Best Neighborhood for Italian restaurant in Toronto

Introduction and Business Problem

The main objective of the project is to find the best location for a new, Italian restaurant in Toronto. This information can be useful for entrepreneurs based in Canada and I am designing this study for them.

The location resolution will be by neighborhood and the parameters I am going to observe in order to recommend the best option(s) are:

- number of restaurants nearby
- number of Italian restaurants nearby

I will be using an unsupervised Machine Learning technique called K-means in order to create groups of Neighborhoods based on the feature parameters (number of restaurants).

I will also visualize the data just to get a whole picture about this topic. This will give us a brief overview, where are the places which are not overcrowded with similar places like ours and where a profitable business can be established.

Of course, there are other factors such as population, net income, number of tourists - just to name a few -, these parameters can be the subject of a potential model refining in the future.

Data

Description

We need the following information:

- List of neighborhoods in City of Toronto, Ontario, Canada
- Geographical coordinates of the neighborhoods (latitude, longitude)
- Venue data related to:
  - Restaurants and
  - Italian restaurants

Preparation

- Scrapping Toronto neighborhood data from Wikipedia
- Getting the coordinates of the neighborhoods by using Geocoder package
- Connect to Foursquare API to get venue data related to the identified neighborhoods