



THE BATTLE OF NEIGHBORHOODS

NEW YORK CITY VS. TORONTO

Introduction

To open a new restaurant location is one of the most important factors to consider. This presentation will compare and contrast New York City and Toronto, and their respective neighborhoods, in reference to existing venues through exploration and segmentation. And hopefully the results will help the restaurant group to make a financially sound investment decision.

Data Acquisition and Cleaning

New York City Data

- Link to the dataset: https://geo.nyu.edu/catalog/nyu_2451_34572
- 5 boroughs and 306 neighborhoods

Toronto Data

- Wikipedia page: https://en.wikipedia.org/wiki/list_of_postal_codes_of_Canada:_M
 - Only include the cells that have an assigned borough. Ignore cells with a borough that is Not assigned.
 - More than one neighborhood can exist in one postal code area. For example, Harbourfront, Regent Park.
 - If a cell has a borough but a Not assigned neighborhood, then the neighborhood is the same as the borough.
- CSV file with geographical coordinates of each postal code: http://cocl.us/Geospatial_data
- 10 boroughs and 103 neighborhoods

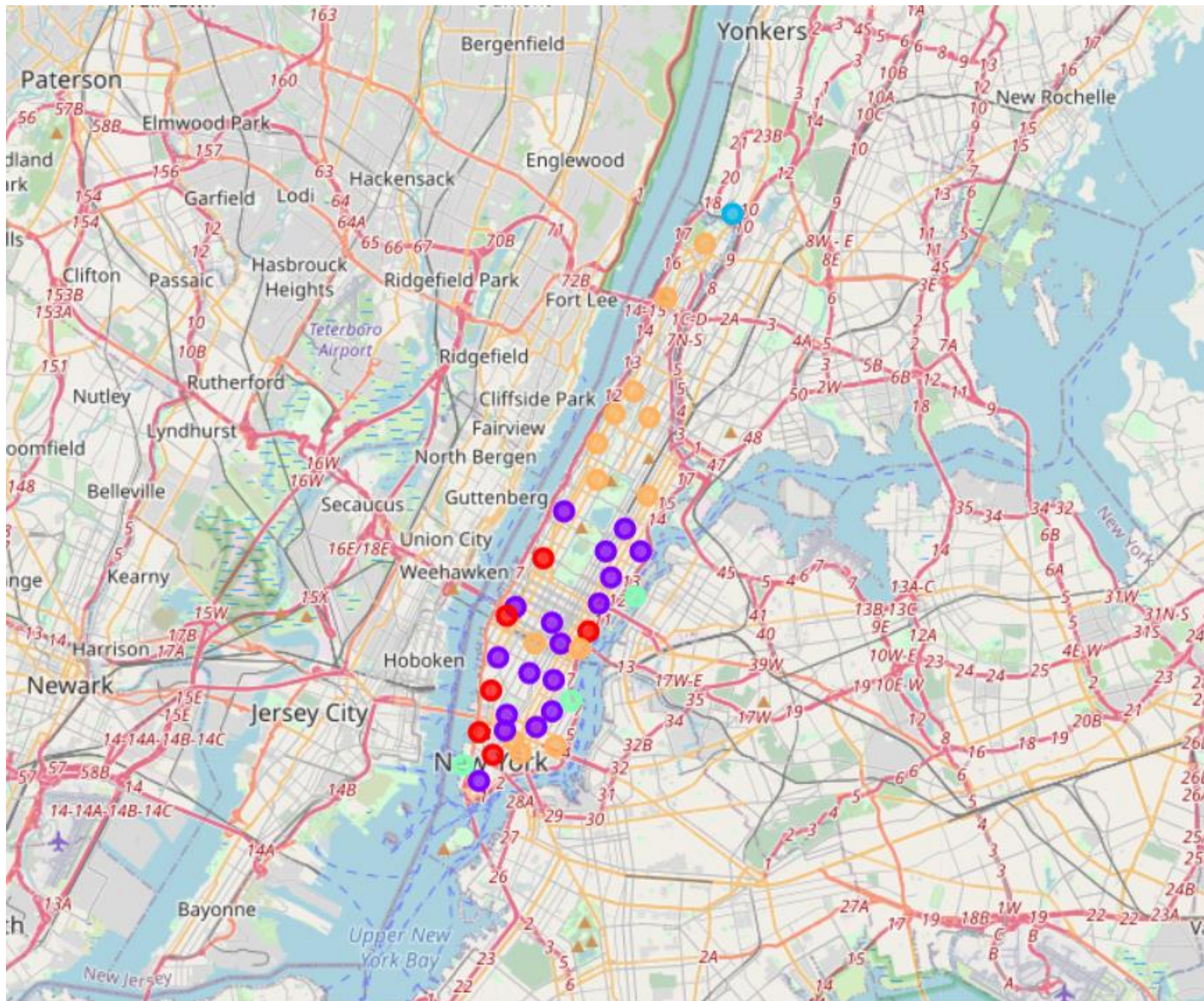
Exploring via Foursquare API

Manhattan

- 40 neighborhoods
- 3160 venues with neighborhood (name, latitude, longitude), venue (name, latitude, longitude, category)
- 327 unique venue categories

