

Finding Target Areas in Toronto for Hot New Restaurants

Using Foursquare Data to Find General Areas of Toronto Missing Restaurant Types

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Introduction

- ▶ Client: Chef Creations
- ▶ Purpose: Locate Best Locations to start a new restaurant
- ▶ Project Concept:
 - ▶ Find hot restaurant trends in New York City
 - ▶ Use the hot restaurant types from New York City to locate underserved areas in Toronto for each restaurant type identified
- ▶ Deliverable: General area of Toronto to site specific restaurant types
 - ▶ Limitations exist due to need to find suitable buildings, locations on main streets and so on...



Data

► Three Data feeds

- Foursquare Trending API for New York City
- Foursquare restaurant Locations for Toronto
- Postal Code based centroids derived from Wikipedia and using location data from other sources combined



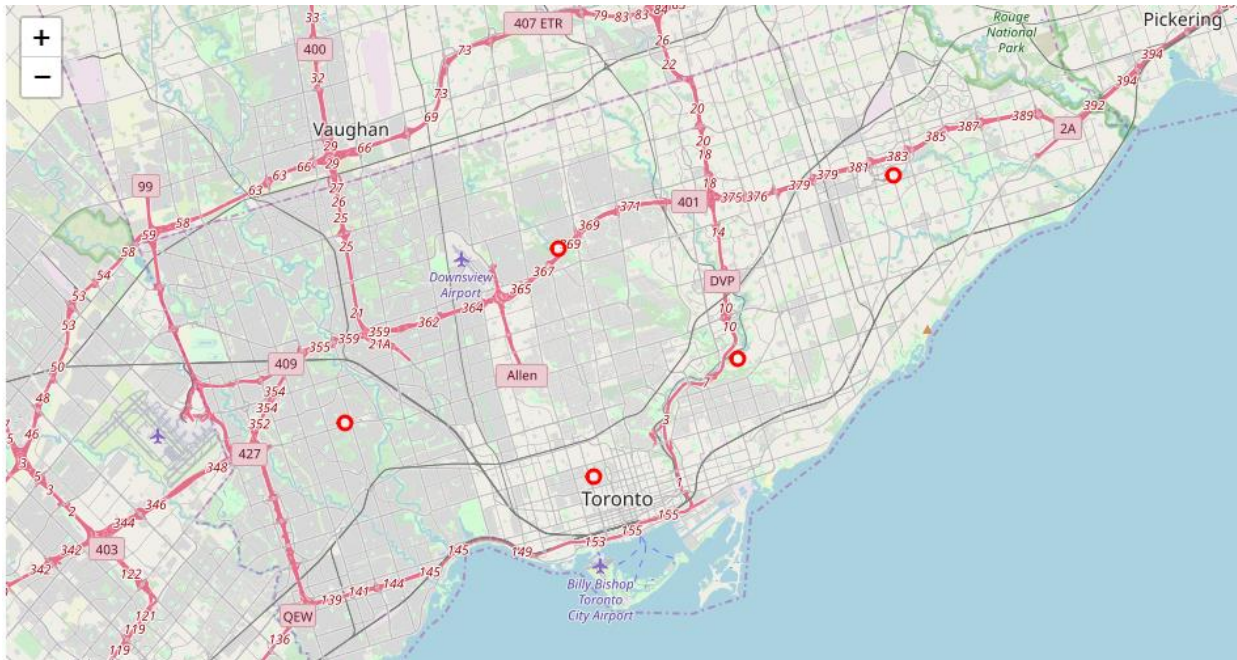
Methodology 1

- ▶ Three different types of restaurants identified as Hot and Trendy in New York City
 - ▶ Dumplings
 - ▶ Halal
 - ▶ Ethiopian



Methodology 2

- Use 5 Centroids of Postal codes as generalized locations
 - Derived from Week 3 Project



	Latitude	Longitude
0	43.653860	-79.398558
1	43.665725	-79.351178
2	43.689694	-79.394773
3	43.664518	-79.414128
4	43.653519	-79.395844

Methodology 3

- ▶ Pull Location Data for each restaurant type in the city of Toronto
- ▶ Table below shows total number of each restaurant type in Toronto

