# THE BATTLE OF NEIGHBORHOODS

IBM DATA SCIENCE CAPSTONE PROJECT

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#### INTRODUCTION

- Finding the optimal location for a restaurant is the key point of the business
- > A Mediterranean restaurant in Downtown Toronto

#### Data

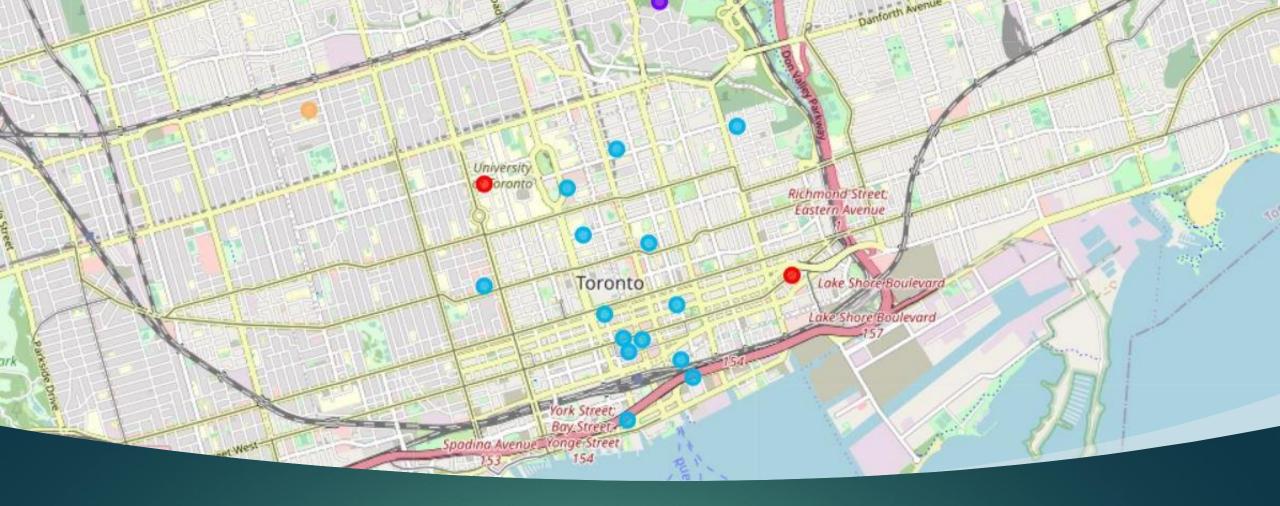
- ▶ List of postal codes of Canada
- Neighborhoods in Toronto



## York Toronto 139 139 141 142A 144 Centre Island

### Data

DOWNTOWN NEIGHBORHOODS MAP



#### Data

CLUSTERED NEIGBORHOODS IN DOWNTOWN TORONTO

#### Data

#### Food Venues in Downtown

	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
Neighborhood						
Berczy Park	50	50	50	50	50	50
er, King and Spadina, Railway Lands, Harbourfront West, Bathurst Quay, South Niagara, Island airport	2	2	2	2	2	2
Central Bay Street	69	69	69	69	69	69
Christie	6	6	6	6	6	6
Church and Wellesley	63	63	63	63	63	63
Commerce Court, Victoria Hotel	100	100	100	100	100	100
First Canadian Place, Underground city	100	100	100	100	100	100
Garden District, Ryerson	95	95	95	95	95	95
Harbourfront East, Union Station, Toronto Islands	83	83	83	83	83	83
Kensington Market, Chinatown, Grange Park	56	56	56	56	56	56
Queen's Park, Ontario Provincial Government	28	28	28	28	28	28
Regent Park, Harbourfront	23	23	23	23	23	23
Richmond, Adelaide, King	94	94	94	94	94	94
Rosedale	1	1	1	1	.1	1
St. James Town	68	68	68	68	68	68
St. James Town, Cabbagetown	29	29	29	29	29	29
Stn A PO Boxes	97	97	97	97	97	97
Toronto Dominion Centre, Design Exchange	100	100	100	100	100	100
University of Toronto, Harbord	28	28	28	28	28	28

#### Methodology

► A neighborhood with some Mediterenean Restaurant

▶ A neighborhood with not too much Mediterenean Restaurant

	Postal Code	Borough	Neighborhood	Latitude	Longitude	Cluster Labels	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
4	M5E	Downtown Toronto	Berczy Park	<mark>4</mark> 3.64 <mark>4</mark> 771	-79.373306	2	Bakery	Sandwich Place	Restaurant	Italian Restaurant	Sushi Restaurant	Moroccan Restaurant	Greek Restaurant	Diner	Bistro	Seafood Restaurant
4	M5E	Downtown Toronto	Berczy Park	43.644771	-79.373306	2	Bakery	Sandwich Place	Restaurant	Italian Restaurant	Sushi Restaurant	Moroccan Restaurant	Greek Restaurant	Diner	Bistro	Seafood Restaurant
3	M5C	Downtown Toronto	St. James Town	43.651494	-79.375418	2	Restaurant	Café	Italian Restaurant	Sushi Restaurant	Bakery	American Restaurant	Breakfast Spot	Gastropub	Moroccan Restaurant	Seafood Restaurant
18	M4Y	Downtown Toronto	Church and Wellesley	43.665860	-79.383160	2	Sushi Restaurant	Japanese Restaurant	Pizza Place	Burger Joint	Café	Restaurant	Fast Food Restaurant	Mexican Restaurant	Vietnamese Restaurant	Mediterranean Restaurant

#### Results

#### Discussion & Conclusion

- ▶ Not the perfect one
- ► Field Research
- ▶ The best probabilities