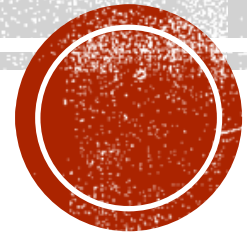


# **BUCHAREST : THE BATTLE OF THE NEIGHBORHOODS**

Capstone Project May 2020



# A. INTRODUCTION

- In a 2016 [Telegraph article](#), among the to visit Bucharest, one can read :
  - It's packed with hipster coffee spots: "Bucharest is home to an abundance of cultured graduates – and where young professionals go, hipster joints follow.
  - There are some fabulous summer parks: "Renting a boat at Cișmigiu Gardens is one of the most popular leisure activities in Bucharest, especially on a hot day.
  - So drinking is incredibly cheap : "The beer prices alone are enough to make you consider leaving London for good. Even in touristy spots, two pints will set you back less than a fiver. "



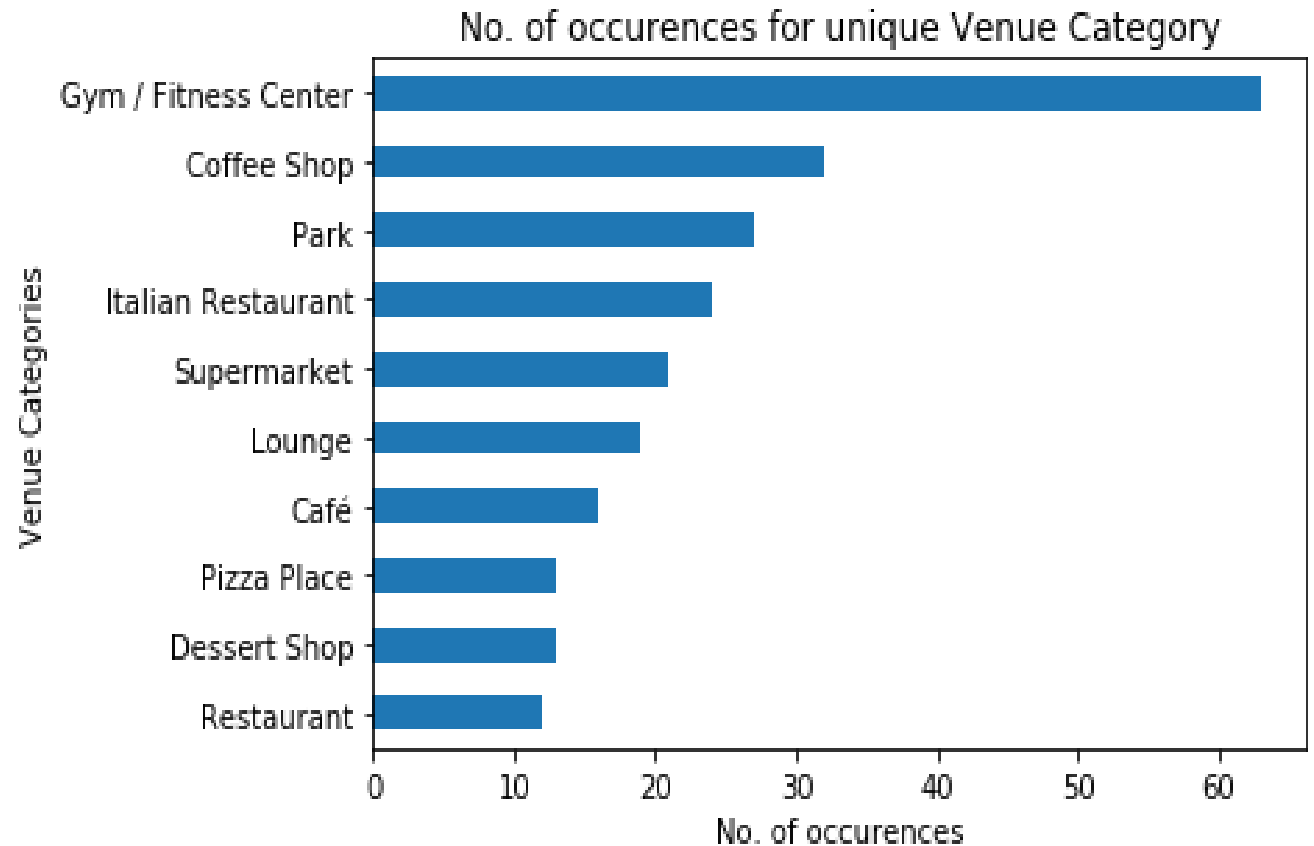
# B. METHODOLOGY AND DATA PREPARATION

- For this problem, we get the services of Foursquare API to explore the Bucharest data, in terms of neighborhoods. First of all, for this project we use Bucharest neighborhoods (6 Sectors) as scrapped from [Wikipedia](#). In order to geographically situate the neighborhoods, latitudes and longitudes were manually added to the csv file used for the dataframe from [Latitude.to](#).
