Capstone Project: Battle of Neighbourhoods in Toronto
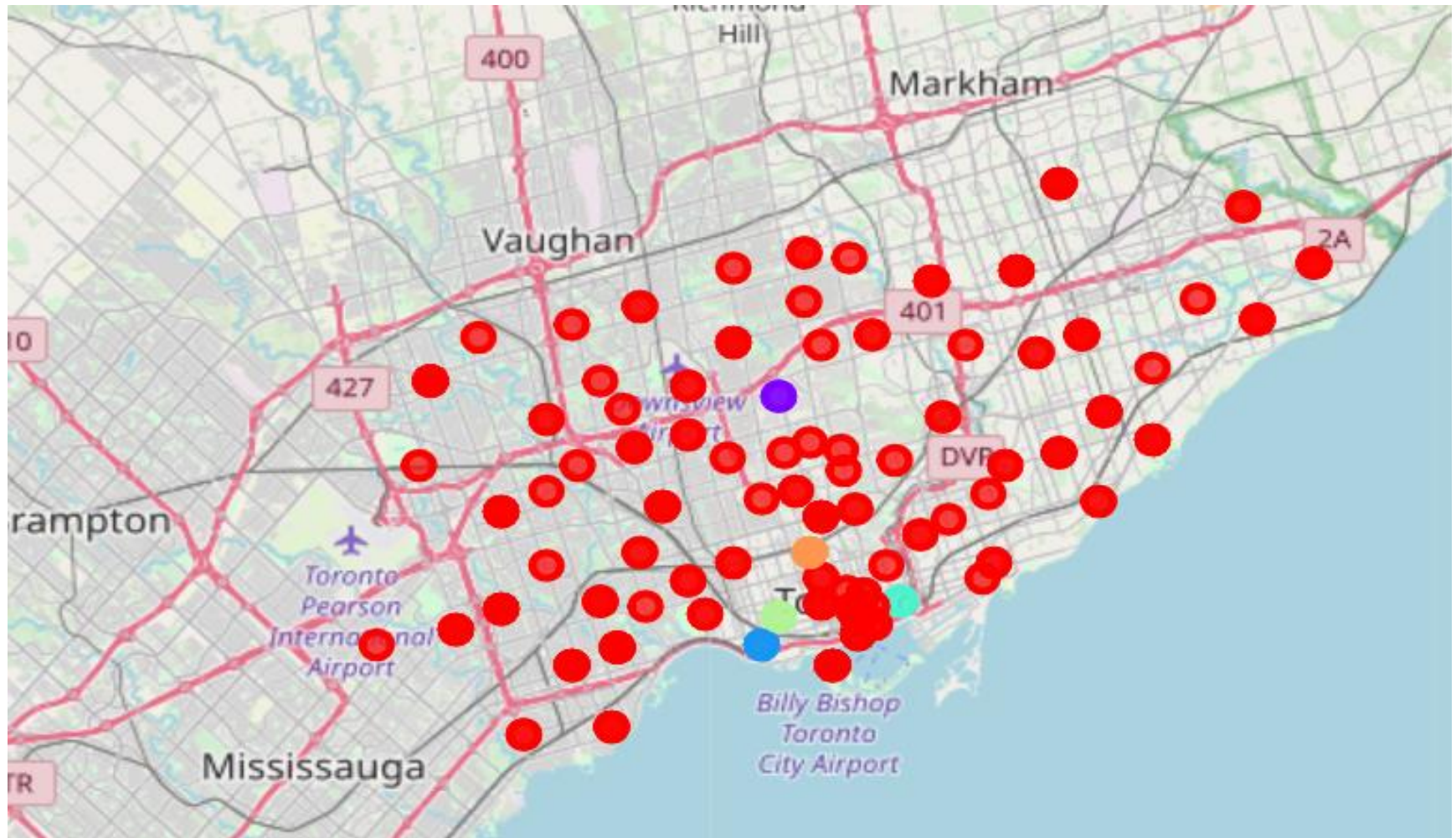
Bohan Xing

