

Deadly Police Encounters

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Metis Project 3

8,485

People killed by police since January 2013

Where do deadly encounters happen?

Mapping Police Violence

US Census Bureau

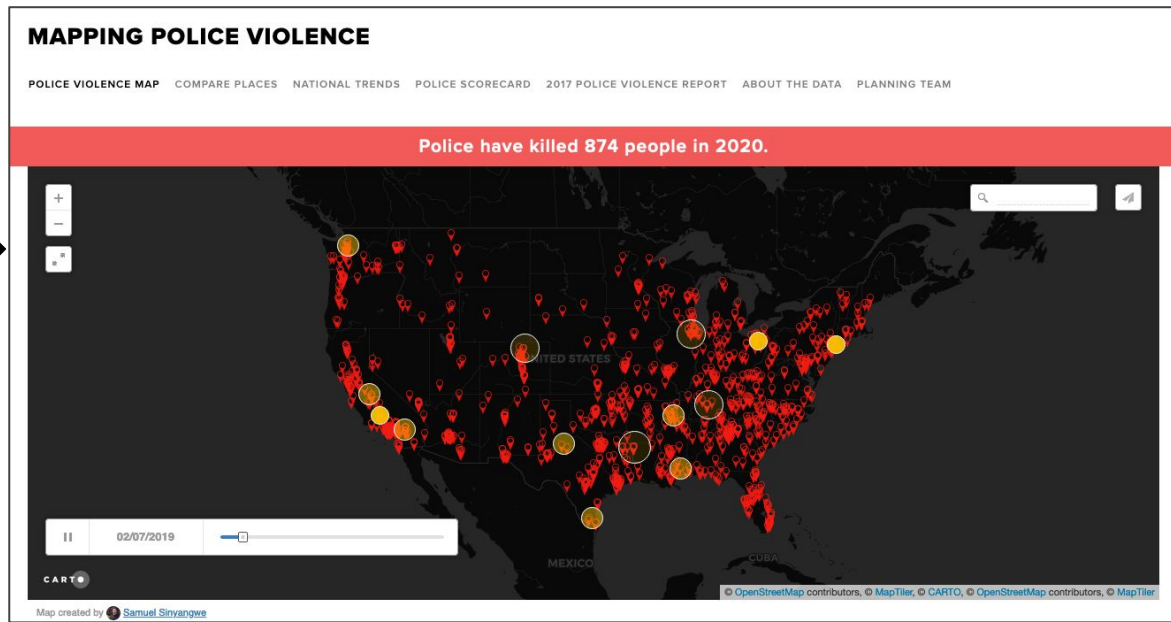
Where do deadly encounters happen?

Gather data on all deadly police encounters

- Location
- Victim's race



Mapping Police Violence



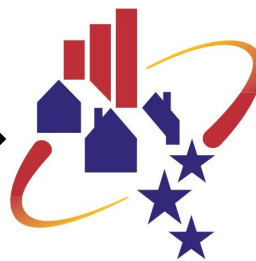
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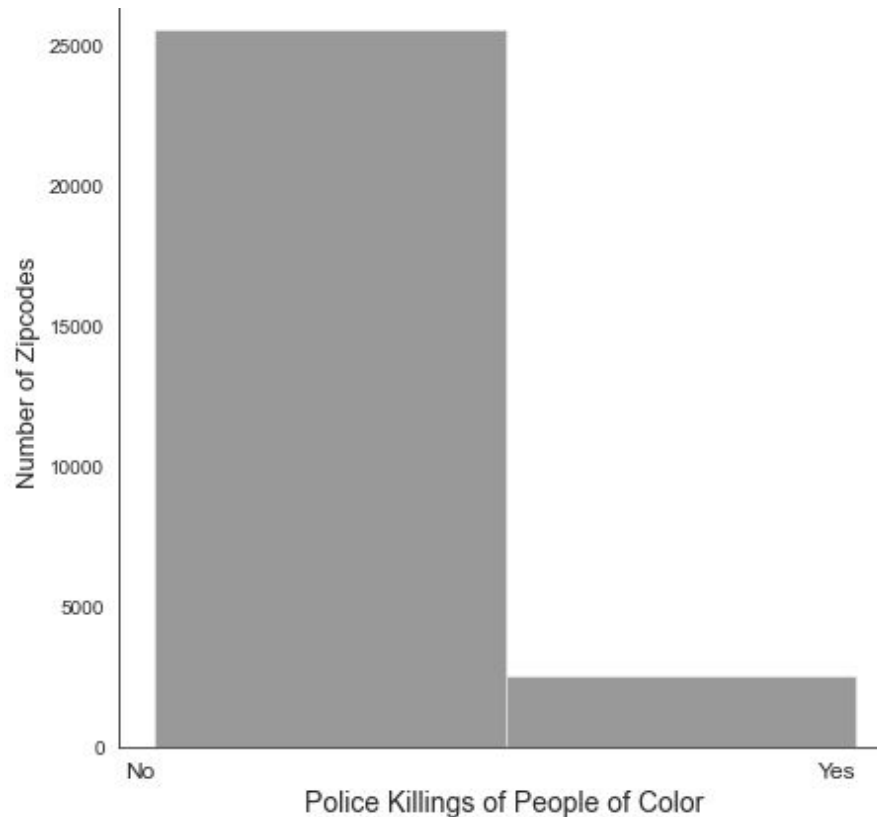


