Group 24 Proposal : Gun Violence Data

Problem:

Analysing Gun Violence Data through visualization and modeling.

Dataset:

Gun Violence Data (https://www.kaggle.com/jameslko/gun-violence-data)

Comprehensive record of over 260k US gun violence incidents from 2013-2018, such as incidence date, state, specific location, participant gender, age and so on.

Proposed Solution and Real world Application :

Our proposed solution is to use related Python packages to perform a deep exploration on the dataset of gun violence including data extraction, modeling and visualization. We plan to use models such as linear models or SVMs to model the observed data, and use the learnt parameters to gain insights. Meanwhile, data visualization about time, location etc. could assist us in analyzing various features and the crime trend, thus revealing hidden patterns as well as finding out the meaningful insights of the data.

Modelling and visualization of gun violence data can help us understand the nature of gun violence acts, and come up with cues that could help in predicting and preventing such situations. Visualization can also help in checking if the claims made by debaters of gun control are true, and in obtaining a better understanding of the way such acts affect people.

Project steps

Step	Estimated completion time	Person(s) in charge (among the group of 6)
1. Extracting and cleaning up data	One week	Shashank, Yihan
2. Data modeling	One week	Yihan, Peiyu
3. Data visualization	Two weeks	Peiyu, Shashank