

The Battle of Neighbourhoods Week 5

Presentation

Goal

- We want to figure out in which area in Toronto we can open a new "real italian restaurant.
- We want to accomplish this goal by finding out where in toronto are already italian restaurant situated so we can deterime a good spot.

Approach

- We grab some data about the area via Wikipedia + Geospatial_Coordinates.csv
- We combine this data .
- We cluster this data with K mean to find the spot.

K-Mean

- With the K-mean we determined 3 clusters to see how many restaurants are in each cluster.
- The results of this you can find on the next 3 slides.

Segment 0

out[220]:

	Neighborhood	Italian Restaurant	Cluster Labels	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
13	Church and Wellesley	0.013699	0	43.665860	-79.38316	Dal Moro's Fresh Pasta To Go	43.666641	-79.38540	Italian Restaurant
34	First Canadian Place, Underground city	0.010000	0	43.648429	-79.38228	Mercatto	43.650243	-79.38082	Italian Restaurant

Segment 1

Out[221]:

	Neighborhood	Italian Restaurant	Cluster Labels	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
76	St. James Town	0.024390	1	43.651494	-79.375418	Terroni	43.650927	-79.375602	Italian Restaurant
77	St. James Town, Cabbagetown	0.043478	1	43.667967	-79.367675	Hey Lucy	43.664075	-79.368655	Italian Restaurant
76	St. James Town	0.024390	1	43.651494	-79.375418	Mercatto	43.650243	-79.380820	Italian Restaurant
11	Central Bay Street	0.048387	1	43.657952	-79.387383	Tosto	43.661198	-79.386414	Italian Restaurant
63	Ontario Provincial Government	0.033333	1	43.662301	-79.389494	Mercatto	43.660391	-79.387664	Italian Restaurant
77	St. James Town, Cabbagetown	0.043478	1	43.667967	-79.367675	F'Amelia	43.667536	-79.368613	Italian Restaurant
79	Studio District	0.027778	1	43.659526	-79.340923	Baldini	43.661300	-79.339027	Italian Restaurant
31	Enclave of MSE	0.030612	1	43.646435	-79.374846	Carisma	43.649617	-79.375434	Italian Restaurant
22	Don Mills South	0.047619	1	43.725900	-79.340923	Sorento Restaurant	43.726575	-79.341989	Italian Restaurant
31	Enclave of MSE	0.030612	1	43.646435	-79.374846	Mirto	43.650702	-79.376307	Italian Restaurant
31	Enclave of MSE	0.030612	1	43.646435	-79.374846	Metropolitan Resto Bar	43.650062	-79.377181	Italian Restaurant
17	Commerce Court, Victoria Hotel	0.040000	1	43.648198	-79.379817	Mercatto	43.650243	-79.380820	Italian Restaurant
17	Commerce Court, Victoria Hotel	0.040000	1	43.648198	-79.379817	Terroni	43.650927	-79.375602	Italian Restaurant
17	Commerce Court, Victoria Hotel	0.040000	1	43.648198	-79.379817	Metropolitan Resto Bar	43.650062	-79.377181	Italian Restaurant
17	Commerce Court, Victoria Hotel	0.040000	1	43.648198	-79.379817	Carisma	43.649617	-79.375434	Italian Restaurant
11	Central Bay Street	0.048387	1	43.657952	-79.387383	Scaddabush Italian Kitchen & Bar	43.658920	-79.382891	Italian Restaurant
7	Brockton, Parkdale Village, Exhibition Place	0.040000	1	43.636847	-79.426191	Caffino	43.639021	-79.425289	Italian Restaurant
53	Little Portugal, Trinity	0.022727	1	43.647927	-79.419750	Ufficio	43.649439	-79.423014	Italian Restaurant
46	India Bazaar, The Beaches West	0.043478	1	43.668999	-79.315572	Casa di Giorgio	43.666645	-79.315204	Italian Restaurant