Knowing the difference between neighbourhoods is valuable to home buyers

- When purchasing a home, people consider:
  - Price
  - **What is available**
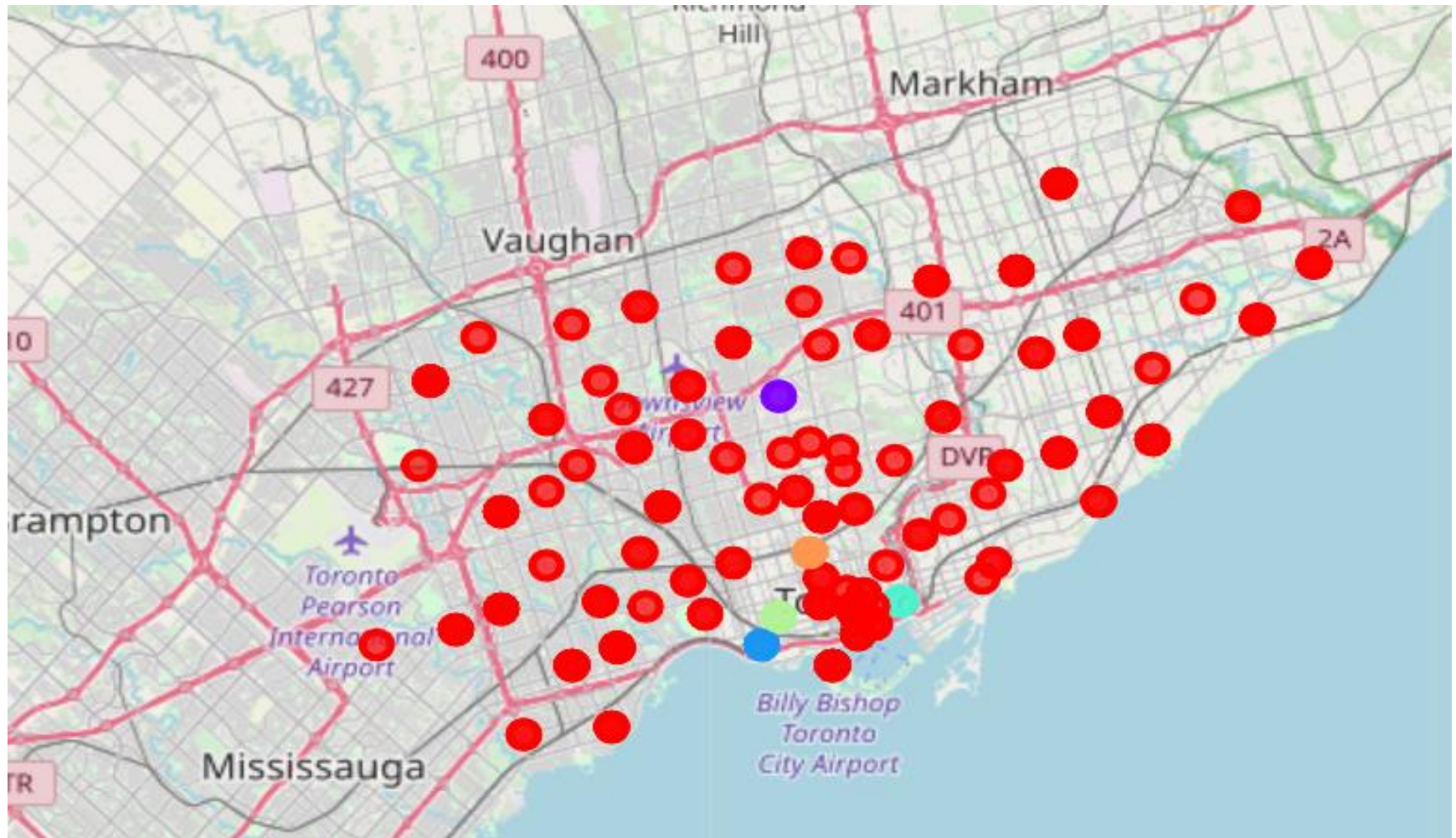 - Safety
  - ect

