Capstone Project 1: The next Parkland shooting

The objective of the project is to predict the next city with a high possibility of a Newtown or Parkland like shooting. With the recent incidents, rekindled debates about gun violence on national television, and my own discussions with NRA members sparked my interest in the subject. Using data sets from

1. <https://cis.upenn.edu/~ccb/publications/gvdb-d4gx.pdf>
2. <https://www.statista.com/topics/1287/firearms-in-the-us/>
3. <http://www.gunviolencearchive.org/reports>
4. FBI crime data base
5. <https://www.nami.org/learn-more/mental-health-by-the-numbers>

Below are some of the questions I will explore

1. What is the co-relation between gun sales and gun violence?
2. What is the correlation between sales of long neck weapons and gun violence?
3. What is the correlation between gun-violence and mass shootings?
4. What is the correlation between overall crime rate and gun-violence?
5. What is the correlation between overall crime rate and mass shootings?
6. What is the correlation between the overall mental health and overall crime rate?
7. What is the correlation between overall mental health and mass shootings?
8. What city/state has a high probability of mass shooting?

Capstone Project 2: Impact of H1b visa on US housing market and economy and vice versa

Given the fact that I am on H1b and there has been ample discussion on the pros and cons of H1b visa program, I intend to analyze the impact of H1b visas on the US housing market and economy.

The data sets are

1. <https://www.kaggle.com/nsharan/h-1b-visa/data>
2. <https://www.kaggle.com/zillow/zecon>

Capstone Project 3: Changing NYC Demographics impacting the restaurant business

The population and demographics of major cities is constantly changing, which in turn impacts the local businesses. I would like to analyze the changing trends in population and demographics to predict the restaurants that will sustain long term or will have to give way to the new demand.

Data sets:

1. <https://data.cityofnewyork.us/Health/restaurant-data-set-2/f6tk-2b7a/data>
2. <https://data.cityofnewyork.us/City-Government/New-York-City-Population-By-Neighborhood-Tabulatio/swpk-hqdp>
3. <https://data.cityofnewyork.us/City-Government/Demographic-Statistics-By-Zip-Code/kku6-nxdu>
4. <https://data.cityofnewyork.us/City-Government/Demographic-Social-Economic-and-Housing-Profiles-b/cu9u-3r5e>