

# Analysis of Terry Stops in Seattle, Washington, USA



# HELLO!

**I am Gabby Amparo**

Beginner Data Science  
Student at Flatiron School



# Terry Traffic Stops

In *Terry v. Ohio*, a landmark Supreme Court case in 1967-8, the court found that a police officer was not in violation of the "unreasonable search and seizure" clause of the Fourth Amendment, even though he stopped and frisked a couple of suspects only because their behavior was suspicious. Thus was born the notion of "reasonable suspicion", according to which an agent of the police may e.g. temporarily detain a person, even in the absence of clearer evidence that would be required for full-blown arrests etc. Terry Stops are stops made of suspicious drivers.

# Objectives

- Using this data, I was able to predict arrests made after Terry Stops using Binary Classification
- This analysis can give the Seattle Police Department and local Seattle government better insight into the demographics of these Terry Stops so that they can better their interactions with citizens of Seattle.



# Data Sources

- Terry\_Stops.csv
  - A subset of public data provided the Seattle government website



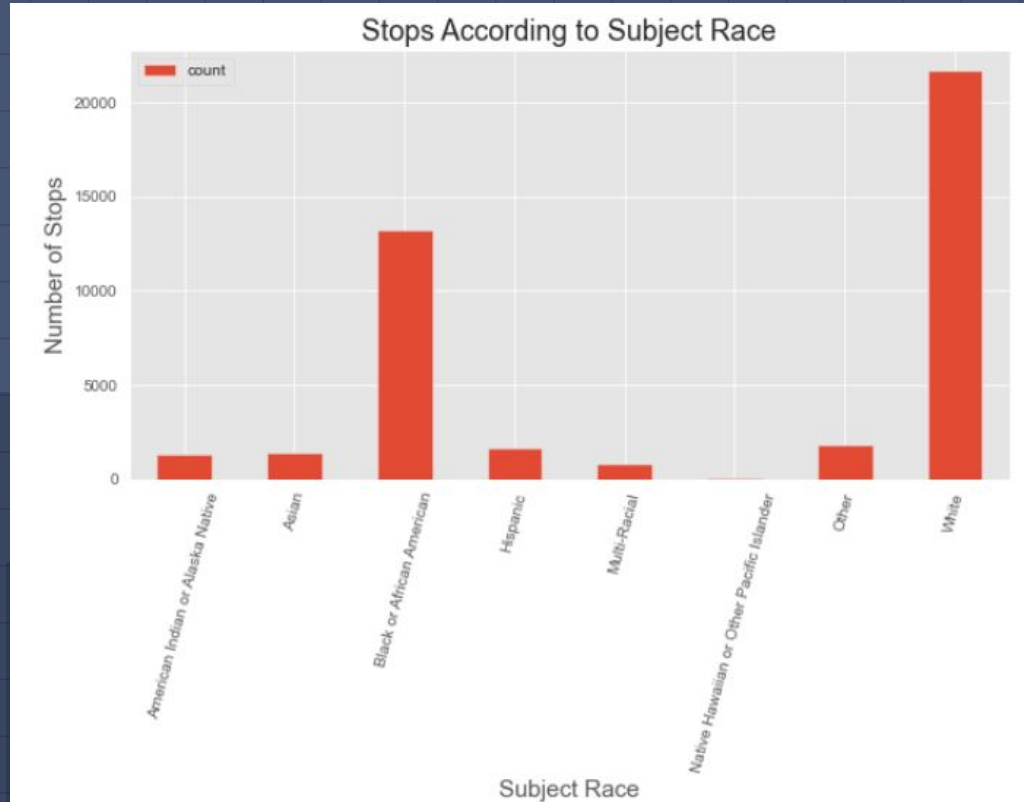
# Programs and Libraries

The following software libraries were used within Python to conduct data analysis:

