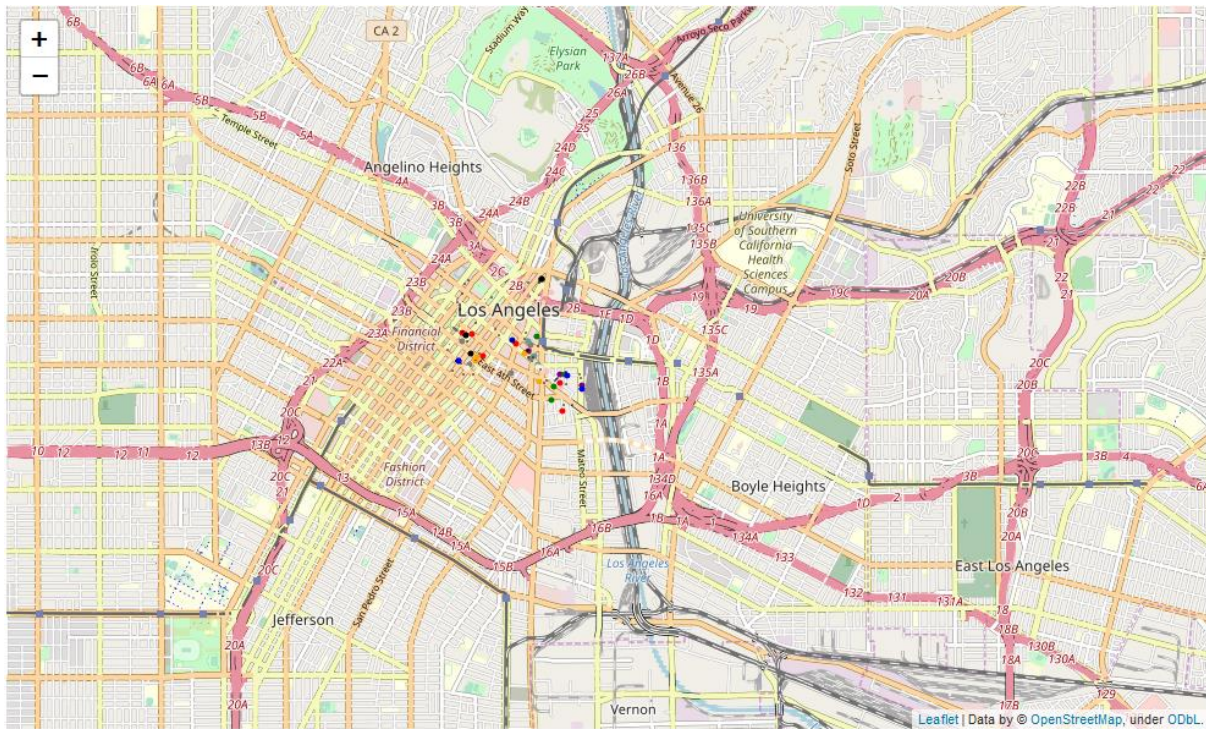


# Capstone Project “The Battle of the Neighborhoods” Crime in Los Angeles



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## 2 Introduction: Business Problem

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In this section I will clearly my choice of using Foursquare location data to solve a imagined business problem.

There are many travel sites on the Internet, including FourSquare, that will tell you all about places to go, things to see, restaurants to eat at, bars to drink and then where to get breakfast in the morning for a strong coffee or a good meal. The problems with these sites is that they are not multi-dimensional. If you want to find out all this information about a city you plan to visit next month, you have to a lot of work. The areas surrounding this new venue might be a criminal neighborhood including car theft, robbery and assault. How can you solve this questions or avoid these risks.

So I want to know what are the most common crimes in Los Angeles and how do they compare to the FourSquare data of Venues.

### 3 Data

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For solving this business problem

Factors that will help in solving this problem

1. Crime incidents in Los Angeles
2. The venues of Los Angeles
3. Separation of venues by Category

The following data sources are needed to generate the information requested

1. A dataset downloaded from Kaggle of reported incidents of crime (with the exception of murders where data exists for each victim) that occurred in the City of Los Angeles in the last t10 years where I use only the data of 2018 en 2019 In order to protect the privacy of crime victims, addresses are shown at the block level only and specific locations are not identified.
2. Four Square data of Los Angeles regarding restaurants and eating places

