Restaurant Location in New Orleans

Using Clu
in Python
Assist in
Restaura
Location
Selection

How can data science assist in selecting a restaurant location?

- Find similar neighborhoods by clustering
- Quantitative Models
- Charts, graphs, and maps to make data more accessib

Finding a good neighborhood for a restau in New Orleans

- This project used clustering to find similar neighborh New Orleans
- The clusters were analyzed for similarities
- Analysis of the clusters revealed neighborhoods with much businesses, rather than neighborhoods with go locations.

Data

- A table of neighborhoods in New Orleans was scrape
  Wikipedia
  (https:/en.wikipedia.org/wiki/Neighborhoods_in_New
  ans)
- FourSquare data was used for analysis

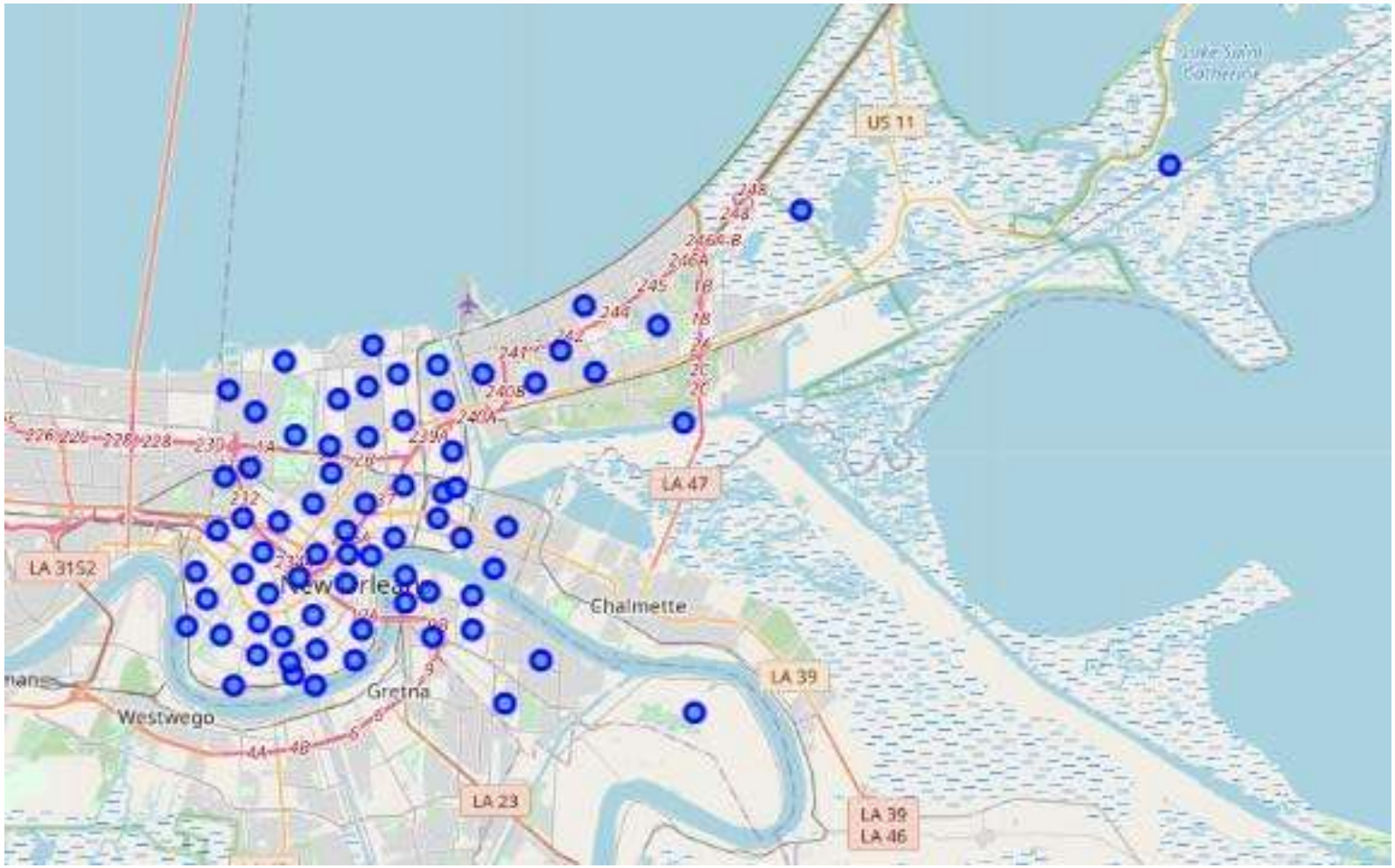
Gathering the data

- A table was scraped from Wikipedia by using the Bea Soup package in Python

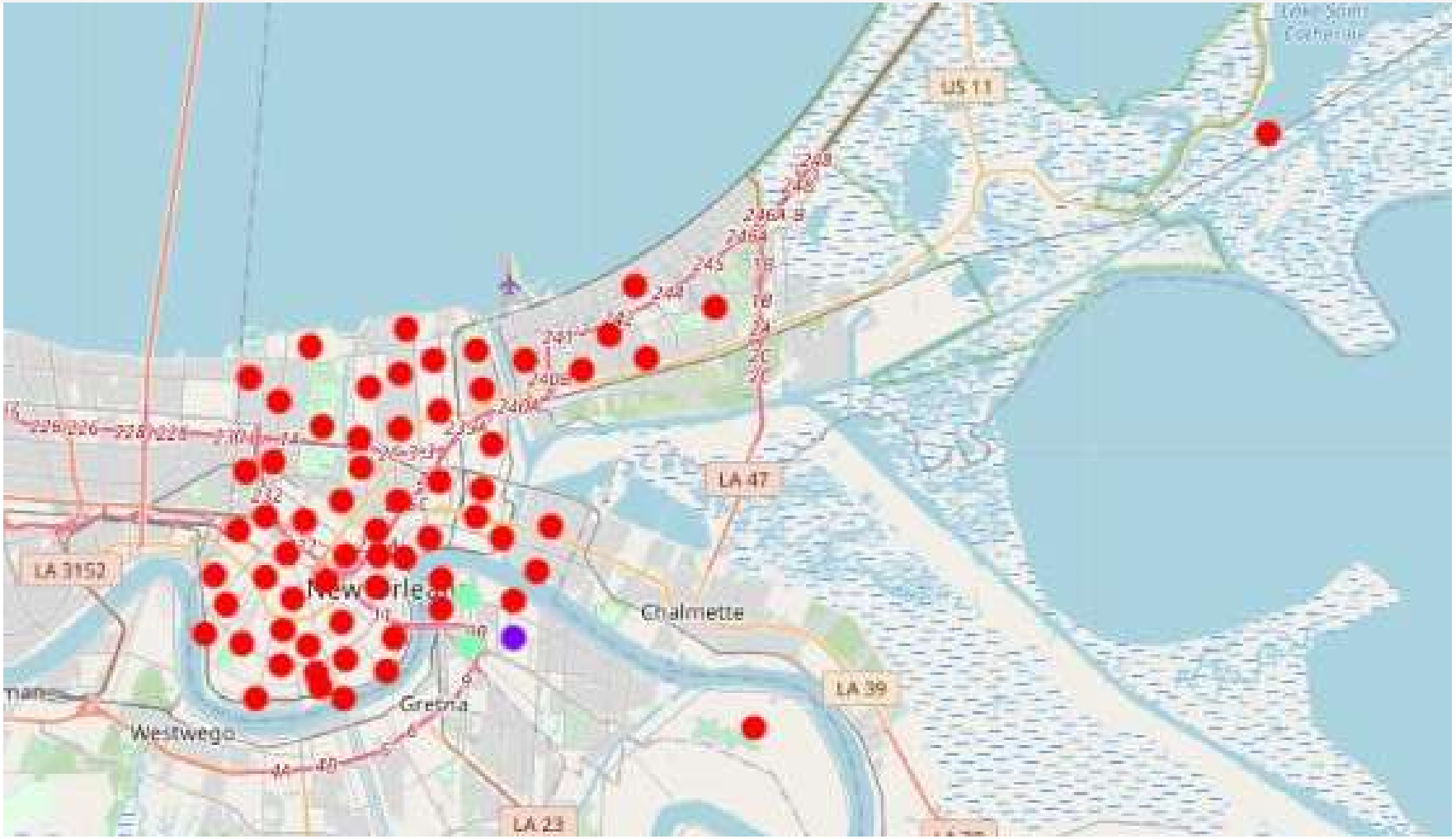
[7]:

	Neighborhood	Longitude	Latitude
0	U.S. NAVAL BASE	-90.026093	29.946085
1	ALGIERS POINT	-90.051606	29.952462
2	WHITNEY	-90.042357	29.947200
3	AUDUBON	-90.121450	29.932994
4	OLD AURORA	-90.000000	29.924440

Mapping the New Orleans Neighborho



K-Means Clustering (Three Clusters)



Cluster 0

Desire Area		
	Venue	Frequency
1	Skate Park	1.0
2	Accessories Store	0.0
3	New American Restaurant	0.0
4	Nightclub	0.0
