Predicting Best Neighborhoods for Opening a New Restaurant

Author: Betul Dincer

Date: May 23, 2020

Introduction

This project is targeted for those who are interested in opening a restaurant in Toronto and our goal is to detect the best neighborhood for a client to open a restaurant in Toronto city. After learning the major cuisine of the restaurant from our client, we want to analyze all the neighborhoods in the city to understand the distribution of different types of restaurants. This way, we can detect the neighborhoods where the similar restaurants are located and offer these neighborhoods as the best possible locations to open a new restaurant. Our goal is to maximize the number of potential customers for the new restaurant and we assume that if we select neighborhoods where similar restaurants are common, we can reach to maximum number of customers. For instance, if we want to open an Italian restaurant, we want to detect the neighborhoods where Italian restaurants are very common which would indicate that people in the neighborhoods like Italian food and they would potentially be interested in a new Italian restaurant.

Data

In order to solve our problem, we need two different data sources: the neighborhood information of Toronto and the count and types of restaurants in each neighborhood. The neighborhood information is crucial for us to determine the optimal neighborhoods to open a restaurant. Getting the location and type of each restaurant will enable us to detect the most popular restaurant types in each neighborhood. Using this information along with the appropriate machine learning technique, we will be able to detect the best neighborhood for a client to open a restaurant at. We show the Toronto neighborhoods on map in Figure 1.