## 4 Methodology

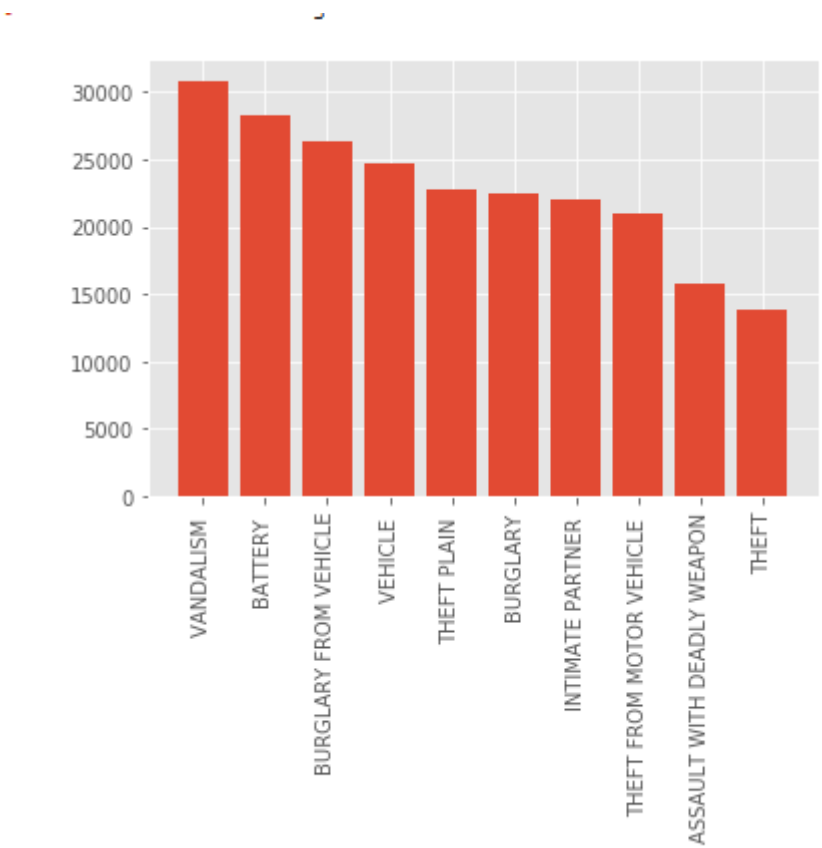
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We are providing characteristic information about Los Angeles neighborhoods analyzing the crime categories and where the top 10 crimes were held

We collected the top 100 venues of Los Angeles

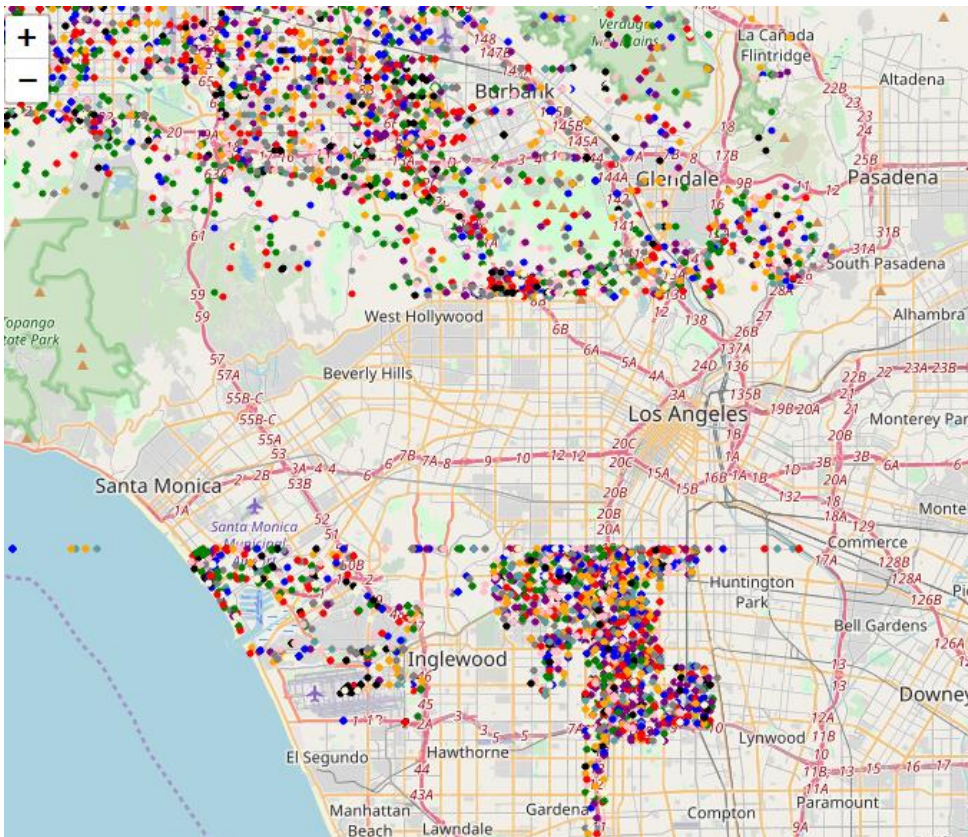
Second Phase

- We cluster all neighborhoods and venues correlated
- Then we got that number down to the top 100 venues in that neighborhood



## 5 Discussion

Los Angeles is a huge city so a lot of data for data analysis, but sometimes not fit for my target. I would need even more venues in Foursquare but that is limited. Using the data gives an overall good analyses of what crimes are most common in Los Angeles. However for some reason when I plotted the data into folium Los Angeles was blank and its surroundings where full of crime spots. Maybe something went wrong with longitude and latitude.





## 6 Conclusion

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This kind of data analysis can be helpful for a visitor to find out what the most common crimes are in Los Angeles and where he has to watch out. Data should be used to build an app and Python code of this analysis should be provided as a microservice

### 6.1 Top 10 Crimes in Los Angeles

The most common crimes are vandalism, battery and burglary. So a visitor needs to watch out especially when he wants to hire a car in Los Angeles

VANDALISM	30876
BATTERY	28235
BURGLARY FROM VEHICLE	26389
VEHICLE	24696
THEFT PLAIN	22697
BURGLARY	22434
INTIMATE PARTNER	22045
THEFT FROM MOTOR VEHICLE	20925
ASSAULT WITH DEADLY WEAPON	15714
THEFT	13883

### 6.2 Top hour of crimes

- A visitor needs be aware especially at 12 AM.
- The most crimes are significantly higher. Also around dinner time needs the visitor to be cautious.
- At 5 AM the visitor is relatively safe to walk

