

Capstone Project - The Battle of Neighborhoods (Week 4&5)

Project: A Restaurant Recommendation System in Toronto

Part 1 - Introduction

Business Problem Statement

Toronto is the provincial capital of Ontario and the most populous city in Canada, with a population of 2,731,571 in 2016 ¹. As a multiculturally diverse city on the planet, over 140 languages have been used there in daily life. Based on the situation that over half of Toronto's residents were born outside Canada, people from different cultures bring a variety of cuisines, and even some of the world's finest restaurants can be found in Toronto.

This project is aimed at providing recommendations to those people who are interested opening restaurants in Toronto, such as where would be the most suitable locations to start the business, and which kinds of cuisine should be considered as the first options. The recommendation system is built on Foursquare location, venue information and rental data from the internet.

Data Overview

The dataset used in this project is mainly from Wikipedia page in tabular format, including postcodes and neighborhoods information, as

well as the longitude and latitude data from the Geospatial_Coordinates.csv file. Besides that, thanks to the information provided by Foursquare which helps to solve the main problem by giving detailed venue information. The rental information for each neighborhood is obtained from several websites, such as torontostoreys.com, torontorentals.com, and etc.

First of all, the data from Wikipedia page in tabular format should be combined with Geospatial_Coordinates.csv file according to the same postcodes, and then we need to filter all the boroughs needed in this projects. After we get the combined dataset, we need to acquire venue information from Foursquare dataset. The rental csv file will be created to explore the rental rates in Toronto in order to provide the optimal suggestion.

References:

1. <https://en.wikipedia.org/wiki/Toronto>