Explore Toronto Restaurants

Introduction

- *Selecting the right location for a restaurant in Toronto is one of the very important decisions, especially for chinese.*

- *Toronto has many neighborhoods with various places that attract tourists and people to visit. It is important to evaluate different neighborhoods based on the factors that are important for running a restaurant such as the number of competitors and the potential demand in that neighborhood.*

- *This project will help people to find the best neighborhood in Toronto to have a meal and the best place to open a new restaurant. The challenge is to find a suitable neighborhood which is easy to access, has fewer competitors.*

Data

- For this project we need following data

- Toronto neighborhood that with their latitude and longitude.
  - Datasource : https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M
  - Description: We will Scrap Toronto neighborhood Table from Wikipedia and get the coordinates of these major districts using geocoder class of Geopy client.
- Restaurants in each neighborhood of Toronto:
  - Data source: Foursquare APIs
  - Description : By using this API we will get all the venues in each neighborhood. We can filter these venues to get only restaurants.
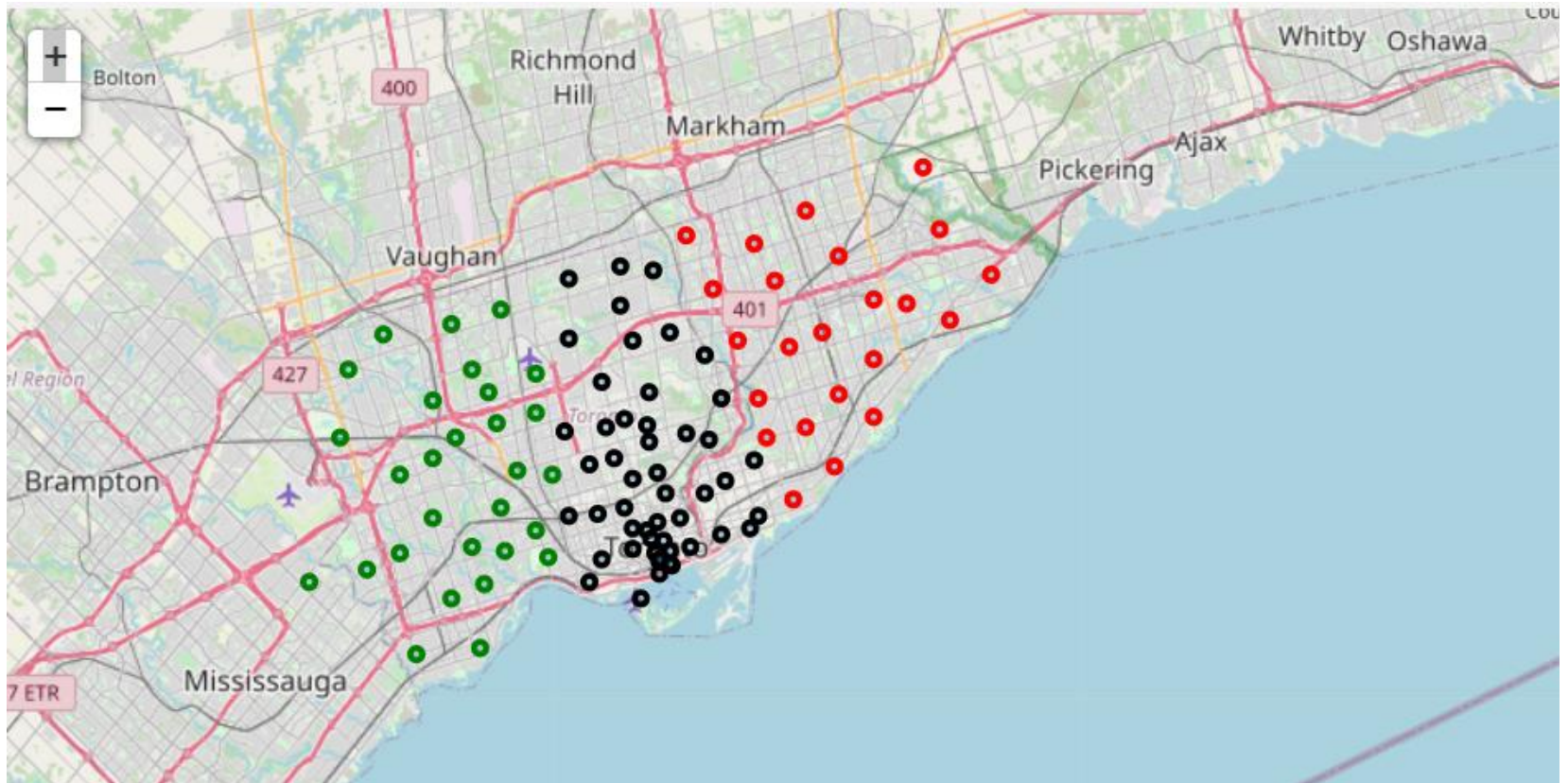
Methodology

