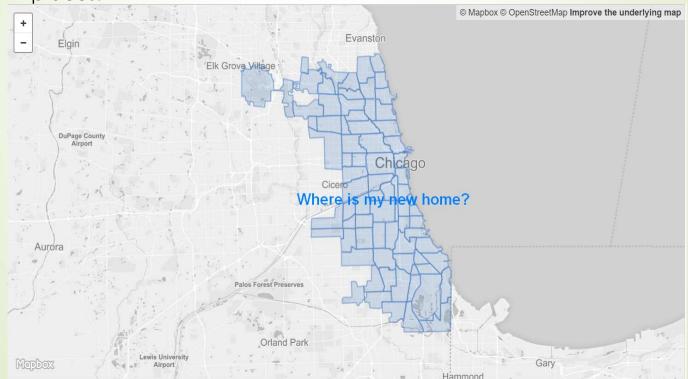
Capstone Project - The Battle of Neighborhoods

Presentation
June, 2019

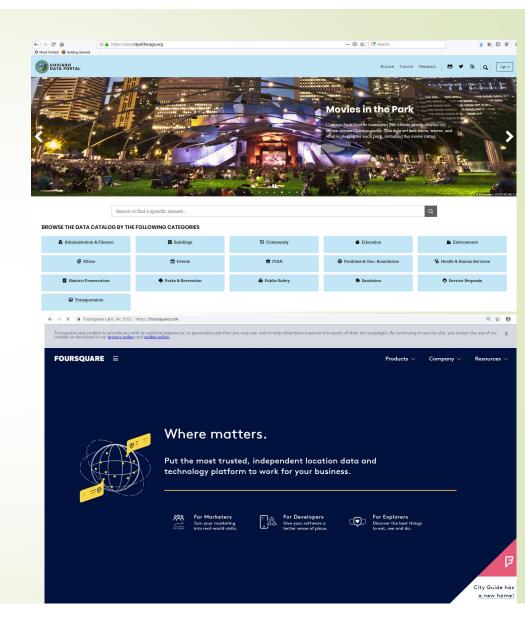


- Use public data and data science methodology to find out a suitable place to live in, for example, buy a house/apartment.
- Chicago is the research target, and it can applied to other cities, places.



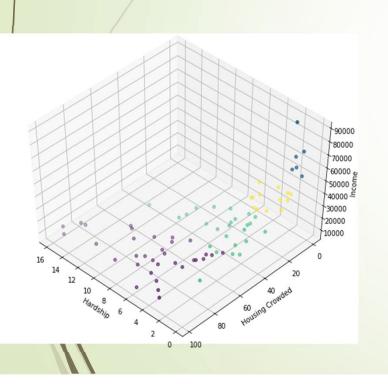
Data

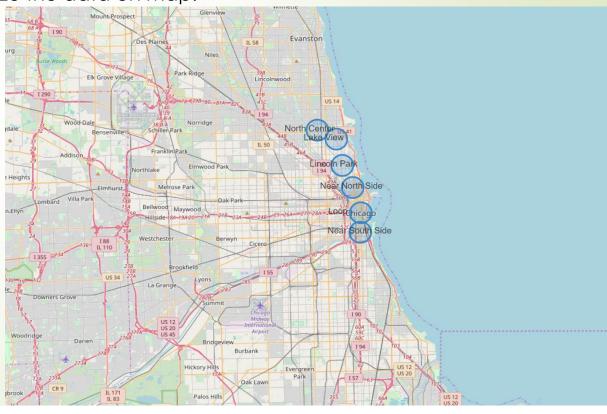
- Publicly available data are abundant.
- Chicago data portal has it all.
- Foursquare provides first-hand location based information and very handy development platform and APIs.



Census Data Research

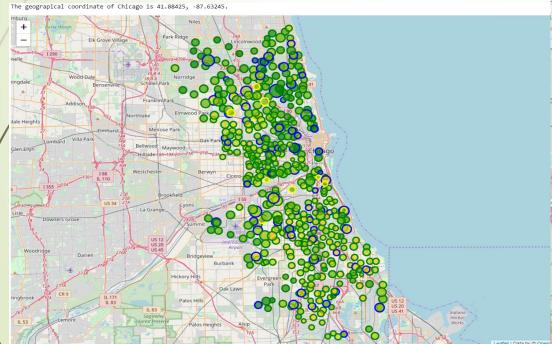
- K-Means Clustering method applied on Census data delivers very clear result.
- 5 Community areas were selected out of 77: North Center, Lake View, Lincoln Park, Near North Side, Loop, Near South Side.
- Folium is very handy to visualize the data on map.

