

# IBM Capstone Presentation

Finding lookalike neighborhoods

**The problem statement:** Help find neighborhoods in Toronto, ON that are similar to a given neighborhood in New York.

**Who will be interested:** This can be used by relocation agencies to help people who are looking to move to Toronto from New York.

**Background:** Toronto is a fast growing city in North America. Having said so, there are loads of new opportunities that are sprawling across Toronto that is of interest to people. This has led to a recent growth in immigration to the city. As per this [site](#); of all immigrants in Ontario, 7 out of 10 lived in Toronto.

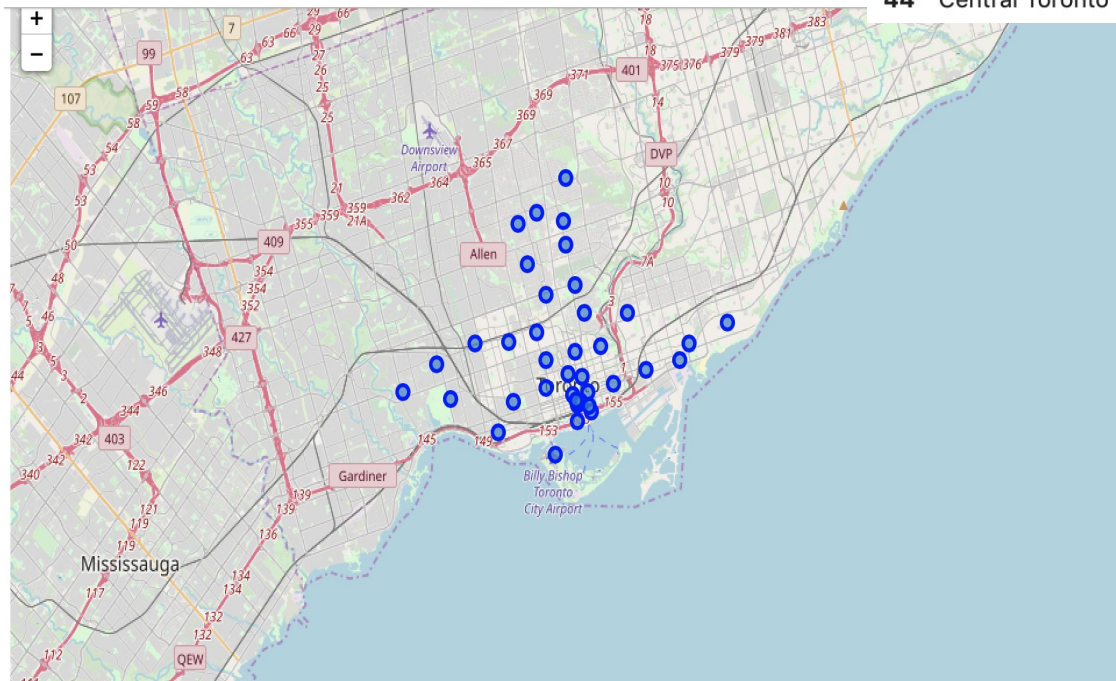
*We intend to come up with a smart solution that will provide an impetus to this effort. Our algorithm will factor in various lifestyle pointers of a neighborhood and use machine learning to find localities that have matching cultural and lifestyle offerings.*

### Data sources:

- New York city data: <https://gist.github.com/0cd2d7265973edb82dbf9ef2486c9ca1>
- Toronto city data: Web scraping [https://en.wikipedia.org/wiki/List\\_of\\_postal\\_codes\\_of\\_Canada:\\_M](https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M)
- FourSquare API to get neighbourhood details for each city

# City of Toronto:

	Borough	Neighbourhood	Latitude	Longitude
37	East Toronto	The Beaches	43.676357	-79.293031
41	East Toronto	The Danforth West,Riverdale	43.679557	-79.352188
42	East Toronto	The Beaches West,India Bazaar	43.668999	-79.315572
43	East Toronto	Studio District	43.659526	-79.340923
44	Central Toronto	Lawrence Park	43.728020	-79.388790



Map all neighborhoods for the city  
and prepare it for Foursquare usage

# City of Toronto: Toronto's neighborhood and its lifestyle in a snapshot!

	Neighbourhood	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	Adelaide,King,Richmond	Steakhouse	Asian Restaurant	Café	Pizza Place	Hotel	Neighborhood	Lounge	Burger Joint	Seafood Restaurant	Smoke Shop
1	Berczy Park	Seafood Restaurant	Coffee Shop	Cocktail Bar	Beer Bar	Café	Farmers Market	Greek Restaurant	Jazz Club	Basketball Stadium	Fish Market
2	Brockton,Exhibition Place,Parkdale Village	Coffee Shop	Breakfast Spot	Café	Climbing Gym	Stadium	Burrito Place	Restaurant	Caribbean Restaurant	Pet Store	Bakery
3	Business Reply Mail Processing Centre 969 Eastern	Yoga Studio	Fast Food Restaurant	Park	Comic Shop	Pizza Place	Butcher	Burrito Place	Recording Studio	Restaurant	Brewery
4	CN Tower,Bathurst Quay,Island airport,Harbourf...	Airport Lounge	Airport Service	Airport Terminal	Harbor / Marina	Sculpture Garden	Airport Food Court	Airport Gate	Bar	Boat or Ferry	Boutique

# City of NY:

NY's neighborhood and its lifestyle in a snapshot!

	Neighbourhood	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	Allerton	Pizza Place	Pharmacy	Spa	Deli / Bodega	Supermarket	Department Store	Fried Chicken Joint	Breakfast Spot	Bus Station	Gas Station
1	Annadale	Pizza Place	Park	Sports Bar	Restaurant	Food	Diner	Train Station	Pharmacy	Field	Event Space
2	Arden Heights	Pharmacy	Coffee Shop	Pizza Place	Bus Stop	Yoga Studio	Financial or Legal Service	Factory	Falafel Restaurant	Farm	Farmers Market
3	Arlington	Bus Stop	Deli / Bodega	American Restaurant	Boat or Ferry	Food	Grocery Store	Fish Market	Farm	Farmers Market	Fast Food Restaurant
4	Arrochar	Deli / Bodega	Pizza Place	Italian Restaurant	Bus Stop	Athletics & Sports	Middle Eastern Restaurant	Bagel Shop	Liquor Store	Supermarket	Hotel

# Find look alike for Chelsea, NY in Toronto

	Neighbourhood	Airport	Airport Food Court	Airport Gate	Airport Lounge	Airport Service	Airport Terminal	American Restaurant	Antique Shop	Aquarium	...	Veterinarian	Video Store	Warehouse Store	Waste Facility
38	Chelsea	0.0	0.0	0.0	0.0	0.0	0.0	0.029412	0.0	0.0	...	0.0	0.0	0.0	0.0

data\_index

0 Adelaide,King,Richmond

1 Berczy Park

3 Business Reply Mail Processing Centre 969 Eastern

7 Chinatown,Grange Park,Kensington Market

11 Davisville

12 Davisville North

15 Dovercourt Village,Dufferin

30 Ryerson,Garden District

32 Stn A P0 Boxes 25 The Esplanade

34 The Annex,North Midtown,Yorkville

