Analysis of the location of eating places in Paris

A Capstone project by Ian Sobral

Objectives

- Find an optimal location for a stakeholder interested in opening an eating place in Paris

- Find out which categories of eating places are the most common in Paris and where they are located

Data description and cleaning

- A geojson file containing the coordinates of the Paris boundaries was used to restrict the area of analysis

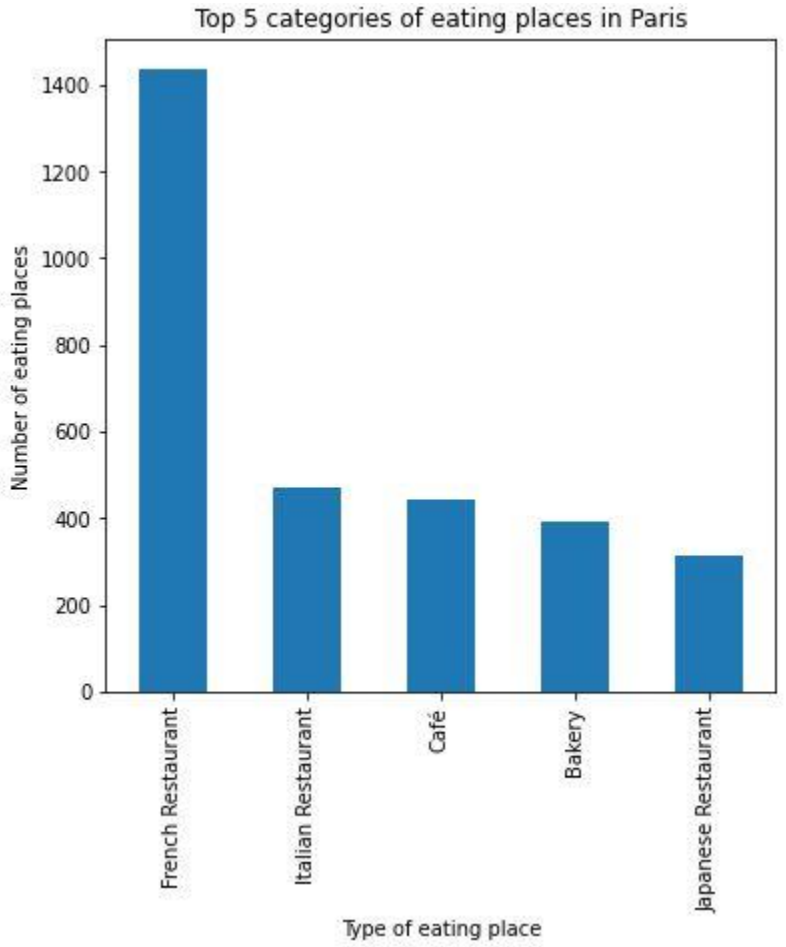
- The data on eating places (addresses, coordinates, name of the establishment, etc.) was obtained from the Foursquare API

- The latitude and longitude of Paris center and the addresses of the best places to open an eating place in Paris were retrieved using the Nomitatim API

