# CUISINE

## VS

## LOCATION



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### INTRODUCTION

The mathematical approach described in this report provides a solution for the two problem mentioned below

- \* At a particular location, what would be the best type of restaurant to invest in?
- \* For a particular cuisine, where would the best location be to open a restaurant?

This report will be of interest to two types of audience:

- \* An Investor who wants to cash in on the appeal of a location
- \* A Chef who is trained in a specific culinary style





## DATA USED

This report concentrates on the city on Toronto in Ontario, Canada. The data sets used in this report are as mentioned below:

#### Toronto Neighborhood Data

Source – Wikipedia

#### • File Containing Latitude & Longitude Information

Source - File provided by the Instructor

#### Restaurant Information

Source - Foursquare Application

#### Restaurant Rating

Source - Foursquare Application



## **METHODOLOGY**

The methodology used for this report is a variation of the content-based recommendation system. The content in this case is the existing restaurant information in a location.

The approach taken in this report involves reviewing all the restaurant categories and then grouping them based on the region they originate from or based on the similarity of the ingredients used.

The ratings for individual restaurants are read from the Foursquare application and a weighted average of the ratings per cuisine category group.

This resulting data frame gives us information about the preferences of the customers in the Toronto region.

This weighted average ratings data frame along with the Toronto neighborhood information data frame will be used to derive the results for the two questions we are trying to answer as part of this report.



## RESULTS

## Date Frame representing the results, which are of interest for an Investor

	Neighborhood	Next_Rest_Cat_Group
0	Adelaide, King, Richmond	Molecular Gastronomy
1	Agincourt European	
2	Agincourt North, "LAmoreaux East", Milliken, S European	
3	Alderwood, Long Branch North American	
4	Bathurst Manor, Downsview North, Wilson Heights East Asian	
5	Bedford Park, Lawrence Manor East North American	
6	Berczy Park European	
7	Brockton, Exhibition Place, Parkdale Village European	
8	Cabbagetown, St. James Town European	
9	Caledonia-Fairbanks East Asian	
10	Canada Post Gateway Processing Centre European	
11	Cedarbrae	North American
12	Central Bay Street	Beverage Bar

## Date Frame representing the results, which are of interest for a Chef

	Next_Rest_Cat_Group	Neighborhood	
0	Beverage Bar	Central Bay Street, Little Portugal, Trinity	
1	Breakfast Spot	Church and Wellesley	
2	East Asian	Bathurst Manor, Downsview North, Wilson Height	
3	European	Agincourt, Agincourt North, "LAmoreaux East",	
4	Mediterranean	Commerce Court, Victoria Hotel	
5	Molecular Gastronomy	Adelaide, King, Richmond, Ryerson, Garden Dist	
6	North American	Alderwood, Long Branch, Bedford Park, Lawrence	
7	Sandwich Place	St. James Town, Stn A PO Boxes 25 The Esplanade	
8	Vegetarian / Vegan	Design Exchange, Toronto Dominion Centre, Firs	



## **DISCUSSION**

#### Neighborhoods

The East Asian group has the highest weighted average ratings, followed by the European and the North American groups.

For the neighborhood of Agincourt; it already has restaurants belonging to the categories East Asian and Sandwich Place. Therefore, based on the analysis, the next best suited option for the locality will be a restaurant of the category European.

#### Cuisine

If a Chef is interested in opening a restaurant serving Mediterranean dishes, the most suited location would be Commerce Court or Victoria Hotel, as they do not already have restaurants belonging to this group.



## CONCLUSION

### **Usages of this Report –**

- As a first step by an Investor or a Chef to begin their search.
- Extrapolated to fit other cities with a similar postal identification structure (postal code, borough, and neighborhood) with ease.
- With minor code change can be extrapolated to fit other cities with a different type of postal identification factors.
- Can also be extrapolated for other type of industries like clothing, retail stores, banks etc.
  provided we can get the location, venue and rating information from Foursquare or other
  applications.