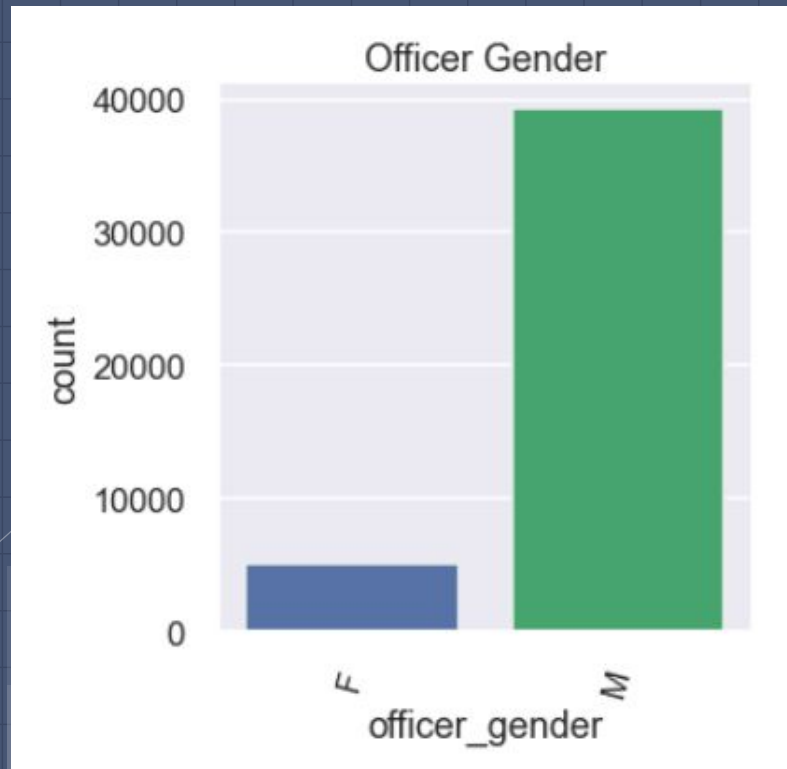
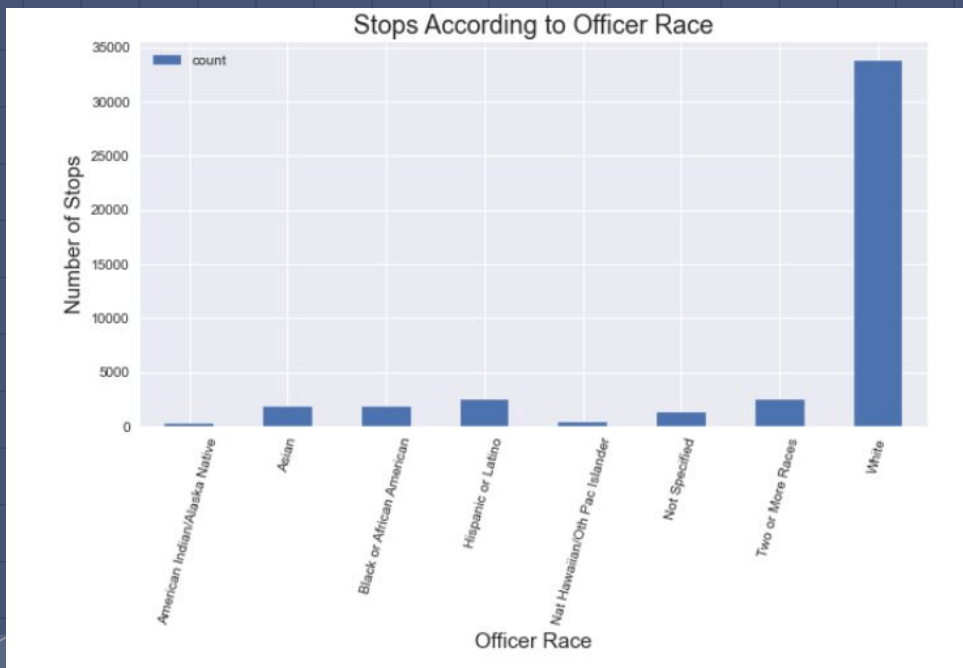
- Numpy – for mathematical computation
- Pandas – allows for data organization & analysis
- Matplotlib – for data visualization
- Seaborn – works with Matplotlib to make clean graphics
- Scikit learn – machine learning



