

Restaurant Categories in Central Toronto

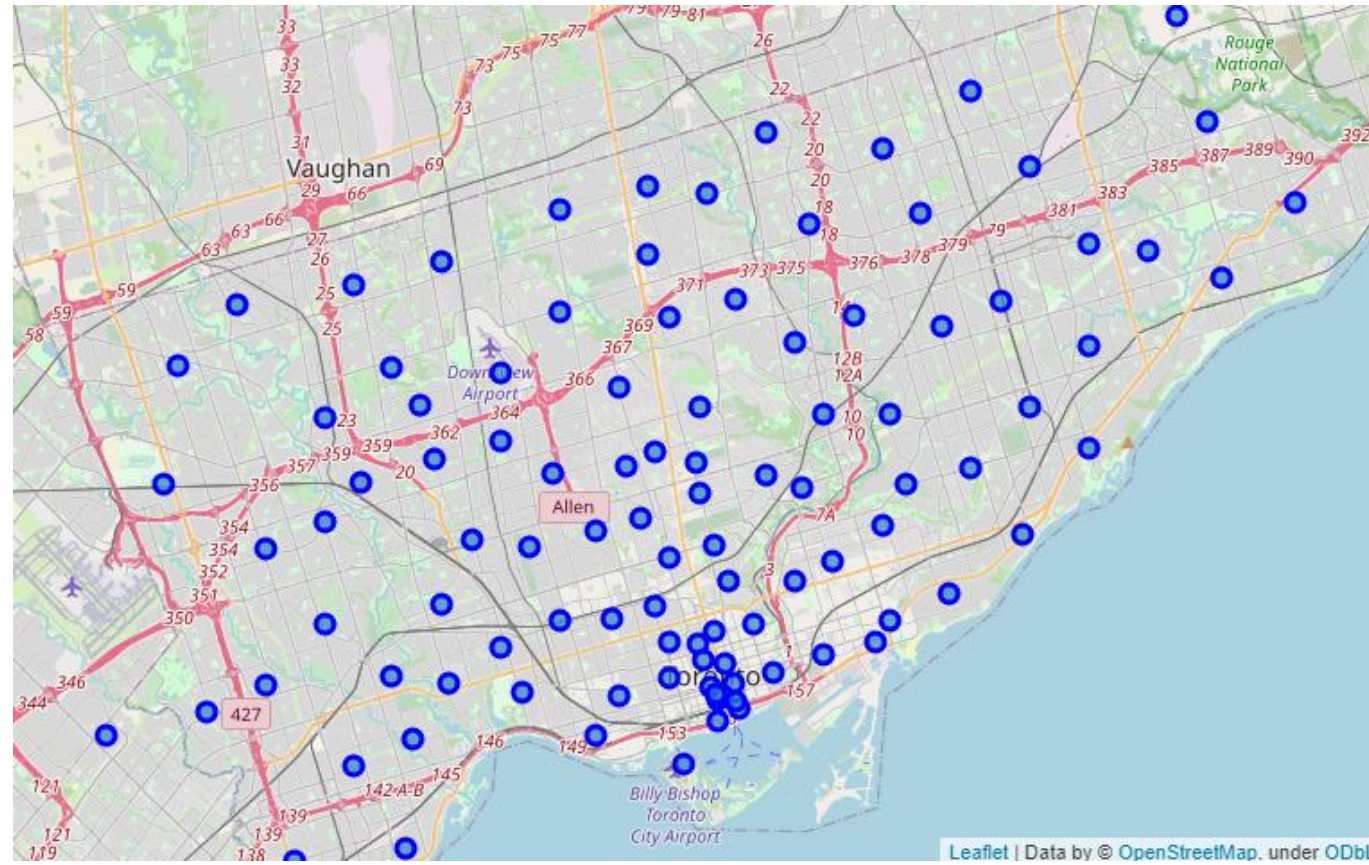
Introduction

The type of food that a certain community prefer is essential in determining what type of restaurant should be put up in a certain community.

In this study, the current restaurants in the Central Toronto area will be analyzed to determine what type of restaurant do most Canadians from Central Toronto prefer. Hopefully, here are some sample questions that can be addressed by the study:

1. Are there a lot of Chinese, French, Japanese, Italian or Others?
2. Which Neighborhood has a lot of sushi restaurants?