Data acquisition and cleaning

- Information of neighbourhoods was gathered from a Wikipedia page (https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M)

- Venue categories information from Foursquare collected on April, 2019
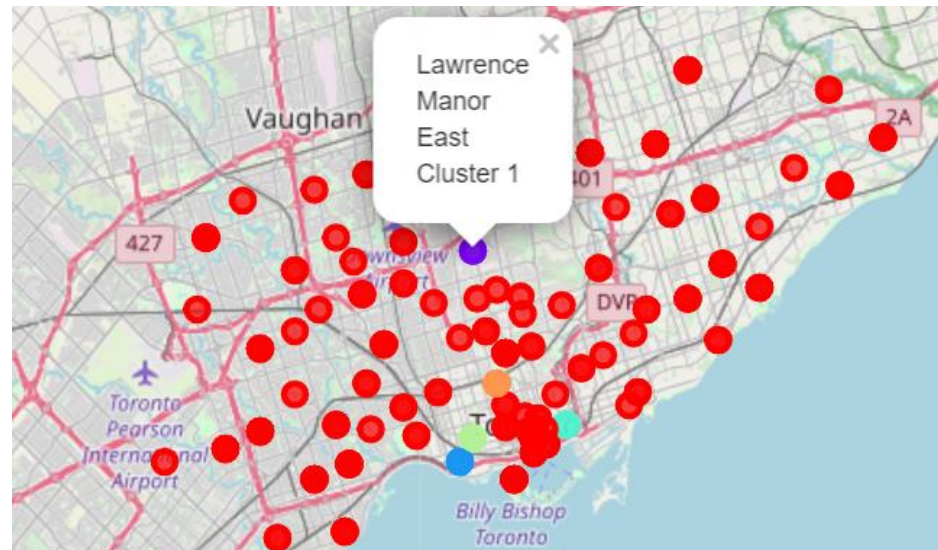
Use BDSCAN as clustering algorithm

Cluster 0 (red): Most neighbourhoods have similar venues

Cluster 1 (Lawrence Manor East): Wealthy neighbourhood

Cluster	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
1	Accessories Store	Juice Bar	Coffee Shop	Bakery	Sports Club	Bank	Italian Restaurant	Sushi Restaurant	Fast Food Restaurant	Boutique

Cluster 2 (Parkdale Village): Hotels

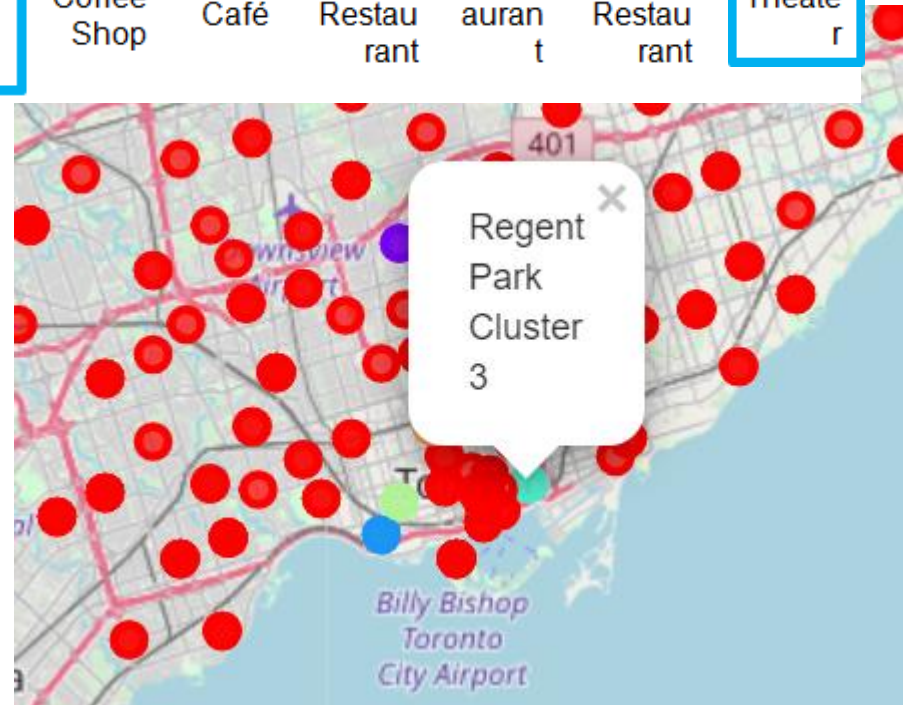| Cluster	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
2	Hotel	Indian Restaurant	Bakery	Tibetan Restaurant	Coffee Shop	Café	Vegetarian / Vegan Restaurant	Restaurant	Furniture / Home Store	Bar