AMERICAN
COMMUNITY
SURVEY

U.S. CENSUS BUREAU

Collect nationwide
socio-economic data on same
scale as location data of
deadly encounters

Where do deadly encounters happen?



9% of all US zip codes account for all police killings of people of color between 2013-2020.

Where do deadly encounters happen?

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Identify as many deadly encounter locations as possible (maximize recall)

Mapping Police Violence

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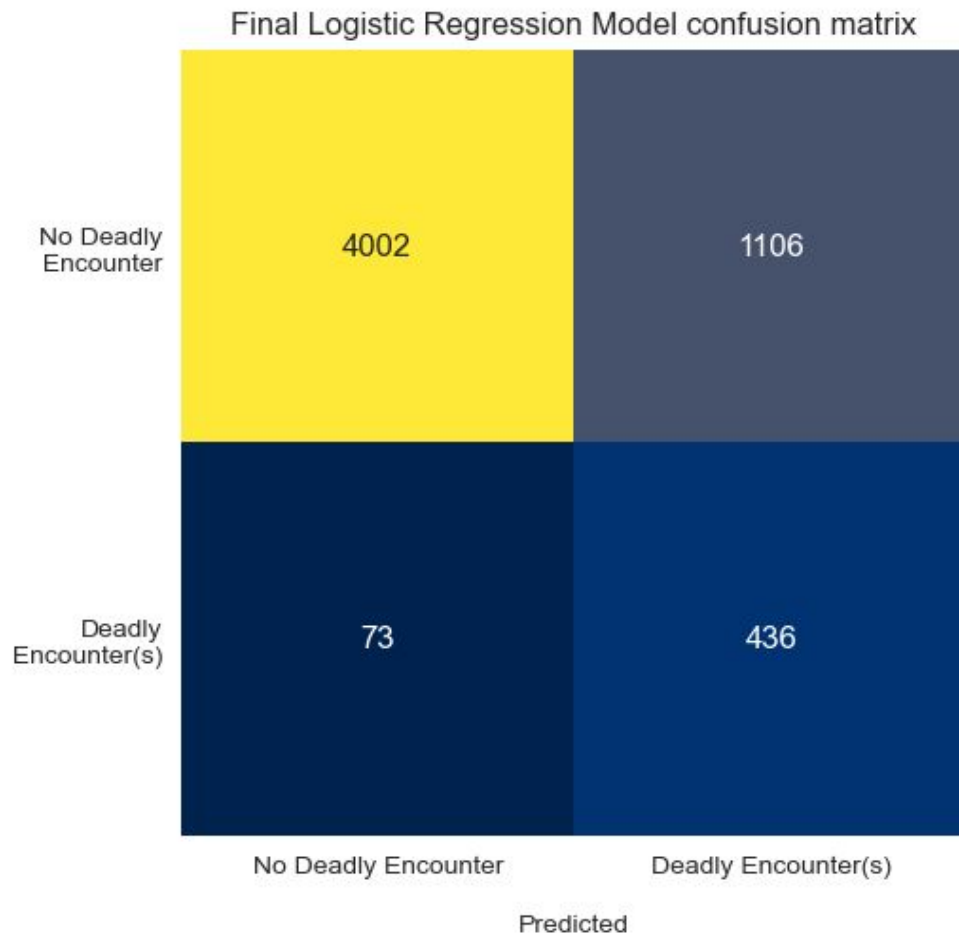
Fit classification algorithms

