Location Analysis of a Chinese Restaurant in Toronto

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IBM Data Science Capstone Project

The problem

Context

Chinese cuisine (Chinese dishes) originated from different regions of China and has become widespread in many other parts of the world. With increasing amount of Chinese population in Toronto, many chef have been looking into opportunities of opening new Chinese Restaurant.

Business Problem

The challenge, besides offering a menu that powers the retention of customer, remains picking the most suitable location.

Problem statement

The Owner would like to give a general recommendation to new chefs wanting to open a new Chinese restaurant in Toronto, with respect to location, attraction and the amount of Chinese restaurant around it.

Solution

Finding the best Chinese restaurant location

The objective of this report is to give a general recommendation to new chefs wanting to open a new Chinese restaurant in Toronto, with respect to location, attraction and the amount of Chinese restaurant around it.

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Implementation

Proposed Methodology

Data Crawling	Data Wrangling	Map Visualization

Knowing the area

To begin with, the postal code information of the the neighbourhoods is required. To complete the analysis, we will leverage Foursquare API as our data provider.

Finding Chinese food

Using the API, we gather information about the venues in each neighbourhood within a chosen radius of 100 meters. The data will present the venues within a specified distance of the longitude and latitude of the postcodes.

Compare location

We will use Pandas library for querying data and managing the dataframe. The result will be in JSON format. In addition to that, we will use Matplotlib for data visualization.

Results

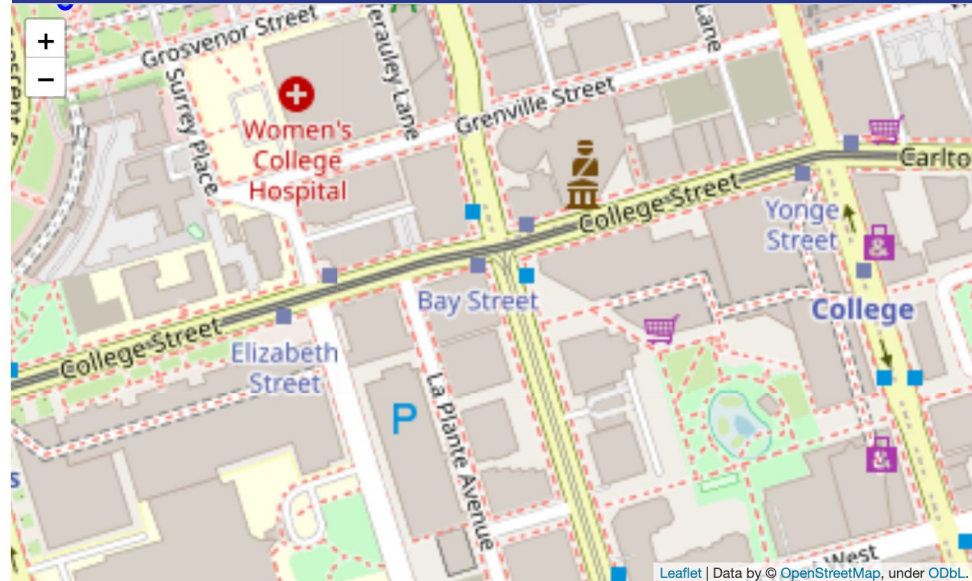Chinese restaurants in red, comparing the neighborhoods in blue.

Leaflet | Data by © OpenStreetMap, under ODbL.

Discussion

Given the limited amount of Chinese restaurants available it could be a market entry opportunity to open one. This restaurant should be located in a commercial area with high traffic, possibly with a mixture of office space, green park on a main avenue. In that case, we would suggest the opening location in the image above, it has a great mixture of public facility, office space, green space, also in a reasonable distance with other three Chinese restaurants.

Conclusion

Time for market entry!

As the maps displays, currently Chinese restaurants are still not mainstream as we can see comparing the red dot comparing with all the neighbourhoods shown in blue. Given the limited amount of Chinese restaurants available it could be a market entry opportunity to open one.

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Thank you!