

Capstone Project - Opening a Café in Toronto

Data

To find the ideal location for a new café in Toronto we first need the geospatial data pertaining to the neighbourhoods in the city. Only the central boroughs of Downtown Toronto and Queen's Park are selected. The neighborhoods within these boroughs are identified by scraping the Toronto post code information from the Wikipedia page

'https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M'. The coordinates of the Toronto neighbourhoods can then be found using the package 'geocoder'.

The Foursquare API is used to find information on all venues in Toronto. Selections can be made so that only information about the cafés, coffee shops or tea rooms in Downtown Toronto and Queen's Park are returned, a selection of the data can be seen in the figure below. Then one can find the areas of low density for these types of venues.

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Regent Park, Harbourfront	43.65512	-79.36264	Tandem Coffee	43.653559	-79.361809	Coffee Shop
6	Regent Park, Harbourfront	43.65512	-79.36264	Rooster Coffee	43.651900	-79.365609	Coffee Shop
8	Regent Park, Harbourfront	43.65512	-79.36264	Sumach Espresso	43.658135	-79.359515	Coffee Shop
12	Regent Park, Harbourfront	43.65512	-79.36264	Starbucks	43.651613	-79.364917	Coffee Shop
18	Regent Park, Harbourfront	43.65512	-79.36264	Savoury Grounds	43.656821	-79.358970	Coffee Shop
29	Ontario Provincial Government	43.66253	-79.39188	Coffee Island	43.664271	-79.386972	Coffee Shop
32	Ontario Provincial Government	43.66253	-79.39188	Second Cup	43.659018	-79.394152	Coffee Shop
34	Ontario Provincial Government	43.66253	-79.39188	Aroma Espresso Bar	43.658928	-79.389903	Café
36	Ontario Provincial Government	43.66253	-79.39188	Tim Hortons	43.659415	-79.391221	Coffee Shop
37	Ontario Provincial Government	43.66253	-79.39188	Tim Hortons	43.658906	-79.388696	Coffee Shop
40	Garden District, Ryerson	43.65739	-79.37804	Page One Cafe	43.657772	-79.376073	Café
54	Garden District, Ryerson	43.65739	-79.37804	Tokyo Smoke	43.657020	-79.380445	Coffee Shop
55	Garden District, Ryerson	43.65739	-79.37804	Oakham Café	43.658078	-79.378315	Café
57	Garden District, Ryerson	43.65739	-79.37804	Balzac's Coffee	43.657854	-79.379200	Coffee Shop
59	Garden District, Ryerson	43.65739	-79.37804	The Black Canary Espresso Bar	43.657029	-79.381385	Café