Map of Toronto



Focusing on Central Toronto

Since the study will focus on Central Toronto, here are the neighborhood of Central Toronto in a map using Folium.



Using Foursquare!

Capture the restaurants visible within 1000m radius of each Neighborhood in Central Toronto.

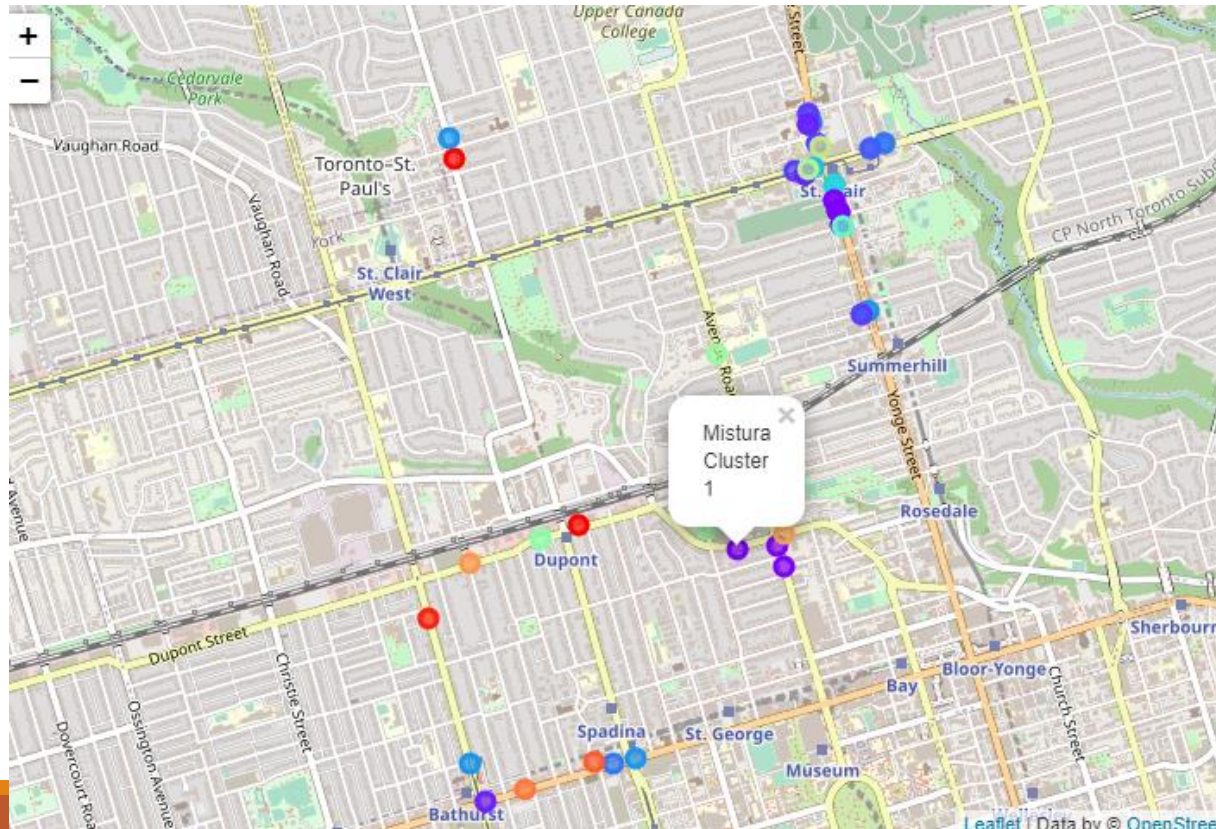
SAMPLE DATA (FIRST 20):

Note: There are 26 Venue categories ranging from Chinese, Thai, Italian, Indonesian, Greek, etc restaurants.