Restaurant Type	Count
Dumplings	38
Halal	51
Ethiopian	38

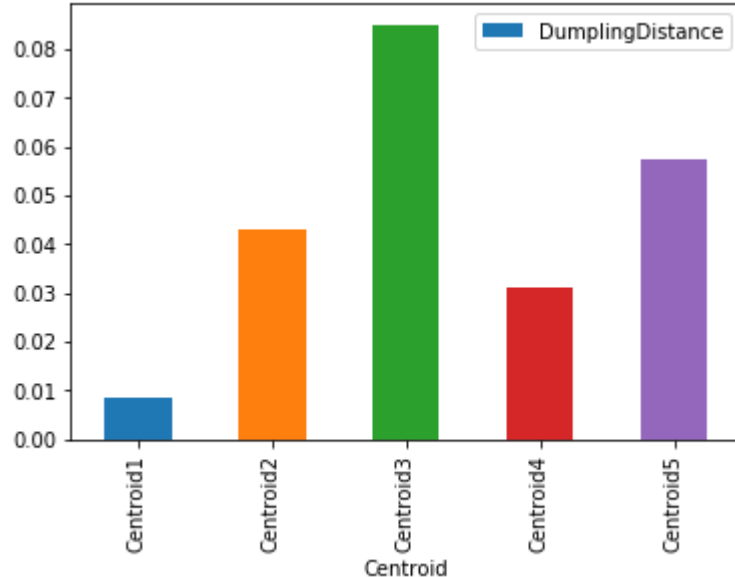
Methodology 4

- ▶ Used Custom Algorithm to Calculate distance measures from each restaurant by type to each centroid
- ▶ Final analysis uses Closest and Average distance
- ▶ Closest restaurant distance to centroid shows nearest competition
- ▶ Average restaurant distance to each type indicates a rough approximation for coverage

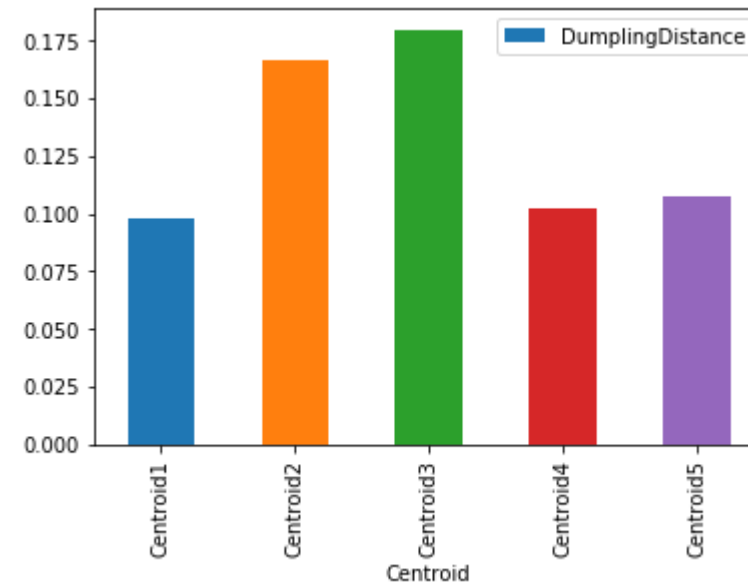
Results -Dumpling

- ▶ Centroid 3 is the best one to target for a Dumpling Restaurant
- ▶ Furthest competitor and low saturation