5	Nightclub Spot	0.0

Cluster 0 Analysis

- Cluster 0 was a neighborhood called the Desire Area.
- Skate park, no businesses
- Population of 2500
- 11th most dangerous neighborhood in New Orleans
- Not the ideal location for a restaurant

Cluster 1 Analysis

- Includes 71 Neighborhoods
- Not much shared in common
- Much more promising locations than cluster 0 or clust
- Recommended to explore further the locations found this cluster

Cluster 2

Pontchartrain Park

	Venue	Frequency
1	Park	1.0
2	Accessories Store	0.0
3	Pharmacy	0.0
4	New American Restaurant	0.0
5	Nightclub	0.0

Lakeshore- Lake Vista

	Venue	Freque
1	Harbor/ Marina	0.5
2	Park	0.5
3	Pharmacy	0.0
4	New American Restaurant	0.0
5	Nightclub	0.0

Cluster 2 Analysis

- Area with small population
- No businesses that are visible on Foursquare
- Not recommended to locate a restaurant here

Results

- Cluster 0 and 2 were not great areas to locate a restau due to low populations, and minimal surrounding businesses
- Cluster 1 is more promising, but requires further analy narrow down a specific area

Conclusion

- Data science can be used to assist in decision making processes
- Clustering can be used to find similarities in data
- Data analysis can eliminate poor options quickly and provide additional information that makes coming to business decision easier and less risky