

Problem Description

As the boss of a famous chain restaurant in China, Mr. Lee is considering opening a brand-new overseas restaurant in Canada. He narrowed his choices of the locations into 3 major cities in Canada: Vancouver, Toronto and Montreal. All these 3 cities have a lot of Chinese immigrants and students, and show diversified development in almost all aspects, including food culture. They all contain a diverse array of cuisines which appeal to their diverse residents, tourists and business travelers. As a prospective restaurateur, Mr. Lee would be interested in knowing the optimal city and specific location for opening a new restaurant.

Due to the level of competition and density of the city, it would be worthwhile for restaurateurs to consider starting a restaurant where there are a high number of restaurants present from other cuisines, but few of the same cuisine to be in direct competition with.

In this project I want to analyze what kind of relevance does a location has for the restaurant's popularity and how can a person choose a perfect place for its new business. Location can be analyzed either by which neighborhood the venue belongs to or by what kind and how many other nearby businesses are. I will focus on the second part, which is quite important because by having more popular restaurants around, the competition increases, however your restaurant gets a bigger exposure and possibly more new customers.

Data for Problem

City geospatial data will be used to inform the neighborhoods to be analyzed. It contains a list of Neighborhoods with their Borough, Latitude and Longitude.

The FourSquare API will be used to provide details about surrounding venues in the neighborhoods obtained from the city geospatial data. It will provide a list of venues with their respective categories, latitudes and longitudes. They should include venues in restaurant categories which will be used as a data input for this investigation.

Required data:

- Types of venues
- Location of restaurants
- Names/ids of restaurant
- Number of likes