Classifying Gang Violence in America

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Overview

We want to help local police departments identify whether a crime is gang related.

This will allow local law enforcement to allocate their resources to the appropriate agencies and have a head start on their investigation. By having a head start on their investigation, the police will be able to catch these gang members and their accomplices.

Data Source

The data used was a compilation produced by Trace and Buzzfeed News, along with various local police departments that spanned from 1992 - 2018 and was produced in January 24, 2019.
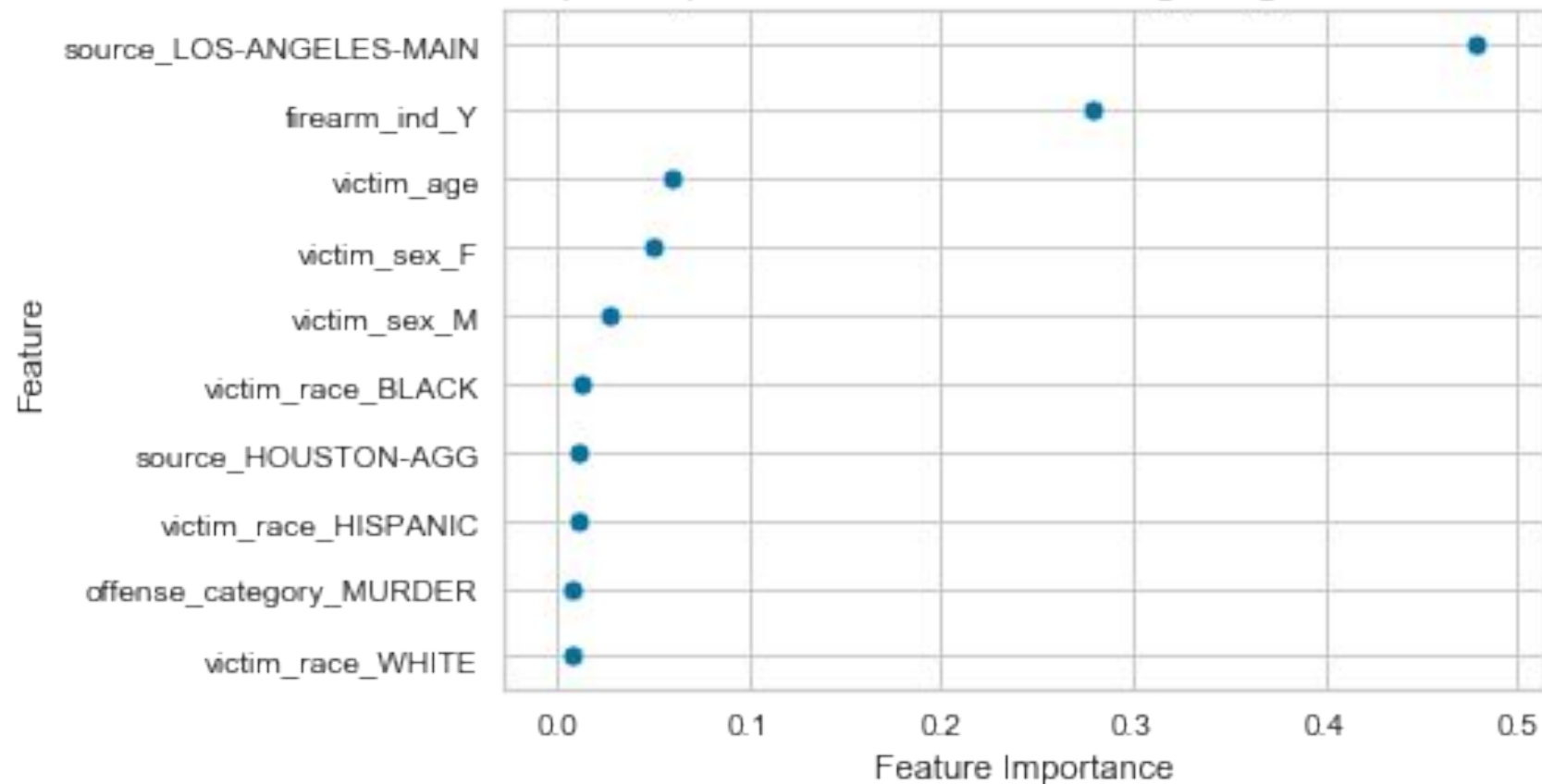
Models Used

Based on different models we used, we found our best model to be 81.84% accurate.

The factors that contributed to this score were:

- Source (what city the crime details are captured from)
- occurred date (when the crime occured)
- Offense category (assault, homicide, or non-fatal shooting)
- Firearm ind (gun involved)
- Gang activity ind (if crime was gang related)
- Victim age (ages 1 - 100)
- Victim race (Black, White, Hispanic, Asian, Other)
- Victim sex (Male or Female)

Top 10 Important Features in Predicting Gang Related Crime

Results

Based on our findings, the two most important factors that predicted gang related activity were:

1. If the crime was reported by the Los Angeles Police Department
2. If a firearm was involved

Next Steps

Further research requires

- A collection of more data with better metrics
- More computing power to enhance models
- Explore more types of models