# Which Race is Stopped the Most?

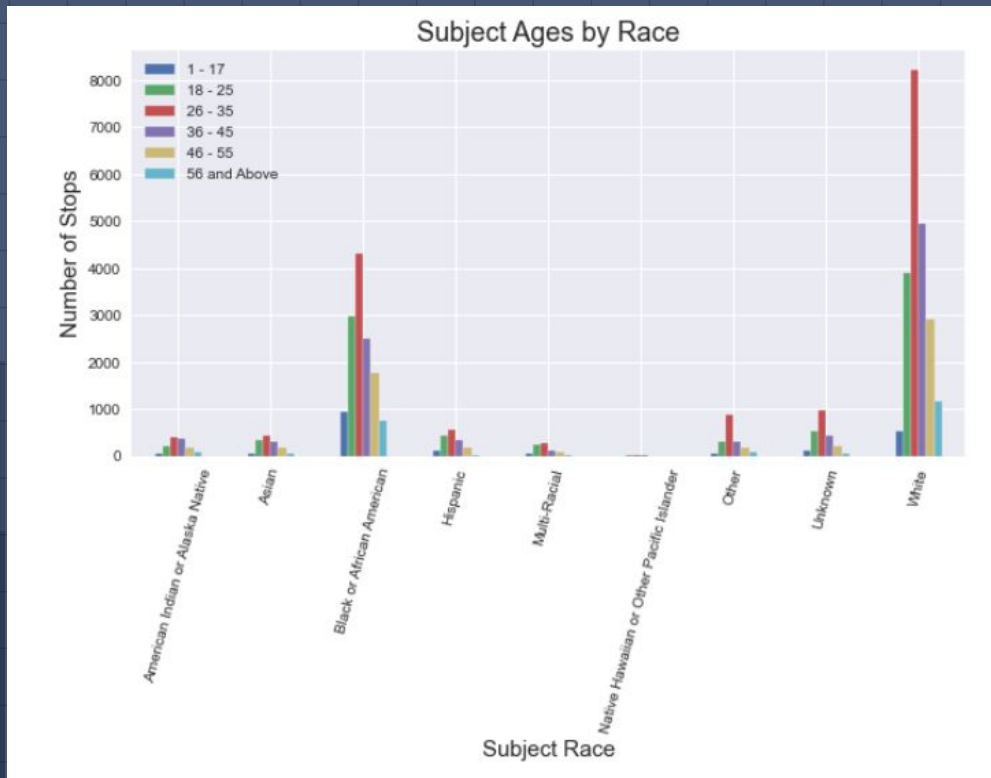


# What demographic of officers perform the most stops?

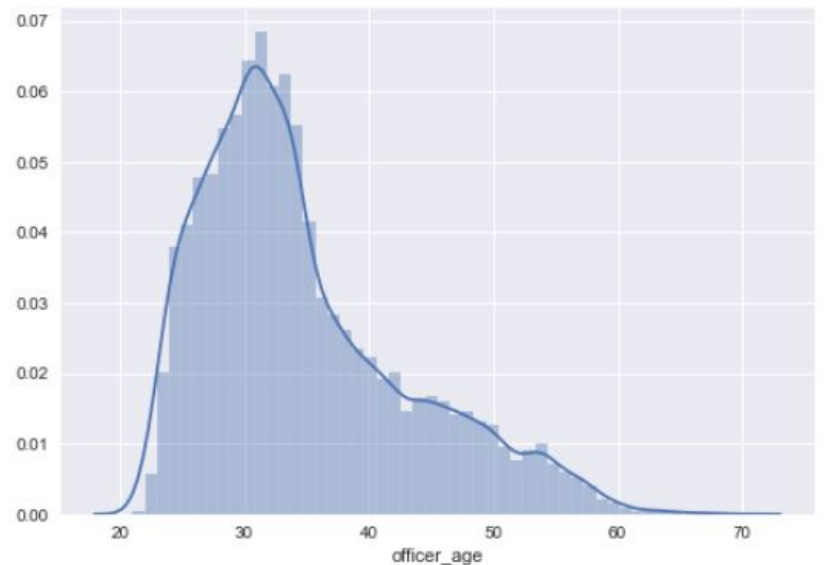
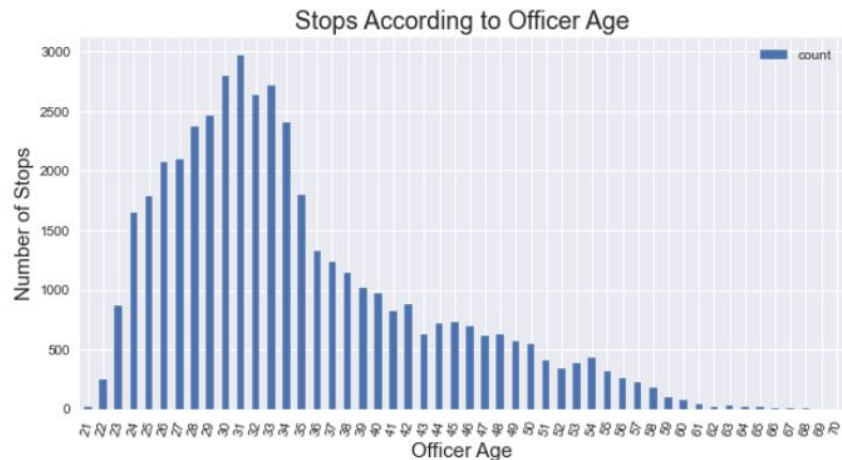




