

The background features abstract geometric shapes in various shades of blue and teal. On the left, a solid blue triangle points towards the center. On the right, a complex arrangement of overlapping translucent triangles and polygons in different blue and teal tones creates a layered, modern look. The central text is positioned within the white space between these graphic elements.

# **DETERMINING THE BEST LOCATION FOR A CARIBBEAN RESTAURANT IN TORONTO**

# Background

- ▶ Canada has one of the highest immigration rates per capita amongst developed nations and is one of the most multicultural cities in the world.
- ▶ John is a budding Data Analyst, however there are not many job offerings for him in Jamaica and has decided to migrate to Canada with his family.
- ▶ John's wife is a chef and would like to open a Jamaican Restaurant in Toronto.

# Problem

Where is the best location for a Jamaican Restaurant in Toronto?



# Who will be interested?

- ▶ Persons migrating and considering opening a business and would like to find the right location
- ▶ Persons interested in finding Caribbean Restaurants in Toronto
- ▶ Anyone interested in Data Analysis

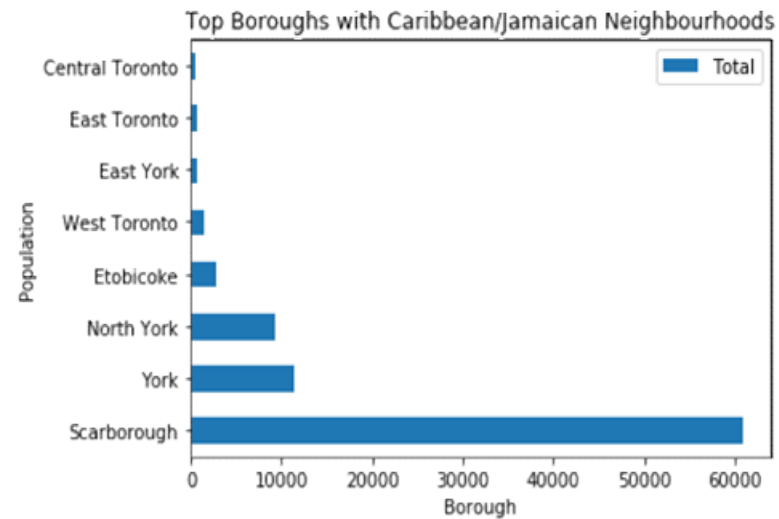
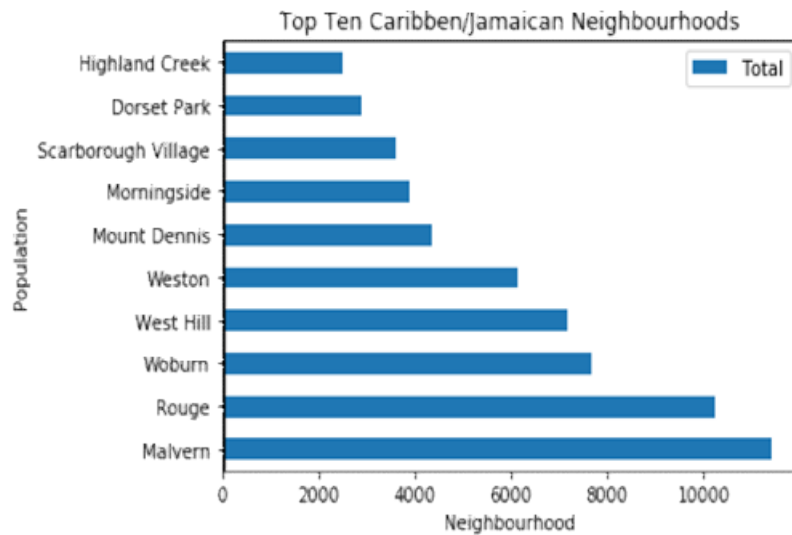
# Data Sources

- ▶ List of Toronto neighbourhoods and postal codes : “List of Postal code of Canada: M”  
([https://en.wikipedia.org/w/index.php?title=List\\_of\\_postal\\_codes\\_of\\_Canada:\\_M&oldid=945633050](https://en.wikipedia.org/w/index.php?title=List_of_postal_codes_of_Canada:_M&oldid=945633050))
- ▶ Boundaries of Toronto Neighbourhoods from Toronto’s Open Data Portal :  
[https://ckan0.cf.opendata.inter.prod-toronto.ca/download\\_resource/a083c865-6d60-4d1d-b6c6-b0c8a85f9c15?format=csv&projection=4326](https://ckan0.cf.opendata.inter.prod-toronto.ca/download_resource/a083c865-6d60-4d1d-b6c6-b0c8a85f9c15?format=csv&projection=4326)
- ▶ Neighbourhood Profiles based on the 2016 Census of Population data from Statistics Canada from Toronto’s Open Data Portal:  
[https://ckan0.cf.opendata.inter.prod-toronto.ca/download\\_resource/ef0239b1-832b-4d0b-a1f3-4153e53b189e?format=csv](https://ckan0.cf.opendata.inter.prod-toronto.ca/download_resource/ef0239b1-832b-4d0b-a1f3-4153e53b189e?format=csv) )
- ▶ Venues for each neighbourhood : Foursquare’s explore API