- Then, data was extracted from Foursquare in order to include the information about the places around each neighborhood like restaurants, hotels, coffee shops, parks, theaters, art galleries, museums and many more. We use machine learning technique, “Clustering” to segment the neighborhoods with similar objects on the basis of each neighborhood data. These objects will be given priority on the basis of foot traffic (activity) in their respective neighborhoods. This will help to locate most common venues in Bucharest but also, will allow to evaluate possible business ideas in tourism area.



# C. RESULTS AND DISCUSSION

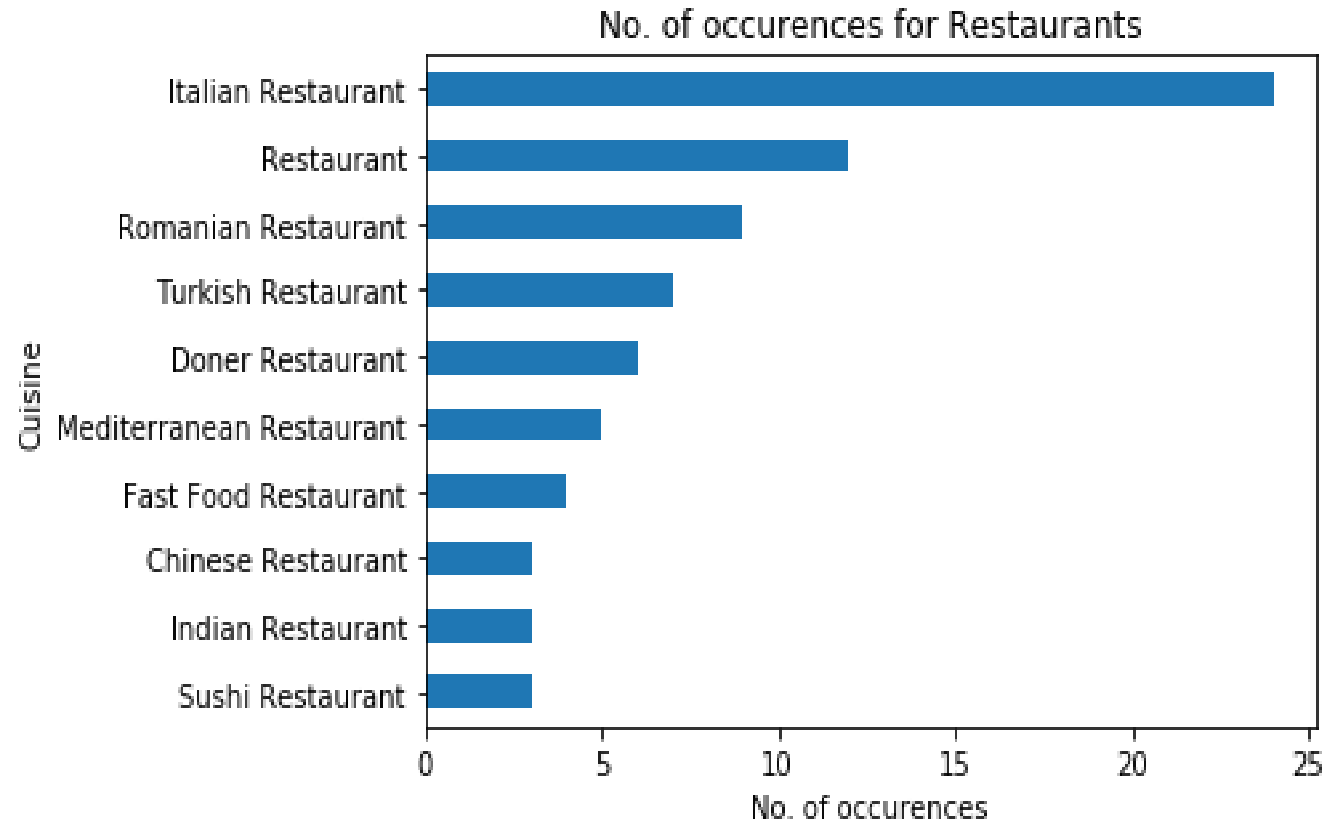
- There are 136 different unique venue categories for Bucharest. If we extract a Top-10 Venue Category based on this data, one can see that Gym / Fitness Center comes in first place, quite surprisingly.
- Combining this observation with the fact that Parks arrive in third position, it seems that having good shape is very important in Bucharest! Coffee shops occupy second position in Top, in agreement with Telegraph article, mentioning that Bucharest *"It's packed with hipster coffee spots"*.





