

Toronto Area Clustering using K-Mean



Toronto



Data

	District	District Latitude	District Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	M3A	43.753259	-79.329656	Brookbanks Park	43.751976	-79.332140	Park
1	M3A	43.753259	-79.329656	Variety Store	43.751974	-79.333114	Food & Drink Shop
2	M3A	43.753259	-79.329656	Corrosion Service Company Limited	43.752432	-79.334661	Construction & Landscaping
3	M4A	43.725882	-79.315572	Victoria Village Arena	43.723481	-79.315635	Hockey Arena
4	M4A	43.725882	-79.315572	Portugril	43.725819	-79.312785	Portuguese Restaurant

	Postal Code	Borough	Neighborhood	Latitude	Longitude
0	M3A	North York	Parkwoods	43.753259	-79.329656
1	M4A	North York	Victoria Village	43.725882	-79.315572
2	M5A	Downtown Toronto	Regent Park, Harbourfront	43.654260	-79.360636
3	M6A	North York	Lawrence Manor, Lawrence Heights	43.718518	-79.464763
4	M7A	Downtown Toronto	Queen's Park, Ontario Provincial Government	43.662301	-79.389494

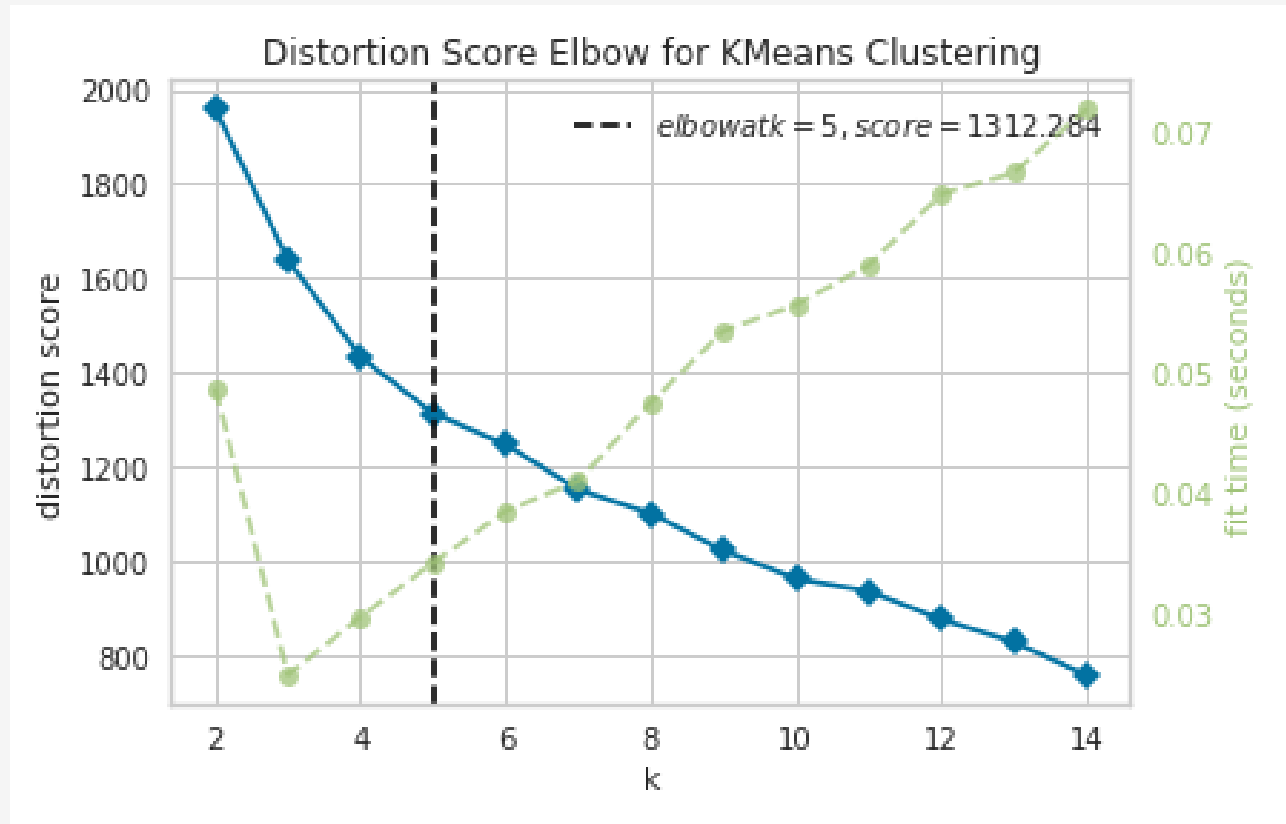
Foursquare Venue

	District	District Latitude	District Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	M3A	43.753259	-79.329656	Brookbanks Park	43.751976	-79.332140	Park
1	M3A	43.753259	-79.329656	Variety Store	43.751974	-79.333114	Food & Drink Shop
2	M3A	43.753259	-79.329656	Corrosion Service Company Limited	43.752432	-79.334661	Construction & Landscaping
3	M4A	43.725882	-79.315572	Victoria Village Arena	43.723481	-79.315635	Hockey Arena
4	M4A	43.725882	-79.315572	Portugril	43.725819	-79.312785	Portuguese Restaurant

Feature

[illegible]

K-Mean Elbow



Cluster 0

Venue Category	Label	American Restaurant	Art Gallery	Asian Restaurant	Bakery	Bank	Bar	Beer Bar	Beer Store	Bookstore	Breakfast Spot	Brewery	Bubble Tea Shop	Burger Joint	Burrito Place	Café
District																
M2J	0	1.0	0.0	1.0	2.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0
M5B	0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	0.0	2.0	0.0	0.0	3.0	1.0	1.0	3.0