Results and discussion

1. Top categories of eating places

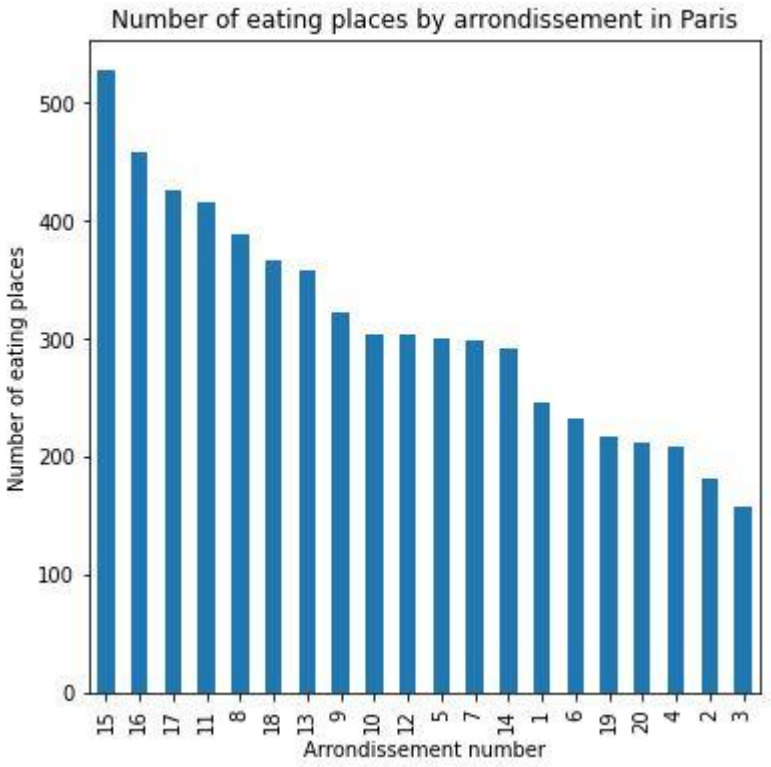
If a stakeholder wants to open a new restaurant in Paris and is looking for less competition, these types of restaurants should be avoided



Results and discussion

2. Number of eating places by arrondissement

A not so good type of analysis. Checking for the density of eating places by km^2 is a better one.

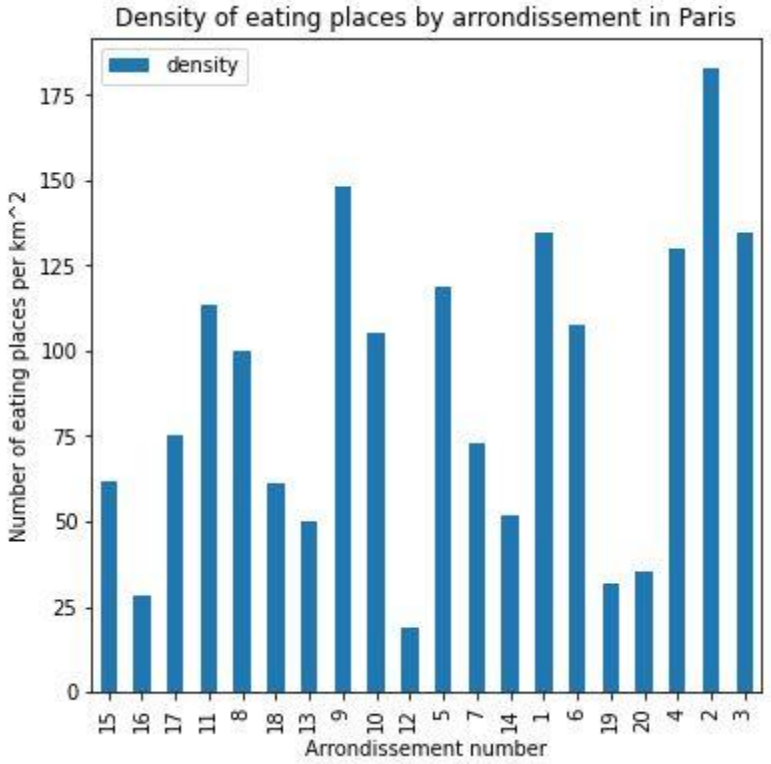


Results and discussion

3. Density of eating places by arrondissement

A better way to analyze which borough is most full of
of eating places.