| | Neighborhood | Neighborhood Latitude | Neighborhood Longitude | Venue | Venue Latitude | Venue Longitude | Venue Category |
|---|------------------|-----------------------|------------------------|-----------------------|----------------|-----------------|---------------------|
| 0 | Roselawn | 43.711695 | -79.416936 | 7 Numbers | 43.703630 | -79.413724 | Italian Restaurant |
| 1 | Roselawn | 43.711695 | -79.416936 | Tokyo Sushi | 43.704146 | -79.410631 | Sushi Restaurant |
| 2 | Roselawn | 43.711695 | -79.416936 | Ferraro | 43.703655 | -79.413167 | Italian Restaurant |
| 3 | Roselawn | 43.711695 | -79.416936 | EDO | 43.703754 | -79.412802 | Japanese Restaurant |
| 4 | Roselawn | 43.711695 | -79.416936 | Kimono | 43.704241 | -79.410085 | Sushi Restaurant |
| 5 | Roselawn | 43.711695 | -79.416936 | Zen Sushi | 43.703717 | -79.414113 | Sushi Restaurant |
| 6 | Davisville North | 43.712751 | -79.390197 | Bar Buca | 43.706961 | -79.394808 | Italian Restaurant |
| 7 | Davisville North | 43.712751 | -79.390197 | La Vecchia Ristorante | 43.710167 | -79.399086 | Italian Restaurant |
| 8 | Davisville North | 43.712751 | -79.390197 | Kinton Ramen | 43.707302 | -79.395854 | Ramen Restaurant |
| 9 | Davisville North | 43.712751 | -79.390197 | Grazie Ristorante | 43.709329 | -79.398823 | Italian Restaurant |

Clustering the Restaurants in Central Toronto

Since there are 26 Restaurant Categories, this will be used as the number of clusters. Here is the map with each clustered according to k-Means:



Determining the Cluster with the most Number or Frequency

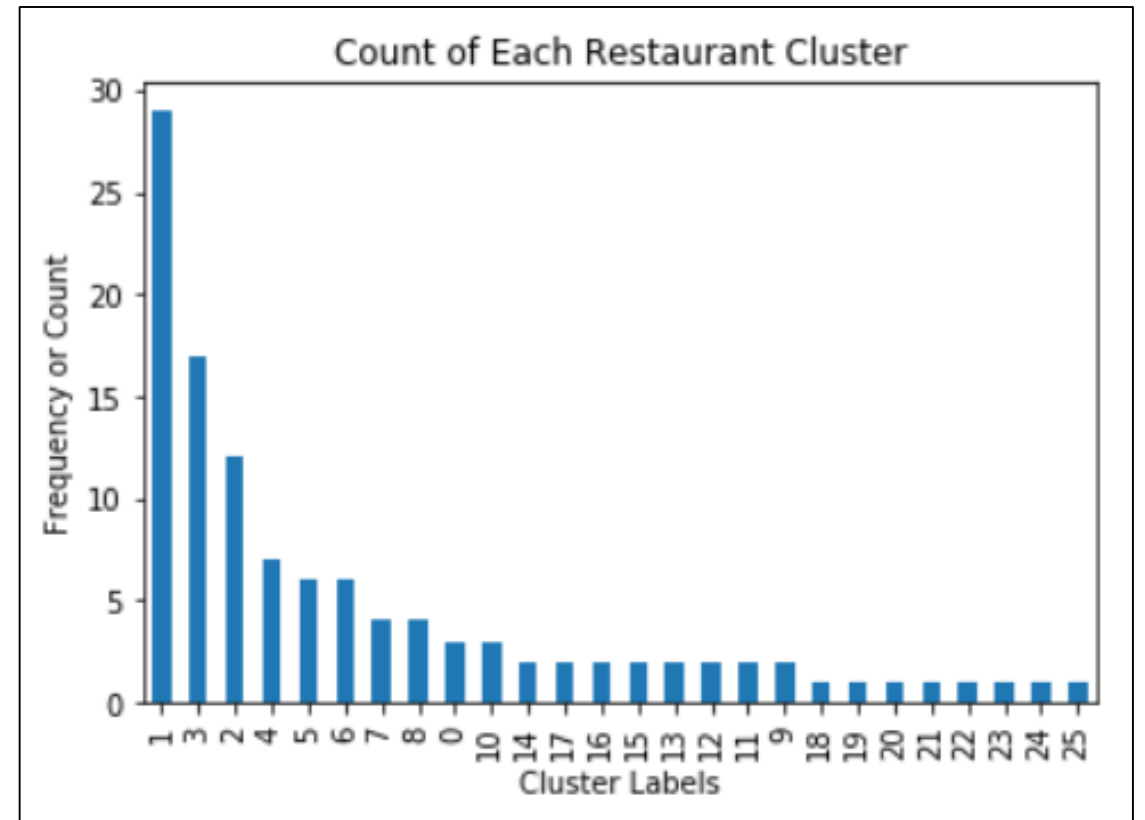
From the bar graph, it can be seen that the cluster with the most number of restaurants is Cluster 1.