- Data preparation

	PostalCode	Borough	Neighbourhood	Latitude	Longitude
0	M3A	North York	Parkwoods	43.753259	-79.329656
1	M4A	North York	Victoria Village	43.725882	-79.315572
2	M5A	Downtown Toronto	Regent Park, Harbourfront	43.654260	-79.360636
3	M6A	North York	Lawrence Manor, Lawrence Heights	43.718518	-79.464763
4	M7A	Downtown Toronto	Queen's Park, Ontario Provincial Government	43.662301	-79.389494

Methodology

- Data visualization: cluster of latitude and longitude

Methodology

- Data preparation: Footsquare

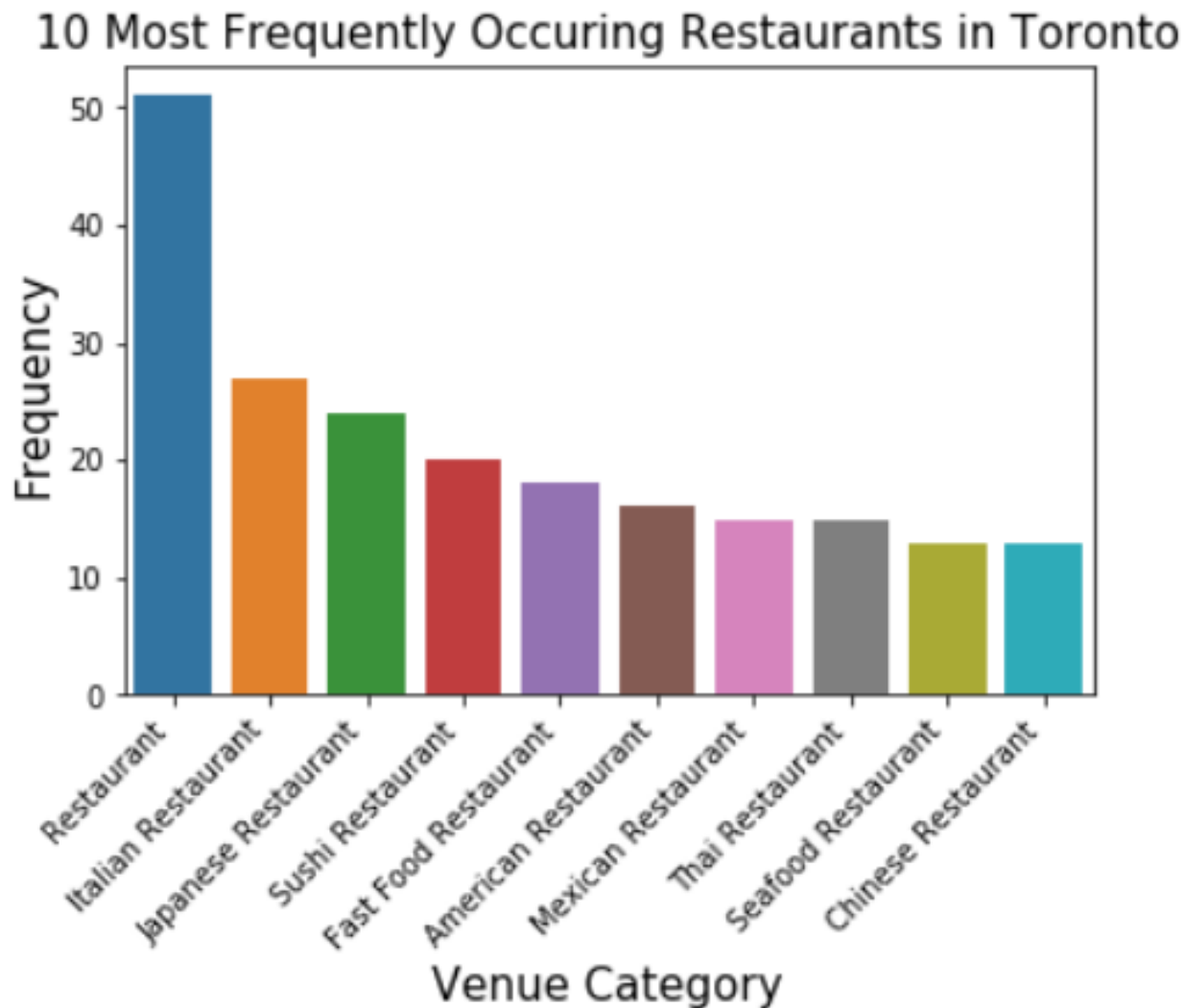|	name	categories	lat	lng
0	The Abbot	Gastropub	43.703688	-79.413485
1	Hotel Gelato	Café	43.703478	-79.414311
2	The Mad Bean Coffee House	Coffee Shop	43.703529	-79.413698
3	7 Numbers	Italian Restaurant	43.703630	-79.413724
4	Tokyo Sushi	Sushi Restaurant	43.704146	-79.410631

