient and natural tool for gaining their interests or trends over time.

Google Trends utilizes each category of keywords with their ranking and the 10 results in each category. On the homepage, I will collect the top 10 rankings of overall searches on Google Trends each year from 2011 to 2018, and on each keyword has a content page that contains the number of search frequencies by region. The number of search frequencies and the name of regions will be also gathered and stored with its keyword hopefully to answer my hypothesis, "Each region would be displayed over a different category of interest by their search keywords in Google, and also, neighboring countries might be shared with similar interests."

The datasets are collected using Selenium in Python on each year in the globar page and have variables of ranking, keyword, category, frequency, and region. Within these data, I'd like to analyze descriptive data analytics on the world trend over time by google search keywords. For showing data on the world map might be needed an extra dataset that has latitude and longitude.