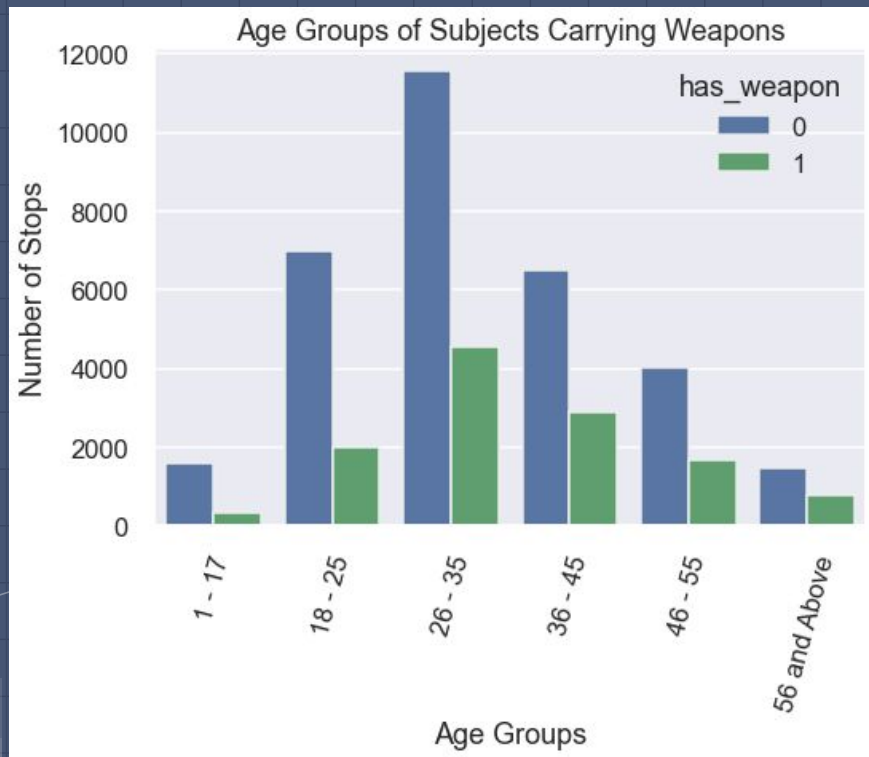
# Is there a Difference in Subject Ages across their Races?



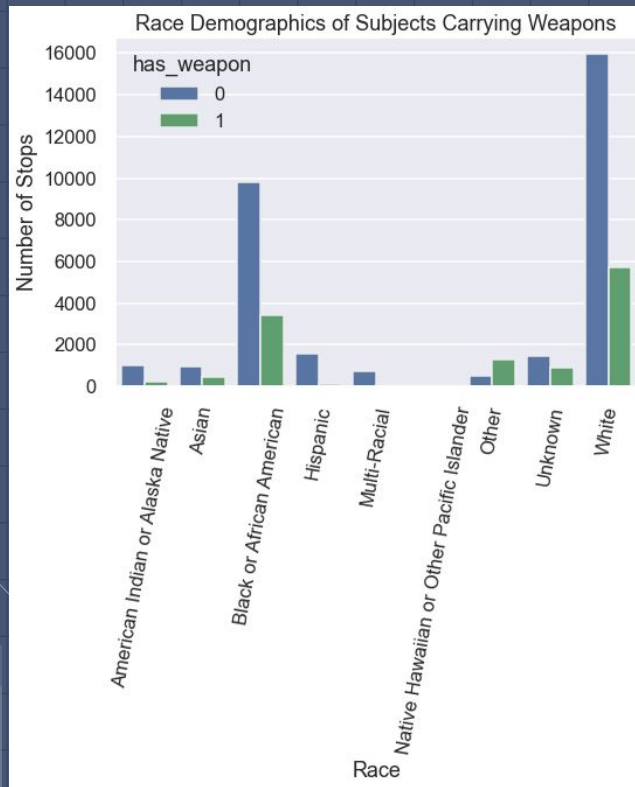
# What is the Distribution of Officer Ages?



# What Subject Age Groups are Most Stopped and are they Carry Weapons?



# What Subject Races are Most Stopped and are they Carry Weapons?



# Conclusions

- A majority of Terry Stop subjects were White, immediately followed by Black/African-Americans
- African-Americans make about 1/3 of Terry Stops
- Across all races, the subject that were most stopped were those belonging to the age group 26-35.
  - This age group made up a third of the dataset and also more likely to carry weapons on their person.
- As for officer demographics, a majority of officers were white men.

# Recommendations

- Seattle Police department should be hiring more officers belonging to minority communities and women
- Seattle PD should reallocate their weapons budget to advancing health care plans to include mental health services like therapy
  - Can help officers better understand themselves and any biases they may have towards certain communities.
- With more focus on the betterment of police practices and the police themselves, there will be less lawsuits against police for abuse of power and
  - That saves Seattle a lot of money.

# Future Work

- This dataset contained a lot of NaN or incomplete information, so more data collection should be made before this analysis can be 100% approved.
- There were a lot of data columns that had a majority of the data missing so they were not used in this analysis even though they would have provided some interesting insights
- More data collection to occur in minority communities, because I am sure the Terry Stop data in those communities would be a lot different than this dataset.

# THANKS!

**Any questions?**

You can find me at:

- [gabbyamparo97@gmail.com](mailto:gabbyamparo97@gmail.com)
- [@gabbyamparo](#)