Methodology

- Data preparation: Toronto restaurants

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
1	Victoria Village	43.725882	-79.315572	Portugril	43.725819	-79.312785	Portuguese Restaurant
2	Regent Park, Harbourfront	43.654260	-79.360636	Impact Kitchen	43.656369	-79.356980	Restaurant
3	Regent Park, Harbourfront	43.654260	-79.360636	El Catrin	43.650601	-79.358920	Mexican Restaurant
4	Regent Park, Harbourfront	43.654260	-79.360636	Cluny Bistro & Boulangerie	43.650565	-79.357843	French Restaurant
5	Lawrence Manor, Lawrence Heights	43.718518	-79.464763	Lac Vien Vietnamese Restaurant	43.721259	-79.468472	Vietnamese Restaurant
6	Queen's Park, Ontario Provincial Government	43.662301	-79.389494	Nando's	43.661728	-79.386391	Portuguese Restaurant
7	Queen's Park, Ontario Provincial Government	43.662301	-79.389494	Mercatto	43.660391	-79.387664	Italian Restaurant

Methodology

- Data preparation: Toronto restaurants ranking in each neighborhood
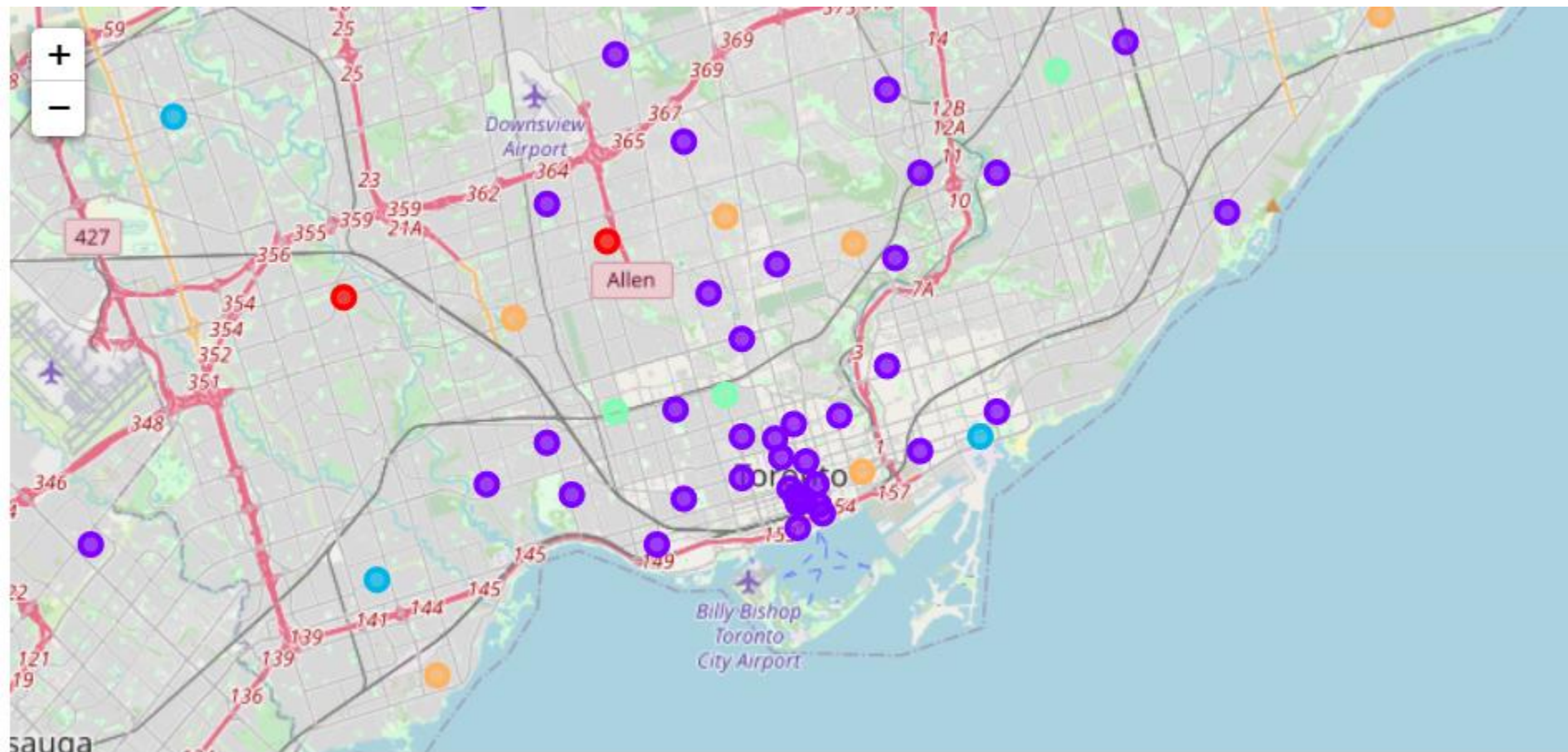
	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Agincourt	Latin American Restaurant	Vietnamese Restaurant	Dumpling Restaurant	Greek Restaurant	Gluten-free Restaurant	French Restaurant	Fast Food Restaurant	Falafel Restaurant	Ethiopian Restaurant	Eastern European Restaurant
1	Bathurst Manor, Wilson Heights, Downsview North	Sushi Restaurant	Chinese Restaurant	Restaurant	Middle Eastern Restaurant	Vietnamese Restaurant	Dumpling Restaurant	Gluten-free Restaurant	French Restaurant	Fast Food Restaurant	Falafel Restaurant
2	Bayview Village	Japanese Restaurant	Chinese Restaurant	Dumpling Restaurant	Hakka Restaurant	Greek Restaurant	Gluten-free Restaurant	French Restaurant	Fast Food Restaurant	Falafel Restaurant	Ethiopian Restaurant
3	Bedford Park, Lawrence Manor East	Italian Restaurant	Sushi Restaurant	Comfort Food Restaurant	Greek Restaurant	Indian Restaurant	Restaurant	American Restaurant	Thai Restaurant	Sri Lankan Restaurant	Gluten-free Restaurant

Results

10 Most Frequently Occuring Restaurants in Toronto

Results

- Cluster of neighborhoods

Conclusion

- I have analyzed the Toronto restaurants using data scraped from Wiki and Foursquare.

- There are lot of different restaurants to choose and many neighborhoods can give you similar options.

- Chinese restaurant is not the most popular choice in Toronto. There are opportunities here to make better Chinese food