

Capstone_Project_Rome_Restaurant

May 29, 2020

1 A new restaurant in Rome

1.1 Introduction

1.1.1 Background

Rome is the largest city in Italy and it is one of the favourite touristic destinations for people all over the world. Apart from hosting an outstanding number of museums and other touristic attractions, Rome is home to a large number of restaurants. Restaurants' revenues are highly dependent on the number of clients, that tend to prefer certain neighbours over others due to many reasons: public transport, the number of restaurants to chose from, nearness to attractions and so on.

1.1.2 Problem

An investor from Brazil would like to invest in Rome by opening several restaurants in the city. Being new to the city he would like to receive some advice regarding the best locations where to open his restaurants. The main idea is to open his Brazilian restaurants in areas where there is already a high number of people going out for lunch or dinner and offering them something different from Italian restaurants, that represents the majority in Rome.

1.2 Data

The data used for the problem will be extracted from the Foursquare database and it will regard the venues in 35 neighbourhoods of Rome. In particular, the data imported from the database for each will be:

- name of the venue
- latitude
- longitude
- category of the venue.

The neighbourhoods' names and locations (i.e. latitude and longitude) have been obtained from Wikipedia and they will be imported as a csv file.

The data from Foursquare will be used to cluster the neighbourhoods in Rome in order to identify the most promising locations where to open a restaurant: the main idea is to identify the cluster characterized by a high number of restaurants or similar venues since the high number of restaurants denotes a lively area with many clients.