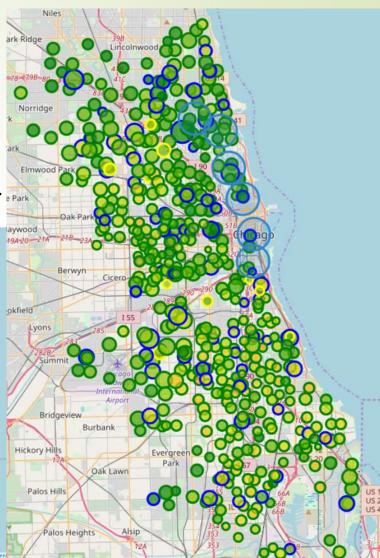






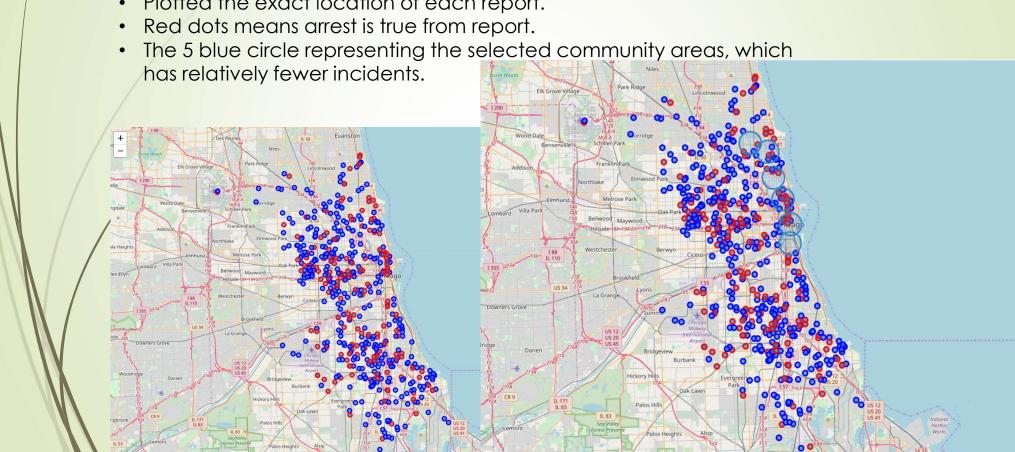
- Color of the circle represent the type of school:
 - Green for ES, Yellow for MS, and Blue for HS
- Fill color represents the safety score of school:
 - Greener means higher safety score
 - Yellow/orange means lower safety score
- Size of the circle is proportional to college enrollment.



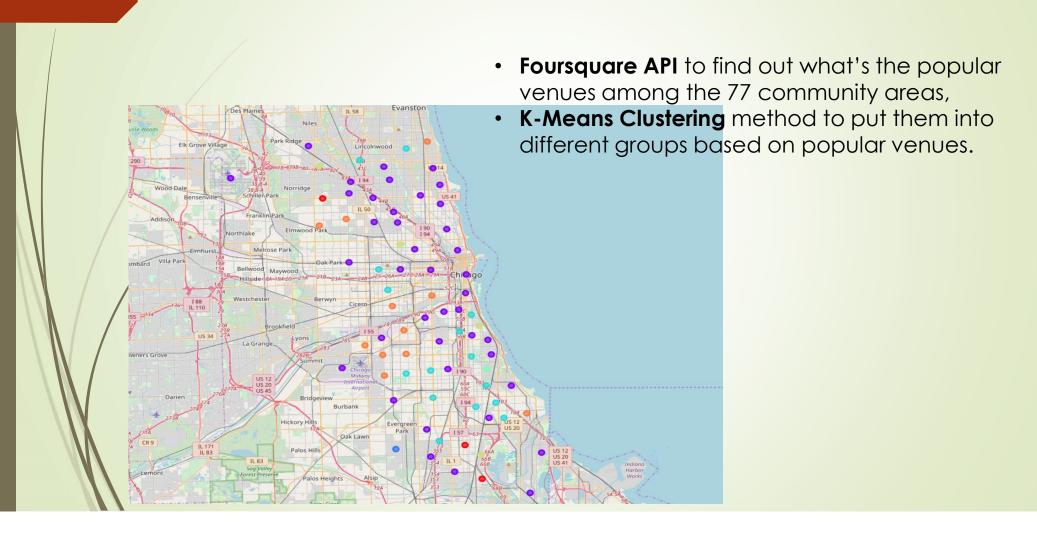




- Using only a very small subset of crime incidents reported in Chicago.
- Plotted the exact location of each report.



Foursquare API



Conclusion

- Through a series of researches based on different **data source** and using different **data science** methods, I've found out 5 top choices of community areas to stay or buy a house/apartment.
- The data are from open sources, and the research method are discussed in this article, the Python codes are published in a notebook.
- The results are quite promising. The same method can be applied by others when there are searching for a new home.
- Hope it will help you find your new ideal destination.