Collect nationwide socio-economic data on same scale as location data of deadly encounters

Logistic Regression

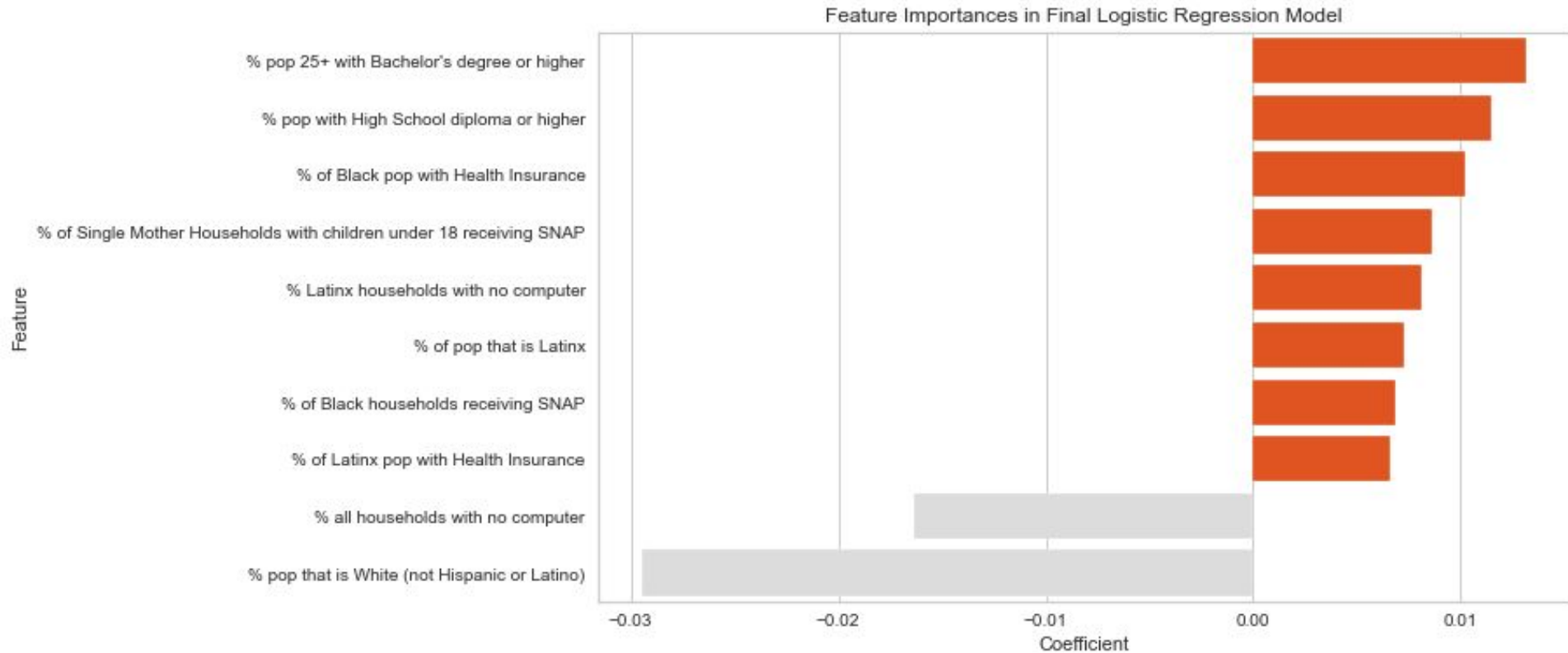
Correctly classifies 87.5% of deadly encounters.

