

Analysis and search for the best place to open a new restaurant in Metropolitan City of Turin.

1. Introduction.

Description & discussion of the background.

Welcome to the opening of our pizzeria! These are the words that the first guests of your restaurant will hear from its smiling owner. Sparkling glasses of Piedmont wine, the landscapes of the endless Alps frozen in the paintings on the wall, and the breathtaking smells of various pizzas everywhere, attracting more and more visitors ...

Indeed, nice dream, but how to achieve it? Well, although the whole answer to this question is a complex strategy, I am going to answer to the part of this question, specifically – how to choose the right place for your new business.

For the current analysis Metropolitan City of Turin is chosen, former capital of Italy and current capital of Piedmont region. All big cities in Italy significantly differ from each other, and Turin is not the exception. This is the bridge between Italian and French cuisine, architecture and culture. Moreover, Turin is so called 'industrial capital' of Italy. Fiat, Lancia, Alfa Romeo, Iveco – did you hear these names? Or Lavazza? Well, these all are originated in Turin.

Of course, we all heard about love of Italians for pizza. If we will search in any city of Italy for the pizzeria, we will find a plenty of restaurants. So, is it worth to open new pizzeria? I guessed, that first input for making the decision can be such part of the city, which is less populated with the current category of restaurants, but highly populated with people. The second input can be the price for renting the premises and the availability of premises in general.

The key word of the problem described above is *density*.

Data Description.

The main data I need for this project is information about locations of all pizzerias in Turin. Mining process will be divided on two parts:

- 1. First, I will get information about the administrative division of the city using web scrapping with Beautiful Soup. The source of data is Wikipedia page: https://en.wikipedia.org/wiki/Turin#Administration.
- 2. Then I need to find geolocation information for every borough (Circoscrizione) with Google Geocoding API.
- 3. After that for every borough I can explore restaurants under category 'pizza' with Foursquare API. Thus, I will get location information for every interested venue in Turin.
- 4. The last information I will need after obtaining clusters of pizzerias in Turin is data about remises for rent and their locations. I will use Google search and choose some agency website, then I will try to mine data from it.