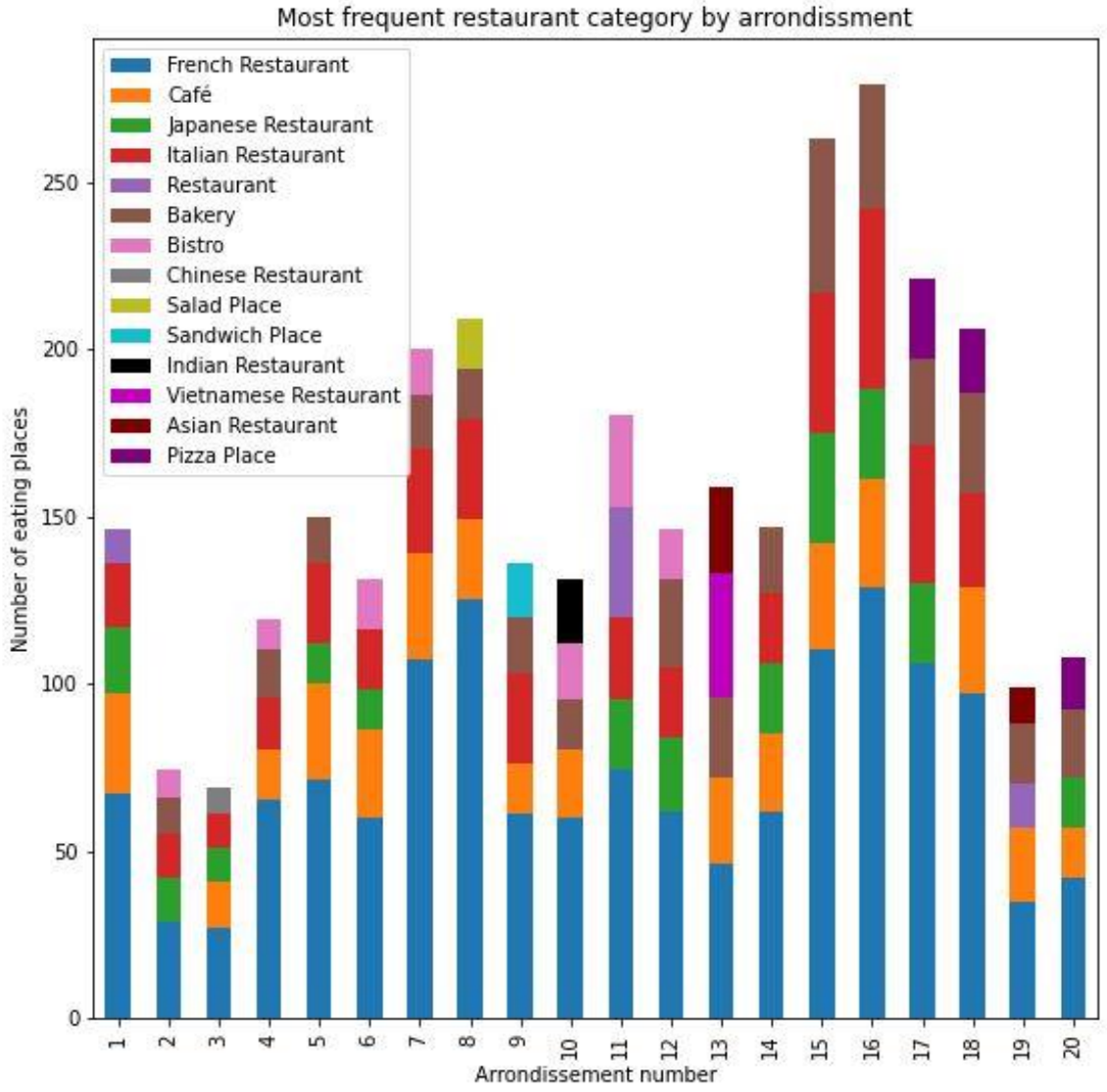
The 2nd arrondissement for example is the most dense area but one of the areas with less restaurants.