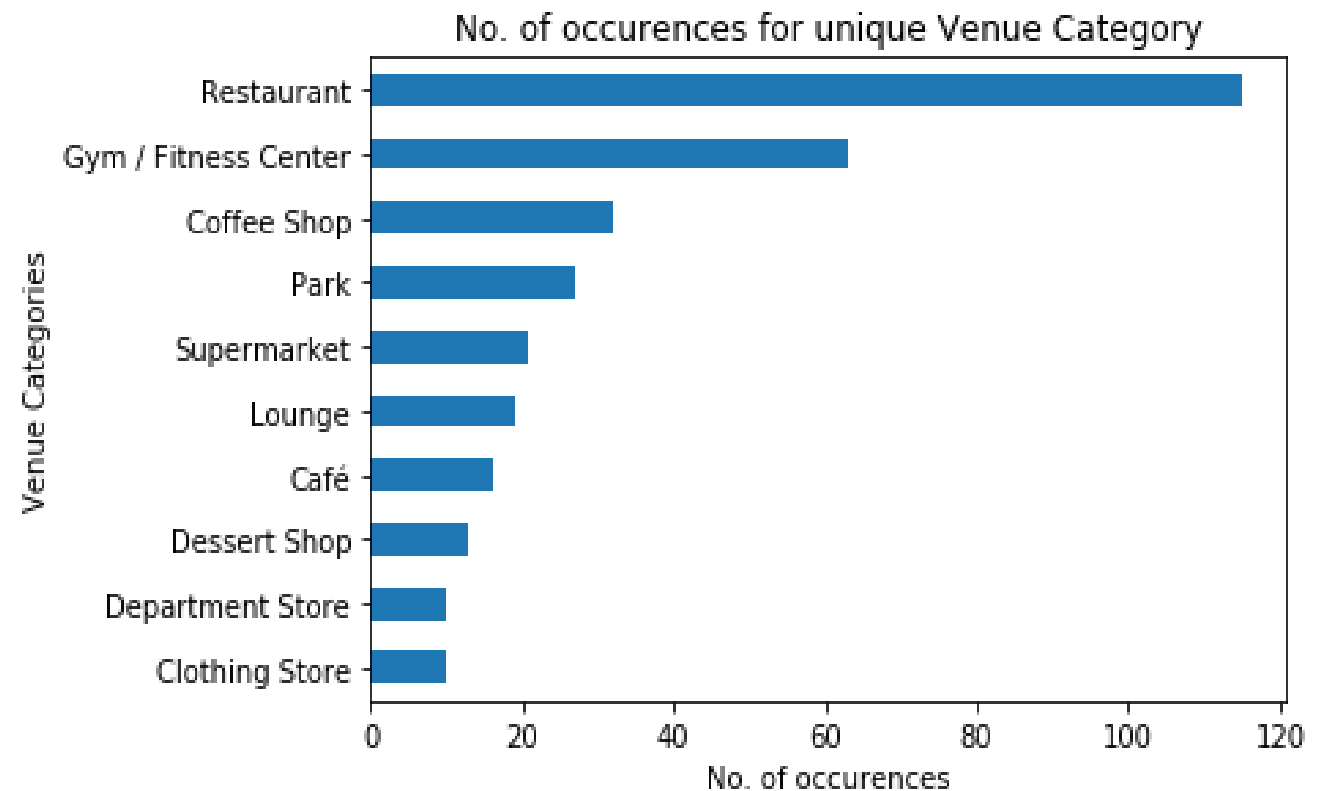
# C. RESULTS AND DISCUSSION

- Let's put Top-10 Restaurants on a graph and analyze this data. Once again, one can see that Italian food is highly appreciated in Bucharest, even more than Romanian Cuisine!
- Proximity of Turkey have an impact on number of restaurants. We find also asian cuisine as chinese, sushi, or indian. It is remarkable that we did not found French Cuisine in Top-10 , when we know that Bucharest is called "Little Paris"!



