

The Battle of the Neighborhoods

Motivation

- Suppose a person wants to move from New York to Toronto for a job. This person does not know anything about Toronto and he would like to move into a place similar to the place where he lives right now.
- Is it possible to create a system that can help our user showing to him the similarities between these two countries?

Objectives

- Develop a system able to show similarities in terms of neighborhoods in order to help a user decide whether to move near the center of Tornot or not

Approach

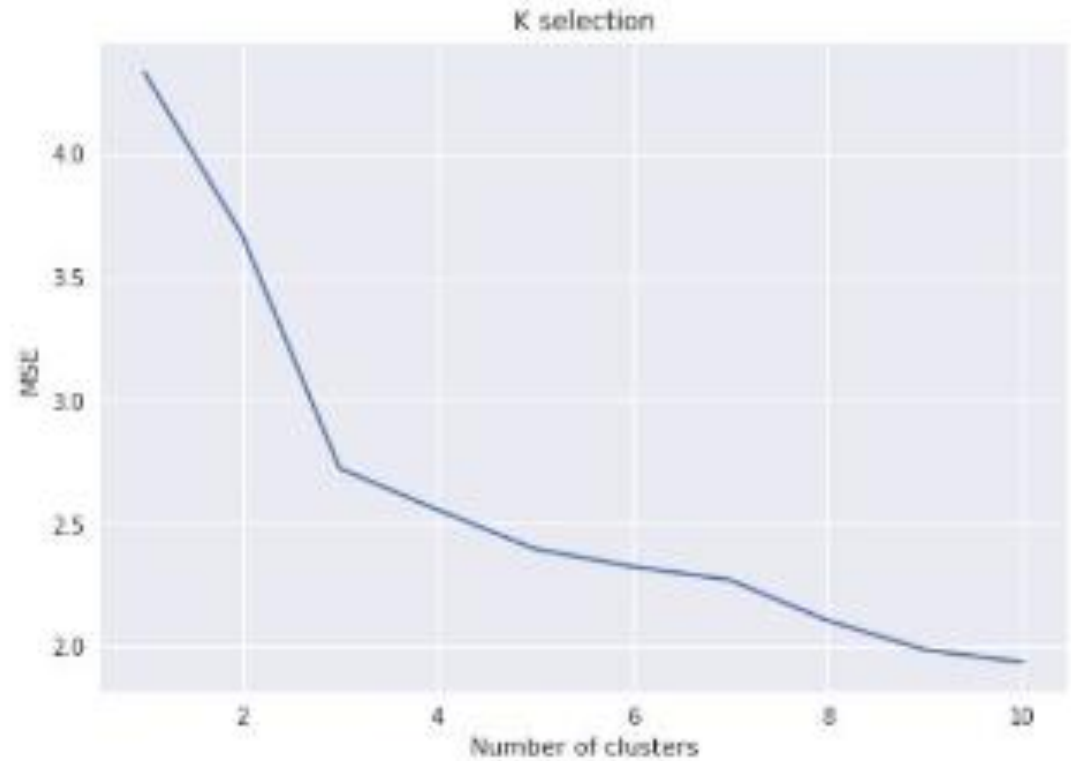
- Neighbourhoods are downloaded
- Venues are requested using Foursquare API
- The categories of venues are encoded using One Hot
- K-Means algorithm is used for finding similarities
- The elbow method is used for select K

Geographical Location



Selection of K

- The best number of clusters is 5. That is, where the elbow is located.



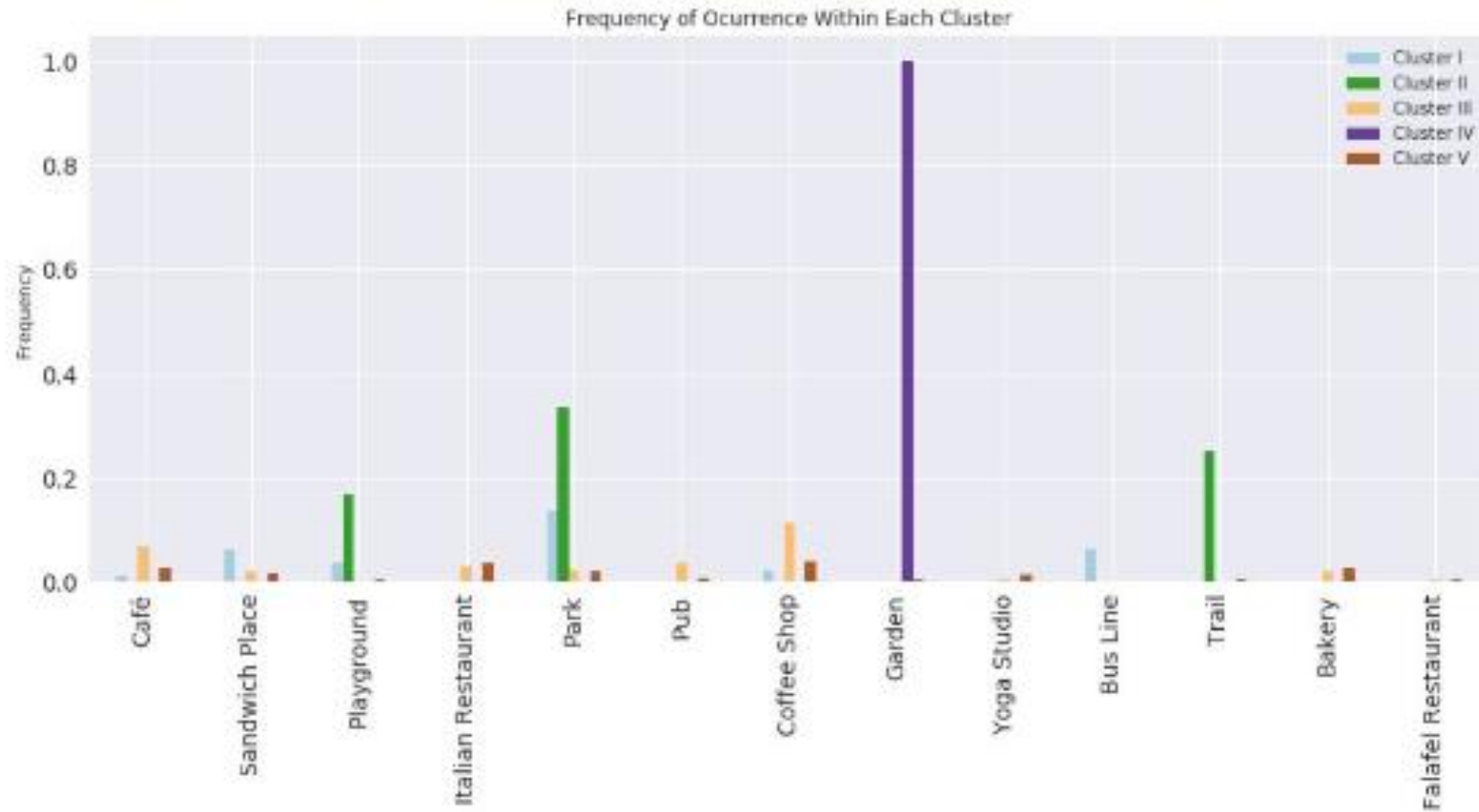
Geographical Location (Clustered)



Proportion of Data Segmented



Frequent Venues



Conclusion

1. Neighbourhoods that have parks, bus lines and sandwich places
2. Neighbourhoods that have parks, playgrounds and trails
3. Neighbourhoods that have coffee shops, pubs and Italian restaurant
4. Neighbourhoods that have gardens
5. Neighbourhoods that have coffee shops, parks and bakeries