

# Personalized Restaurant Recommender

Harnoor Manan

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## 1. Introduction

### 1.1 Background

Everyone likes to enjoy great food; we spend a lot of our time looking for restaurants when we visit new places. People who travel often need to do a lot of research before going to the place on what food to try. We know that there are lots of applications out there which have restaurant recommendations for the cuisine of your favourite choice but scrapping through these website/applications can be a tedious task when you need to take care of important work.

### 1.2 Problem

Data that might contribute to determining which restaurants to visit when travelling to different places. This project aims to give recommendations to three different cuisines namely Italian, Indian and Japanese to the user in his vicinity based on the data.

### 1.3 Interest

Obviously, Great food pleases every human and if they can know what good restaurants are near them without spending time to search on google and look at reviews. This will help them save lots of time which they can spend eating that food.

## 2. Data acquisition and cleaning

### 2.1 Data sources

I found the data of postal codes of Toronto from the dataset [here](#).

### 2.2 Data cleaning

Data downloaded from the source was cleaned and then the neighbourhoods were extracted from the data using beautiful soup. The generated dataframe was further analysed and formatted to remove nan and null string values.

### **2.3 Feature selection**

After data cleaning, we extracted the neighbourhoods using the borough and postal code fields from the dataframe. We generated clusters using latitude and longitude of neighbourhoods. The main location and used the foursquare API to focus on the clusters for investigating the restaurants nearby.