ORIE 4741 Final Project: NBA Analysis

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Problem Question

The goal of our project is to analyze fatal police shooting data and identify whether demographics and location affect the number of shootings. We plan on answering the following questions:

1. How does an individual's demographics affect their chances of being shot by the police?
2. How has the frequency of police shootings changed in the last 5 years (2015-2020)? Are there certain times of the year/location where they occur at higher rates?

Dataset

We have a dataset consisting of 4,895 police shootings from 2015-2020. It contains descriptive data about the suspects like their name, age, gender and race. In terms of how the shooting transpired, the dataset includes the date of event, where it happened, how they were shot, if they attacked the officers, if they were holding weapons, if they showed any signs of mental illness, if the policeman were wearing a camera/the incident was recorded, if the suspect fled the scene, and the type of weapon used (if any) by the suspect.
Our data was collected from Kaggle.com:
https://www.kaggle.com/ahsen1330/us-police-shootings
We plan on using various combinations of the variables listed above in order to predict the probability of police using lethal force given a suspect's demographics/current actions on the scene. We plan on exploring whether correlations exist between

Project Values

We believe that this is a worthwhile project as police brutality and racial bias is a concern for America as a whole. The results of this analysis could be applied in regulating districts to help facilitate de-escalation training that tackle issues of racial biases/avoiding unnecessary use of lethal force.

We believe that we will succeed in solving this problem because the chance of police shootings/lethal force has a strong relationship with the variables in our dataset, and we plan on identifying the exact nature of this relationship, in order to avoid unnecessary violence.