40	Harbourfront East, Union Station, Toronto Islands	0.030000	1	43.640816	-79.381752	Taverna Mercatto	43.642625	-79.383257	Italian Restaurant
40	Harbourfront East, Union Station, Toronto Islands	0.030000	1	43.640816	-79.381752	Piazza Manna	43.641460	-79.377719	Italian Restaurant
40	Harbourfront East, Union Station, Toronto Islands	0.030000	1	43.640816	-79.381752	Amano Pasta	43.644919	-79.382358	Italian Restaurant
87	Toronto Dominion Centre, Design Exchange	0.030000	1	43.647177	-79.381576	Mercatto	43.650243	-79.380820	Italian Restaurant
87	Toronto Dominion Centre, Design Exchange	0.030000	1	43.647177	-79.381576	Metropolitan Resto Bar	43.650062	-79.377181	Italian Restaurant
87	Toronto Dominion Centre, Design Exchange	0.030000	1	43.647177	-79.381576	TOCA	43.645431	-79.387059	Italian Restaurant
11	Central Bay Street	0.048387	1	43.657952	-79.387383	Mercatto	43.660391	-79.387664	Italian Restaurant
41	High Park, The Junction South	0.040000	1	43.661608	-79.464763	nodo	43.665303	-79.465621	Italian Restaurant
36	Garden District, Ryerson	0.020000	1	43.657162	-79.378937	Scaddabush Italian Kitchen & Bar	43.658920	-79.382891	Italian Restaurant
36	Garden District, Ryerson	0.020000	1	43.657162	-79.378937	Trattoria Mercatto	43.654453	-79.380974	Italian Restaurant

Segment 2

out[222]:

	Neighborhood	Italian Restaurant	Cluster Labels	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
84	The Danforth West, Riverdale	0.069767	2	43.679557	-79.352188	Cafe Fiorentina	43.677743	-79.350115	Italian Restaurant
84	The Danforth West, Riverdale	0.069767	2	43.679557	-79.352188	7 Numbers	43.677062	-79.353934	Italian Restaurant
18	Davisville	0.054054	2	43.704324	-79.388790	Positano	43.704558	-79.388639	Italian Restaurant
72	Runnymede, Swansea	0.054054	2	43.651571	-79.484450	Goodfellas Wood Oven Pizza	43.648224	-79.486356	Italian Restaurant
18	Davisville	0.054054	2	43.704324	-79.388790	Florentia Ristorante	43.703594	-79.387985	Italian Restaurant
84	The Danforth West, Riverdale	0.069767	2	43.679557	-79.352188	IL FORNELLO on Danforth	43.678604	-79.346904	Italian Restaurant
72	Runnymede, Swansea	0.054054	2	43.651571	-79.484450	Campo	43.655191	-79.487067	Italian Restaurant
88	University of Toronto, Harbord	0.062500	2	43.662696	-79.400049	Piano Piano	43.662949	-79.402898	Italian Restaurant
12	Christie	0.062500	2	43.669542	-79.422564	Vinny's Panini	43.670679	-79.426148	Italian Restaurant
64	Parkdale, Roncesvalles	0.066667	2	43.648960	-79.456325	Domani Restaurant & Wine Bar	43.649235	-79.450229	Italian Restaurant
4	Bedford Park, Lawrence Manor East	0.086957	2	43.733283	-79.419750	Francobollo	43.734557	-79.419549	Italian Restaurant
4	Bedford Park, Lawrence Manor East	0.086957	2	43.733283	-79.419750	Il Fornaro	43.734073	-79.419870	Italian Restaurant
88	University of Toronto, Harbord	0.062500	2	43.662696	-79.400049	Daddyo's	43.664622	-79.402685	Italian Restaurant
15	Clarks Corners, Tam O'Shanter, Sullivan	0.071429	2	43.781638	-79.304302	Remezzo Italian Bistro	43.778649	-79.308264	Italian Restaurant

K-Mean cont.