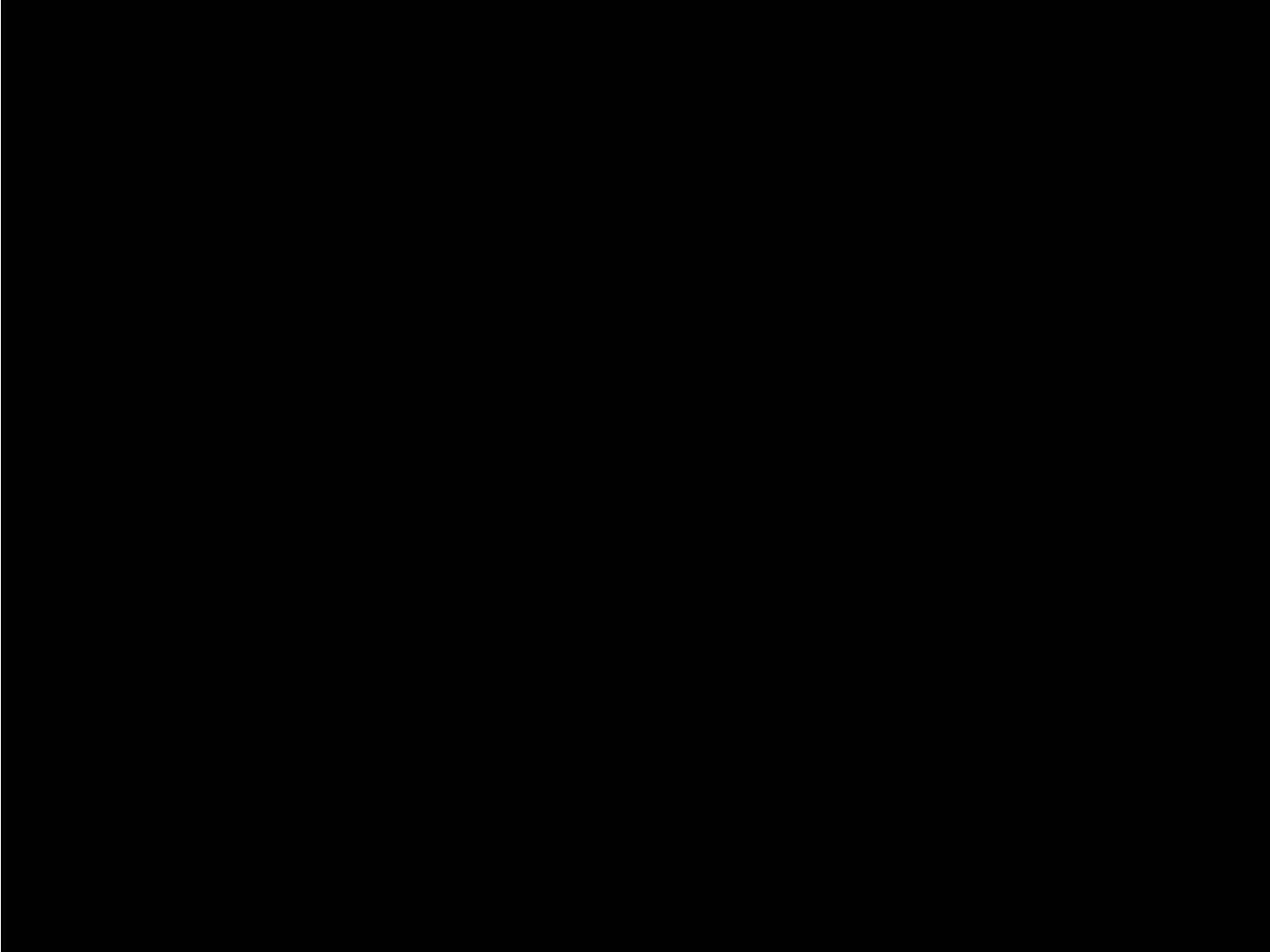
Actual



Minority Class Recall: 0.857, Minority Class Precision: 0.283, Minority Class F-beta: 0.840