Cluster 1 = **Italian (1st)**

Thus, it can be said from here that the people from Central Toronto typically prefers Italian Restaurants since this is the most number in the city.

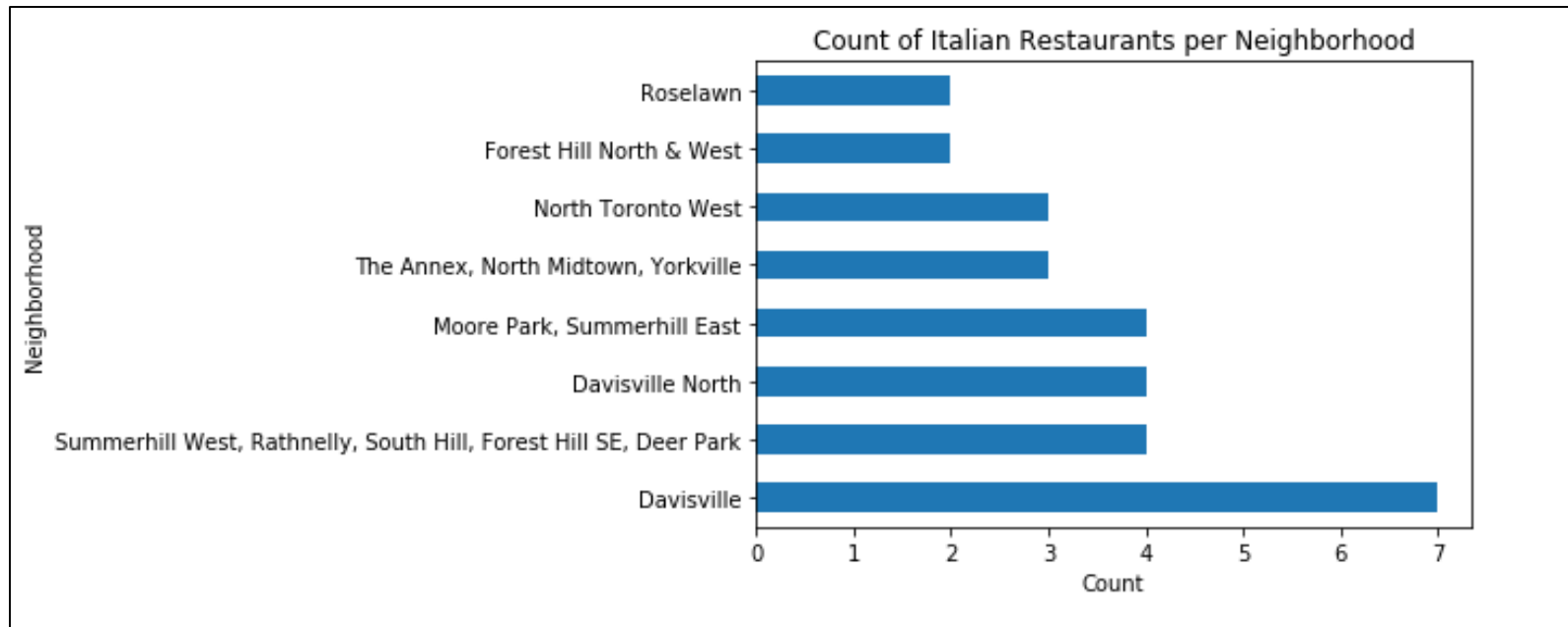
second with the most number is Cluster 3.

Cluster 3 = **Sushi (2nd)**



Italian Restaurants in Central Toronto

If a chef would like to open a restaurant, he can assure that people will be familiar with his cuisine in **Central Toronto**. He may opt to open in Neighborhoods where there are fewer Italian restaurants such as **Roselawn** and **Forest Hill North & West**.



Sushi Restaurants in Central Toronto

Since Sushi Restaurants came in second, people of Central Toronto would also be familiar with in especially people from **Davisville**.