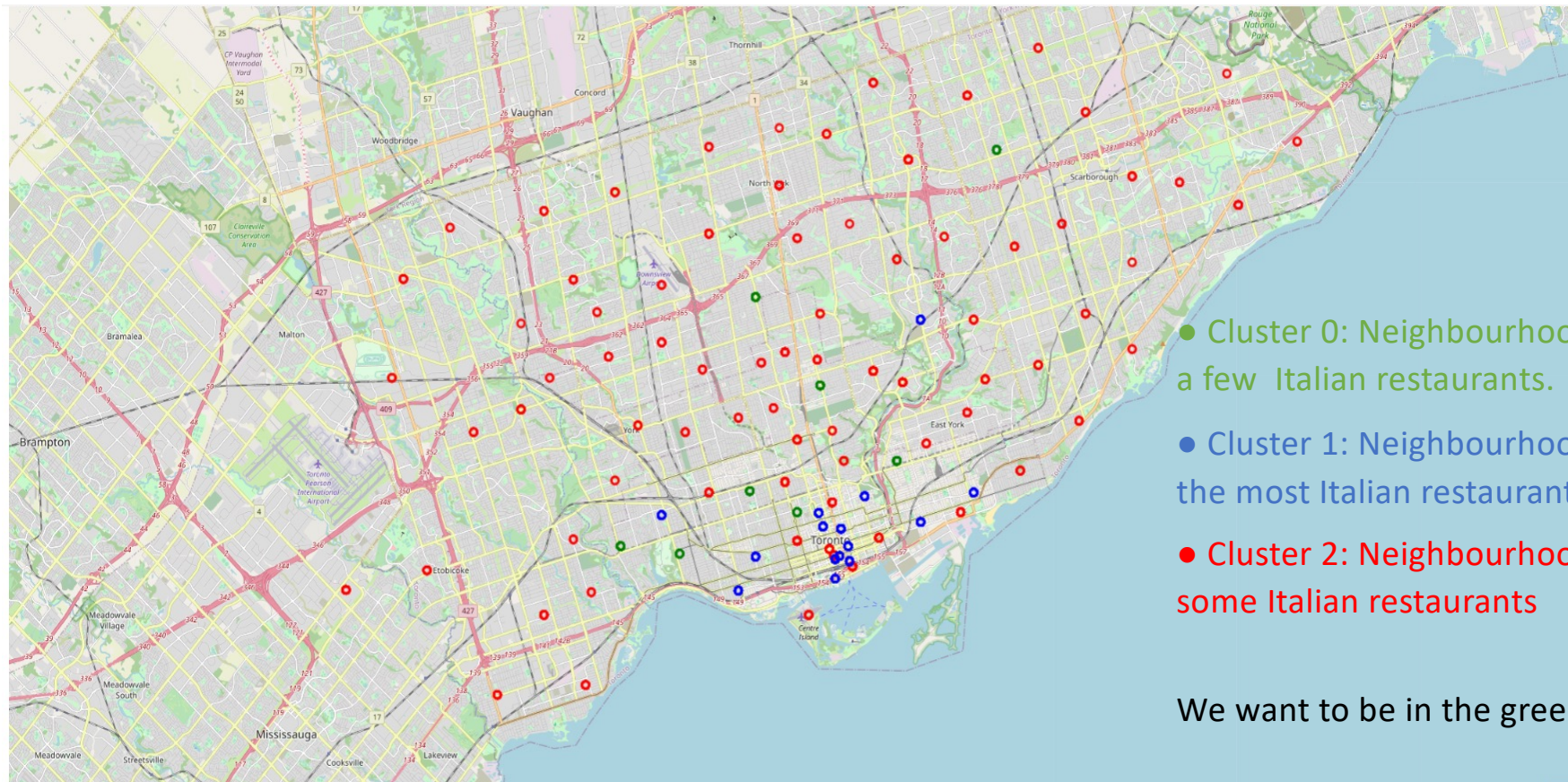
- Lets summaries what we just saw on the last slides.

Overview of the amount of current Italian restaurants

Segment 0	Segment 1	Segment 2
2	29	14

- We can see that segment 0 has the least amount of restaurants.

Map of the segments,



- Cluster 0: Neighbourhoods with a few Italian restaurants.
- Cluster 1: Neighbourhoods with the most Italian restaurants.
- Cluster 2: Neighbourhoods with some Italian restaurants

We want to be in the green area's

Recommendations

- Most of the Italian restaurants are in cluster 1 lowest in Cluster 0.
- Looking at nearby venues it seems cluster 1 might be a good location as there are not a lot of Italian restaurants in these areas. We therefore recommend the entrepreneur to open an authentic Italian restaurant in these locations.