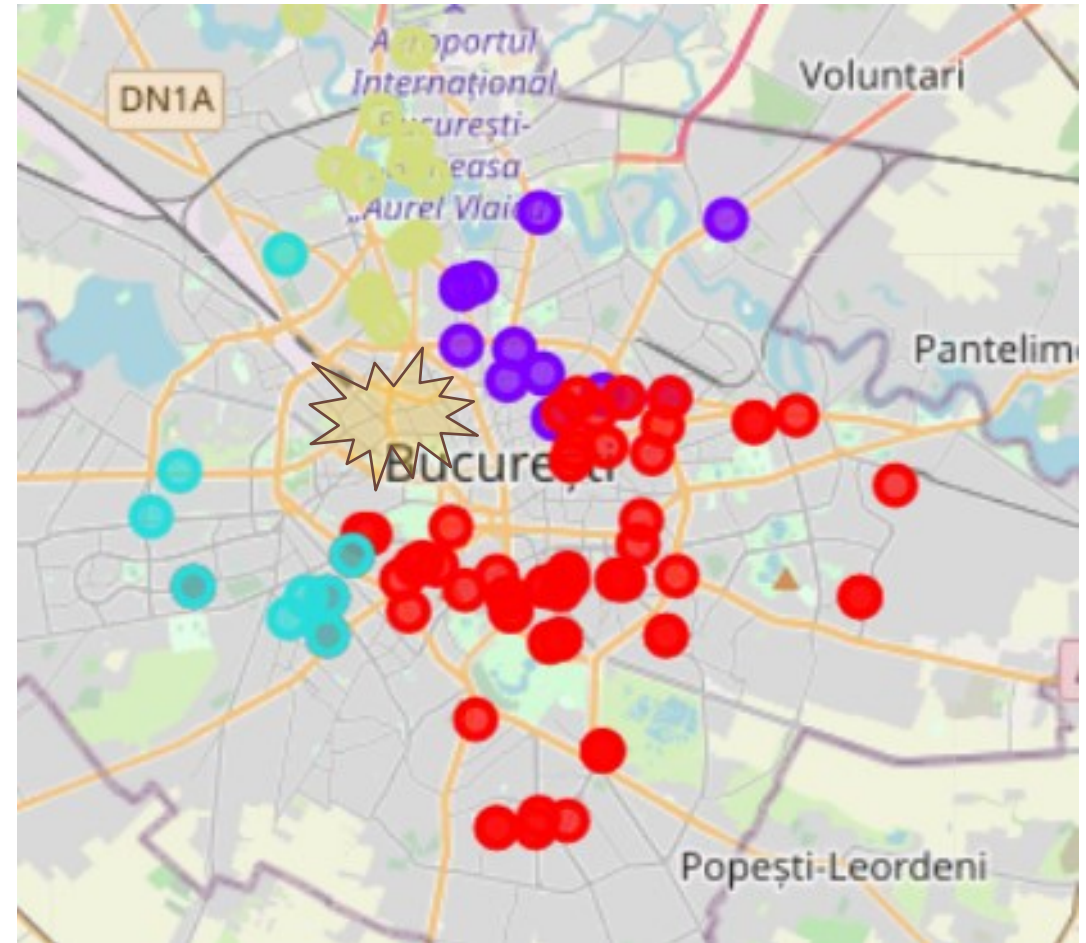
# C. RESULTS AND DISCUSSION

- After data reorganization we aggregated restaurants under a unique category in order to evaluate impact on Top-10.
- The new graph shows clearly why Fitness Centers and Parks are in Top-10 Venues, the reason is the Restaurant venue in pole-position!



# C. RESULTS AND DISCUSSION

- Finally we extracted only the most common restaurants localization for the 4 clusters in order to identify possible zone for a new, French cuisine, restaurant
- We can see here above that center and center-west of Bucharest not very dense in restaurants.
- Coroborated with previous observation that there's no French restaurant in Top-10 venues (in fact there's a only one French restaurant in data we've obtained from Foursquare) we can say that we recommend to open a French cuisine restaurant in that area.



# D. CONCLUSIONS AND PERSPECTIVES

- This study was inspired by a Telegraph article mentioning that in Bucharest there are a lot of coffee shops and parks, and also, that beer is cheap .
- After scrapping Bucharest neighborhoods from Wikipedia, we inserted them in a dataframe together with most common venues from Foursquare.
  - At first sight, the most common venue in Bucharest was Gym/fitness Centers, which was quite amazing! After data cleaning in fact the most common venue in Bucharest are restaurants.
  - Their important number could be an explanation for cheap beer, but also for need of large number of Fitness centers 😊
  - What was surprising was there's no French cuisine in Top-10 restaurants in Bucharest, especially when we know that Bucharest is called the Little Paris so this is a nice business opportunity in Bucharest.
- In agreement with Telegraph article, we found than in Top-5 venues the coffee shops and the parks.
- Finally kmeans clusterization and map positioning visualization with Folium allows us to recommend to choose the area of center-west for opening a French cuisine restaurant in Bucharest.

