

# Restaurant business recommendation in Toronto

## 1 Introduction

The idea of this project is to provide insights to investors who are interested in opening a new restaurant or purchase an existing restaurant in one of Toronto's suburbs. Traditionally, the investors would usually determine where to open or acquire a food business based on their own experience and judgement. However, with the support of this project, people can determine the best suburbs to set up the restaurant and potentially the best location and food types served in the restaurant. The result of the project can be used to inform the decision-making process of the investment, which would be data-driven.

## 2 Data Source

The data source of this project can be downloaded from the server of Foursquare and Wikipedia. First of all, we will download Toronto's neighbourhood and borough lists from Wikipedia. Then, the neighbourhood's latitude and longitude can be determined by using Python Geocoder.

For each neighbourhood, the venues which specifically corresponds to food category can be downloaded. Most importantly, the type of the food provided in each restaurant (or say venue) can be collected from this data, which would enable us to determine which food type is most popular in this suburb.

In addition, once we decide the suburb to set up the restaurant, we can also use clustering technique to further separate the suburb to different blocks, which would guide us to determine the location of the restaurant in the suburb. The selection of the block can be supported by the local renting cost, etc.

## 3 Methodology

## 4 Results and discussion

## 5 Conclusion