Cluster 1

[illegible]

Cluster 2

Venue Category	Label	American Restaurant	Art Gallery	Asian Restaurant	Bakery	Bank	Bar	Beer Bar	Beer Store	Bookstore	Breakfast Spot	Brewery	Bubble Tea Shop	Burger Joint	Burrito Place	Café
District																
M5H	2	1.0	1.0	1.0	2.0	0.0	1.0	0.0	0.0	2.0	1.0	0.0	0.0	1.0	1.0	5.0
M5J	2	0.0	1.0	0.0	2.0	0.0	2.0	1.0	0.0	0.0	0.0	3.0	1.0	0.0	0.0	4.0
M5K	2	3.0	1.0	1.0	2.0	0.0	1.0	2.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	7.0
M5L	2	4.0	1.0	1.0	2.0	0.0	1.0	2.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	7.0
M5X	2	3.0	1.0	3.0	2.0	0.0	1.0	2.0	0.0	1.0	0.0	0.0	0.0	1.0	1.0	8.0

Cluster 3

Venue Category	Label	American Restaurant	Art Gallery	Asian Restaurant	Bakery	Bank	Bar	Beer Bar	Beer Store	Bookstore	Breakfast Spot	Brewery	Bubble Tea Shop	Burger Joint	Burrito Place	Café
District																
M2N	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	2.0
M4G	3	0.0	0.0	0.0	0.0	2.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	2.0	0.0	0.0
M4K	3	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	2.0	0.0	1.0	1.0	0.0	0.0	1.0
M4M	3	2.0	0.0	0.0	2.0	1.0	1.0	0.0	0.0	1.0	0.0	2.0	0.0	0.0	0.0	4.0
M4S	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	2.0
M4X	3	1.0	0.0	0.0	2.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	3.0
M5M	3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
M5R	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	3.0
M5S	3	0.0	0.0	0.0	2.0	1.0	2.0	1.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	5.0
M5T	3	0.0	0.0	0.0	3.0	0.0	2.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	5.0
M6G	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
M6J	3	0.0	1.0	2.0	0.0	0.0	5.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	2.0
M6K	3	0.0	0.0	0.0	2.0	0.0	1.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	1.0	3.0
M6P	3	0.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	2.0
M6S	3	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	3.0

Thankyou