Cluster 3 (Regent Park): Entertainments

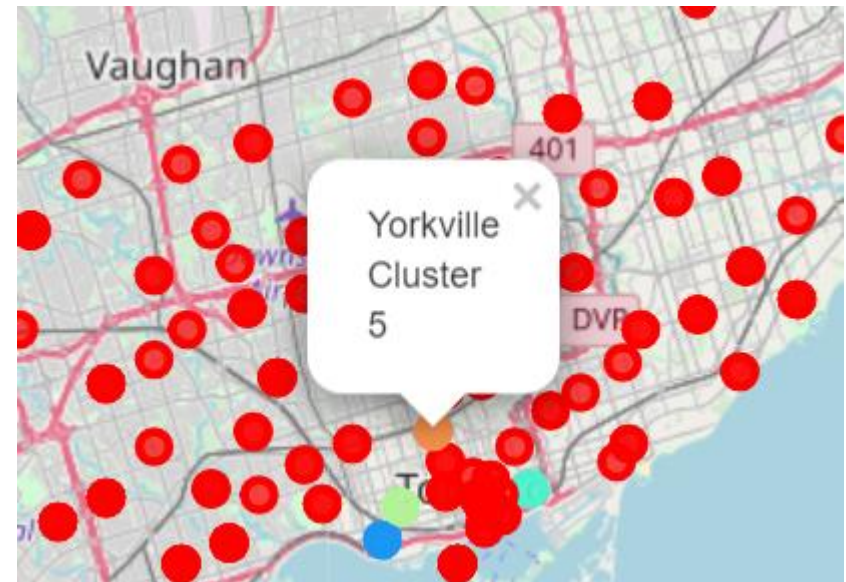| Cluster	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
3	Pub	Diner	Breakfast Spot	Park	Coffee Shop	Café	Sushi Restaurant	Restaurant	Italian Restaurant	Theater

Cluster 4 (Trinity): Foods

Cluster	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	Men's Store	Italian Restaurant	Bakery	Asian Restaurant	Coffee Shop	Café	Vegetarian / Vegan Restaurant	Restaurant	Cocktail Bar	Bar

Cluster 5 (Yorkville): Museums

Cluster	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
5	Pub	Museum	Bakery	Grocery Store	Coffee Shop	Café	Vegetarian / Vegan Restaurant	Restaurant	Italian Restaurant	Pizza Place

Conclusion

- Lawrence Manor East, Regent Park, Trinity, Yorkville neighbourhoods are unique.

- I do not advise to purchase in the Parkdale Village neighbourhood as it is mostly for visitors.

future directions

- More detailed analysis can be used to cluster within Cluster 0.

- Other information such as average price and police crime record can also be used for clustering