# Jamaican/Caribbean Population in Toronto



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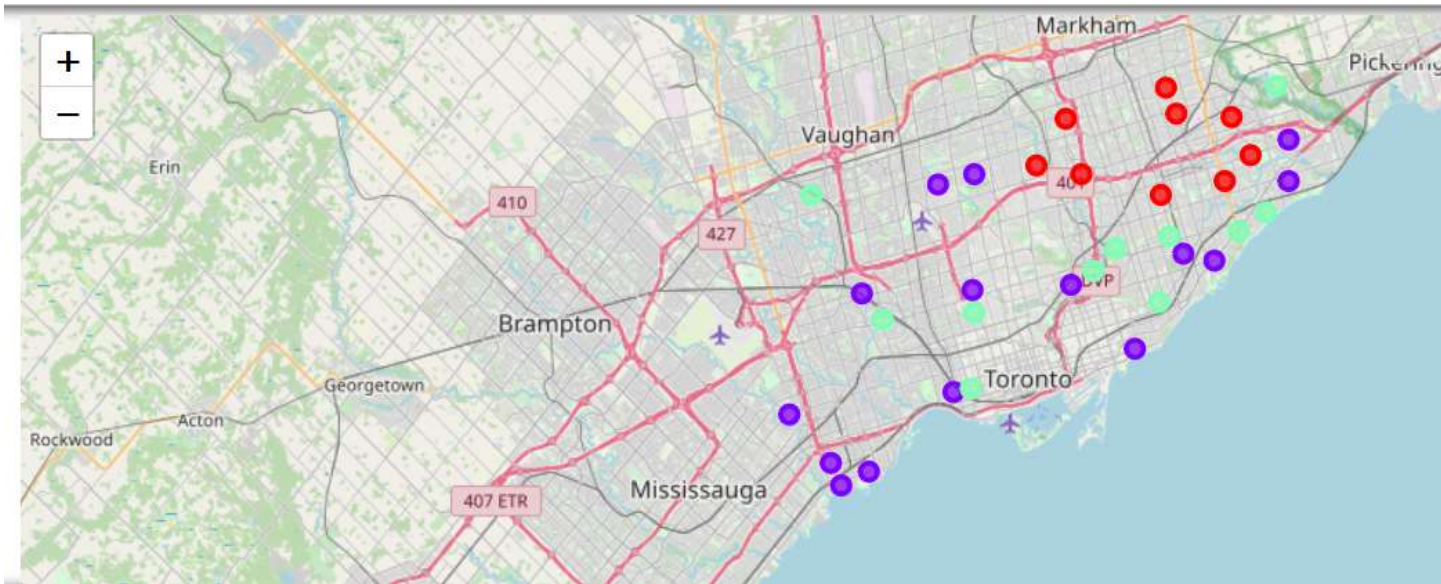
# Where are the Caribbean Restaurants Located?

Neighbourhood Number	Neighbourhood	Total	Percentage	Borough	Caribbean Restaurant
11	129.0 Agincourt North	2295.0	0.08	Scarborough	5
0	132.0 Malvern	11375.0	0.42	Scarborough	4
15	130.0 Milliken	1575.0	0.06	Scarborough	4
2	137.0 Woburn	7635.0	0.28	Scarborough	4
6	135.0 Morningside	3855.0	0.14	Scarborough	4
22	53.0 Henry Farm	940.0	0.03	North York	4
8	126.0 Dorset Park	2855.0	0.10	Scarborough	4
26	48.0 Hillcrest Village	715.0	0.03	North York	3
23	52.0 Bayview Village	905.0	0.03	North York	3
10	21.0 Humber Summit	2315.0	0.08	North York	2

Borough	Caribbean Restaurant
5 Scarborough	30
4 North York	14
7 York	2
6 West Toronto	1
0 Central Toronto	0
1 East Toronto	0
2 East York	0
3 Etobicoke	0



# Cluster of Neighbourhoods



- ▶ Cluster 0 (Red Dots): The highest number of Caribbean Restaurants
- ▶ Cluster 1 (Purple Dots): No Caribbean Restaurants
- ▶ Cluster 2 (Green Dots): Small number of Caribbean Restaurants

# Results

- ▶ Scarborough has the largest Jamaican/Caribbean population amongst all the boroughs in Toronto.
- ▶ The most densely populated Jamaican/Caribbean neighbourhoods are Malvern, Rouge, Glenfield-Jane Heights, Woburn, West Hill, West Humber-Claireville, Mount Olive-Silverstone-Jamestown, Downsview-Roding, Weston and Black Creek.
- ▶ The most Caribbean Restaurants were located in Agincourt North, however it has a low percentage of persons of Jamaican/Caribbean origin.
- ▶ Of the most densely populated Jamaican/Caribbean neighbourhoods, Malvern and Woburn were the only ones with Caribbean Restaurants.

# Conclusion

- ▶ Python library was used to develop a model to determine the right location for a new restaurant
- ▶ There is room for improvement, as Foursquare API did not include a classification for Jamaican Restaurants
- ▶ The inclusion of additional information like crime and earnings data can improve the analysis
- ▶ This dataset can be used by anyone looking to open a restaurant or any other business with small changes.