



ATLANTA, GA IMAGE FROM CERTAPET.COM

# BATTLE OF NEIGHBORHOOD

# INTRODUCTION

Goal of this project is to identify the most popular type of restaurant in the city and suggest a few locations which are good community with strong demand of dining



# DATA

To solve this problem, below data will be used:

- List of Atlanta Neighborhood

[https://en.wikipedia.org/wiki/Table\\_of\\_Atlanta\\_neighborhoods\\_by\\_population](https://en.wikipedia.org/wiki/Table_of_Atlanta_neighborhoods_by_population)

- Latitude & Longitude of neighborhood (Python Geopy)
- Venue data related to these neighborhood ( Foursquare API )

# METHODOLOGY

- Step1: identity the most popular type of restaurant in the city of Atlanta
- Step2: clustering to uncover the list of restaurant with strong demand of dining but lacking the most popular restaurant

# RESULT

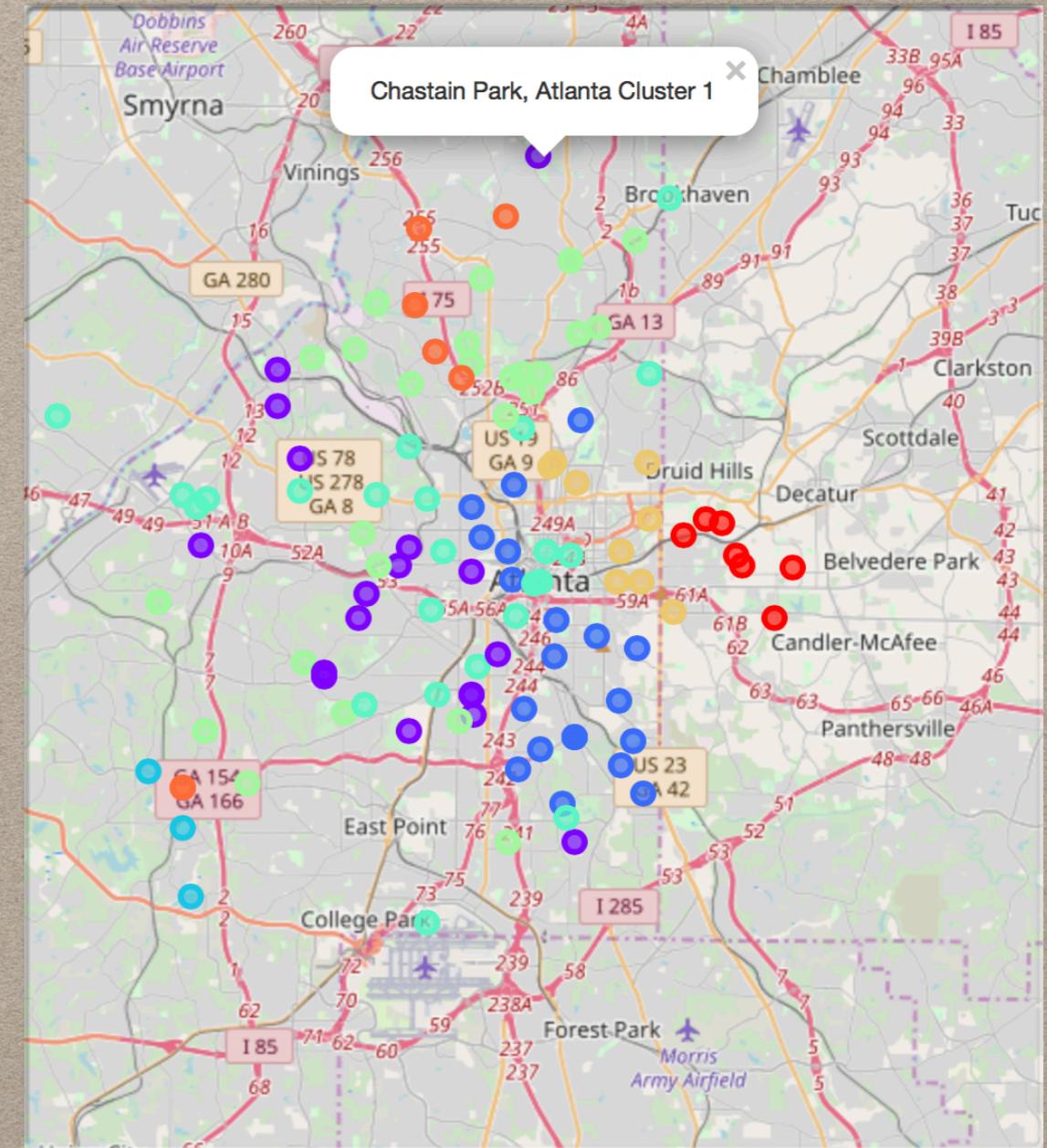
Top 5 most popular restaurants in Atlanta:

Venue Category	Venue
American Restaurant	36
Mexican Restaurant	29
Italian Restaurant	18
Seafood Restaurant	15
Vietnamese Restaurant	13

**American Restaurant is the most popular!!**

# CLUSTERING

Neighborhood	Latitude	Longitude	American Restaurant	Total	Cluster Lables
Adair Park, Atlanta	33.724974	-84.411429	4	26	7
Adams Park, Atlanta	33.712052	-84.456873	2	29	1
Adamsville, Atlanta	33.759274	-84.505209	3	30	1
Ansley Park, Atlanta	33.794550	-84.376315	4	22	5
Ardmore, Atlanta	33.806282	-84.400028	2	23	2
Argonne Forest, Atlanta	33.776905	-84.377668	5	21	5
Ashview Heights, Atlanta	33.704830	-84.378537	4	22	5
Atlanta University Center, Atlanta	33.751543	-84.413597	3	26	7
Atlantic Station, Atlanta	33.792029	-84.396072	3	21	0
Audubon Forest, Atlanta	33.726219	-84.470485	2	28	1
Bankhead, Atlanta	33.772235	-84.428882	3	22	5
Beecher Hills, Atlanta	33.723174	-84.463411	3	29	1
Ben Hill, Atlanta	33.690664	-84.511319	1	30	1
Ben Hill Terrace, Atlanta	33.690664	-84.511319	1	30	1



# DISCUSSION

- Cluster 7 was determined to be the best fit with:
  - Large number of total restaurant
  - Small number of American restaurant

Neighborhood	American Restaurant	Total	Cluster Lables
Ben Hill, Atlanta	1	30	7
Ben Hill Terrace, Atlanta	1	30	7
Cross Creek, Atlanta	1	22	7
Paces, Atlanta	1	24	7
Peachtree Heights East, Atlanta	1	23	7
Peachtree Heights West, Atlanta	1	23	7
Tuxedo Park, Atlanta	1	26	7
Underwood Hills, Atlanta	1	22	7

# CONCLUSION

- This study is targeting potential new business owner who is looking to open up a restaurant in Atlanta.
- Report leveraged foursquare location data identified that American restaurant is the most popular type of food
- Clustering is used to uncover several neighborhood where there is strong demand of dining but not a big competition of American food