Results and discussion

4. Most frequent restaurant category by arrondissement

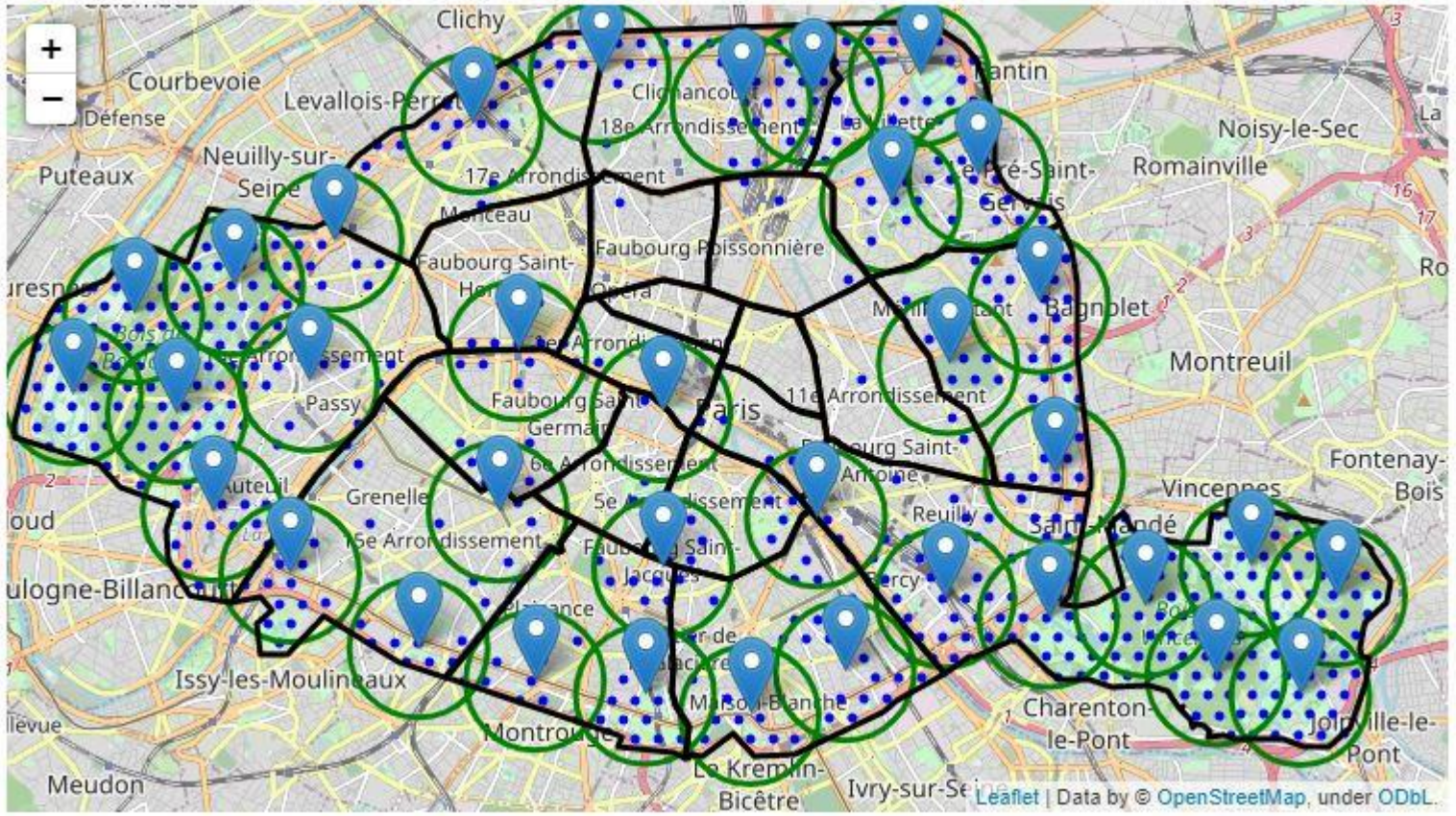
A similar analysis to the one of the page 3, but this time on a local scope.



Results and discussion

5. Best places in Paris to open a new eating place based on the less dense areas

Using a k-means machine learning clustering method, we can gather the addresses of the clusters of the areas with less eating places.



Conclusion

- This study can be useful for anyone who is interested in opening a new eating place at Paris and wants to know which kind of restaurant to choose and the best locations to do so.

- Some data science and machine learning skills were used to gather the data and make the desired predictions.

- The Foursquare API and the Paris Data website were essential to this project.