

## Background

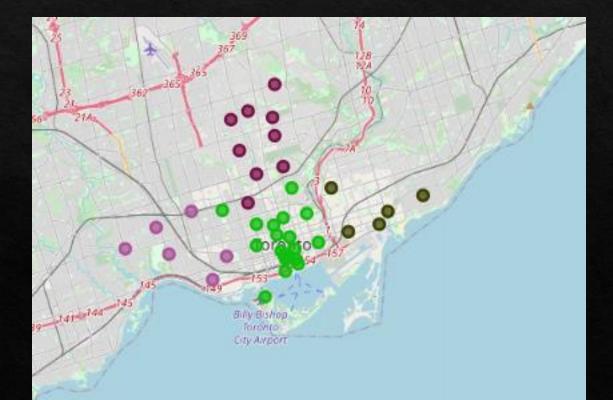
Chinese cuisine is a great food for people in Toronto, especially during winter season, because it contained various spices. In reality, there are only small number of restaurant that served Chinese cuisine there. So, it is a good idea to open an Chinese restaurant in Toronto. It is quite challenging to find a place or area to open the Chinese restaurant. This project will help the enterpreneur to find the most suitable location.

#### Data

- ♦ List of neighborhoods in Toronto from Wikipedia
- Coordinate data of Toronto from Geospacial data
- ♦ Nearby venue list of Toronto neighborhoods from Foursquare API

# Methodology

- Scrapping and cleaning Toronto neighborhood data
- Combining neighborhood data and coordinate data



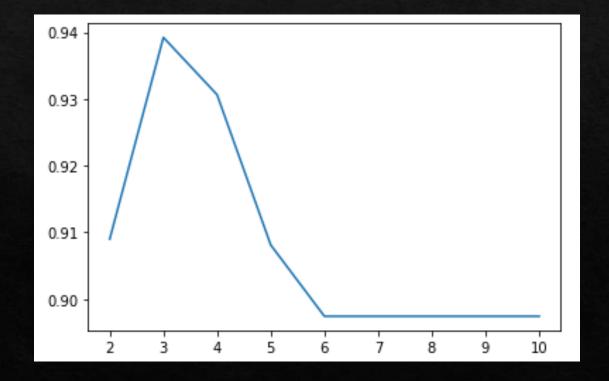
# Methodology

- ♦ Get nearby venues for each of Toronto neighborhoods
- ♦ Get occurence of Chinese Restaurant for each neighborhoods

	Neighborhoods	Chinese Restaurant
0	Berczy Park	0.0
1	Brockton, Parkdale Village, Exhibition Place	0.0
2	Business reply mail Processing Centre, South C	0.0
3	CN Tower, King and Spadina, Railway Lands, Har	0.0
4	Central Bay Street	0.0

# Methodology

- ♦ Simulation using Silhuette Score to determine best number of cluster
- Clustering neighborhoods using Kmeans



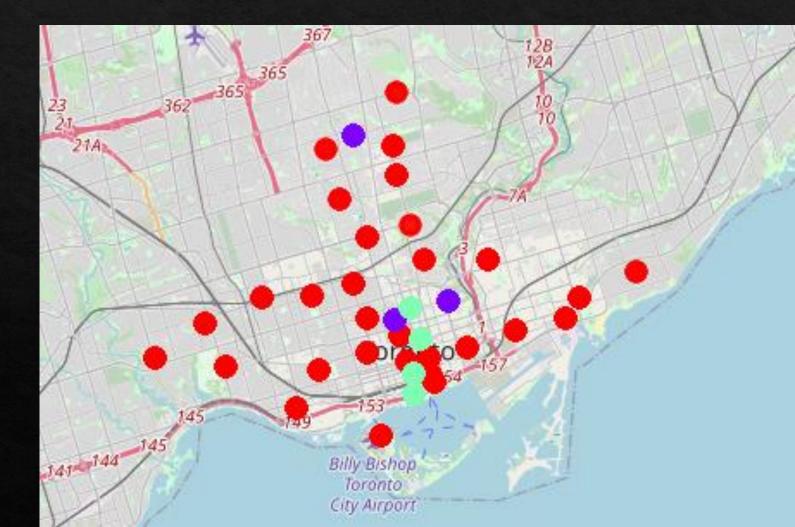
### Result

#### Mapping

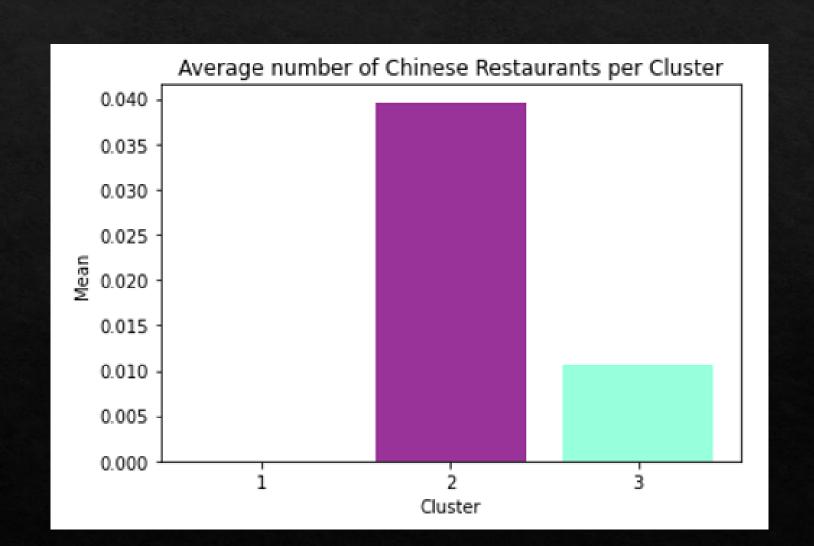
♦ Cluster 1 : Red

♦ Cluster 2 : Purple

♦ Cluster 3 : Blue



#### Result



#### Conclusion

The conclusion is, the best location to open Chinese Restaurant is in cluster 1 around The Beaches, Stn A PO Boxes, Central Bay Street, and other location located in cluster 1 because cluster 1 has the least dense Chinese restaurant in the area. There are only several Chinese Restaurant in Toronto, so I think it is a good idea to present restaurant that serve Chinese cuisine, especially in neighborhood without Chinese Restaurant to eliminate competition.