Dumplings Closest



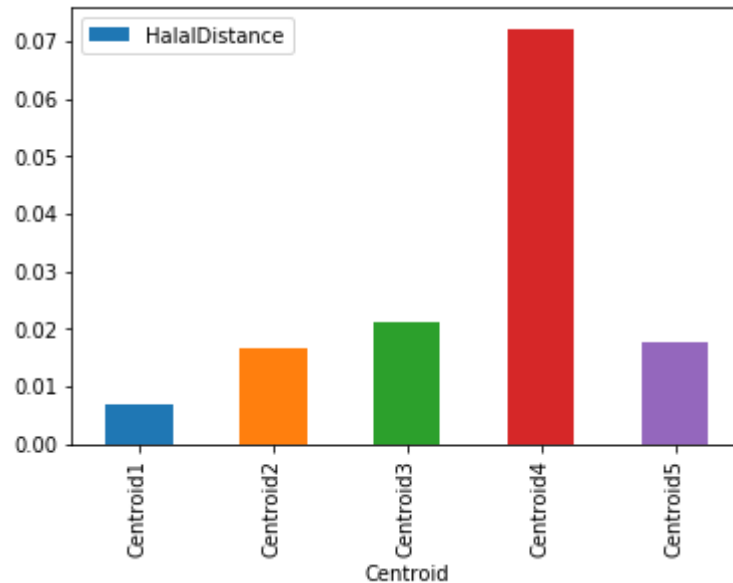
Dumpling Average



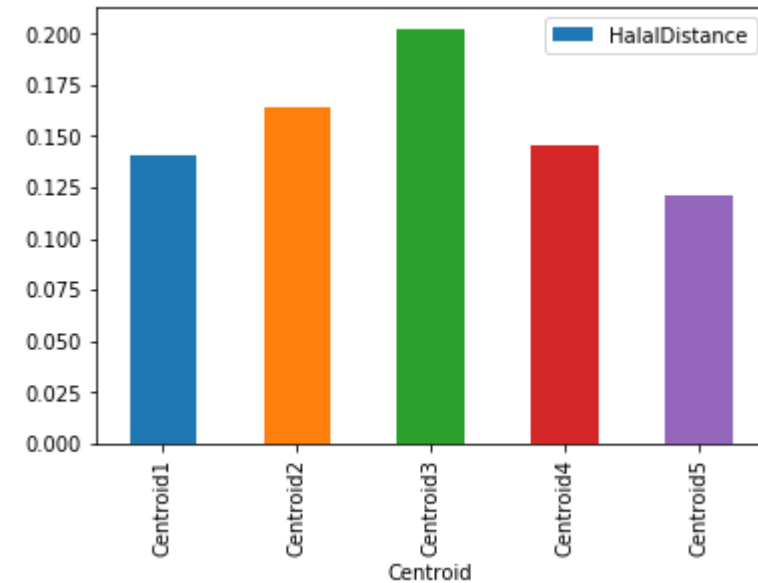
Results - Halal

- ▶ Centroid 4 is the best one to target based on closest competitor
- ▶ Unfortunately, Halal restaurants seems to be well dispersed in Toronto - no centroid seems low on this type

Halal Closest



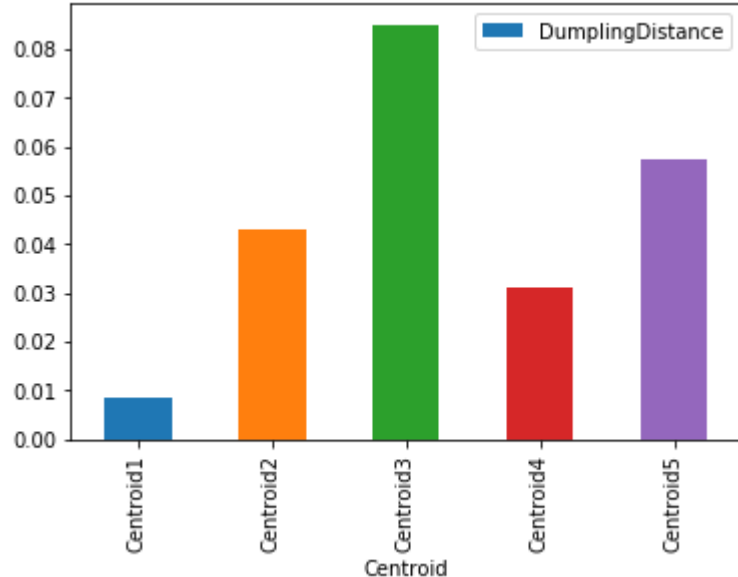
Halal Average



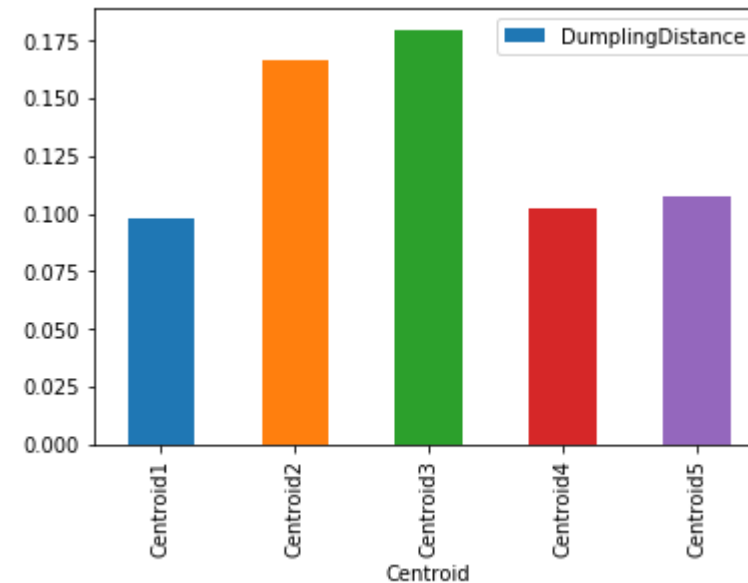
Results - Ethiopian

- ▶ Centroid 3 is the best one to target for a Ethiopian Restaurant
- ▶ Furthest competitor and low saturation
- ▶ Very similar to Dumplings

Ethiopian Closest



Ethiopian Average



Discussion

- ▶ Chef Creations should target
 - ▶ Dumpling concept near centroid 3
 - ▶ Ethiopian concept near centroid 3
- ▶ Avoid Halal type or at least put off in favor of other concepts first
 - ▶ Market already has more competitors