Socio-Economic Factors that make deadly encounters more or less likely





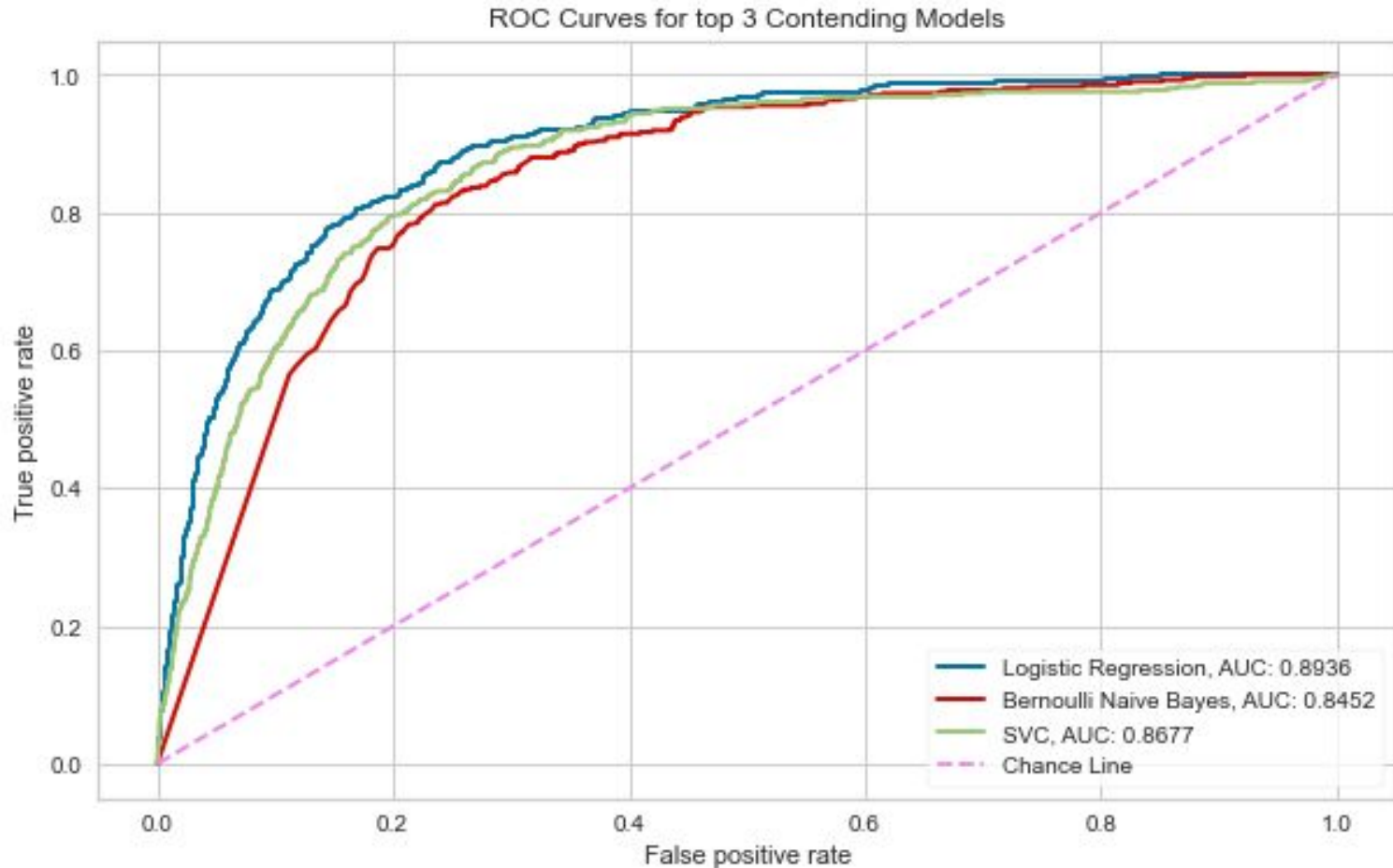
Counter-intuitive takeaways

- Police killings of people of color are more likely to occur in zip codes where people of color experience poverty and utilize social safety net
- ... as well as in zip codes with higher numbers of overall population with Bachelor's degree or higher
 - Suggests external, unobserved causes beyond community socio-economic characteristics

Future Work

- Characteristics of law enforcement agencies responsible for deadly encounters rather than characteristics of communities within which they exist
- More granular location-based data:
 - Measures of racial inequality **within** zip codes
 - Socio-economic data by census tracts rather than zip codes

Appendix



3,896

People of color killed by police since January 2013

51% of people killed by police are people of color although they are only 40% of the population.