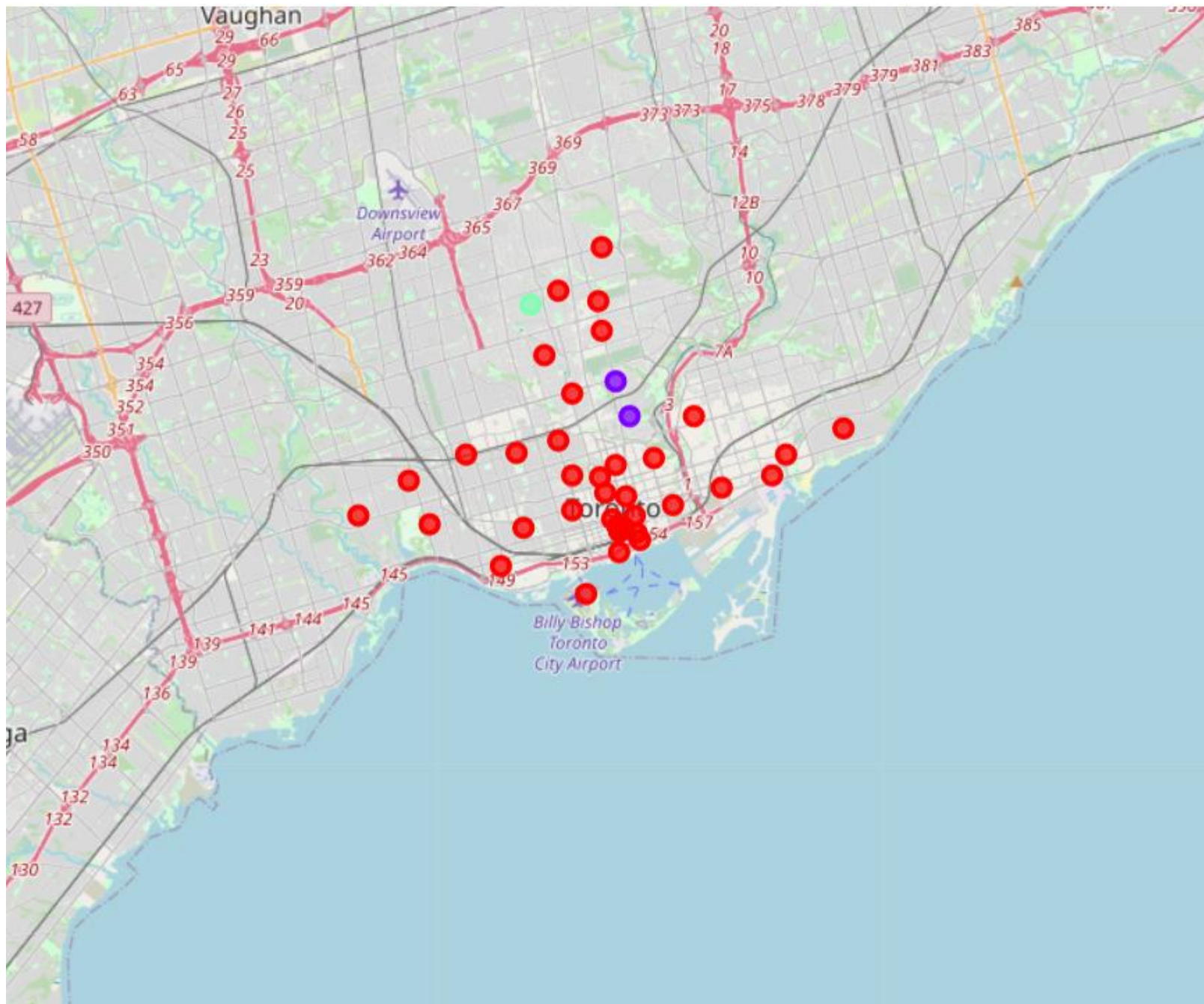
Toronto (Downtown Toronto, East Toronto, West Toronto and Central Toronto)

- 39 neighborhoods
- 1614 venues with neighborhood (name, latitude, longitude), venue (name, latitude, longitude, category)
- 233 unique venue categories



Manhattan K-means clustering

- ❖ Italian Restaurant/ Coffee Shop
- ❖ Hotel and Plaza
- ❖ Sandwich Place
- ❖ Park
- ❖ Other Ethnic Restaurant



Toronto K-means clustering

- ❖ Coffee Shops and other eateries
- ❖ Park
- ❖ Pool

Conclusion and future analysis

- Explored Manhattan and Toronto via Foursquare database and API
- Segmented Manhattan and Toronto via K-means clustering
- Recommended Manhattan for more venues and venue categories
- Future studies:
 - Explore and segment based on Chinese venues
 - Trending and tips in the focused neighborhoods