

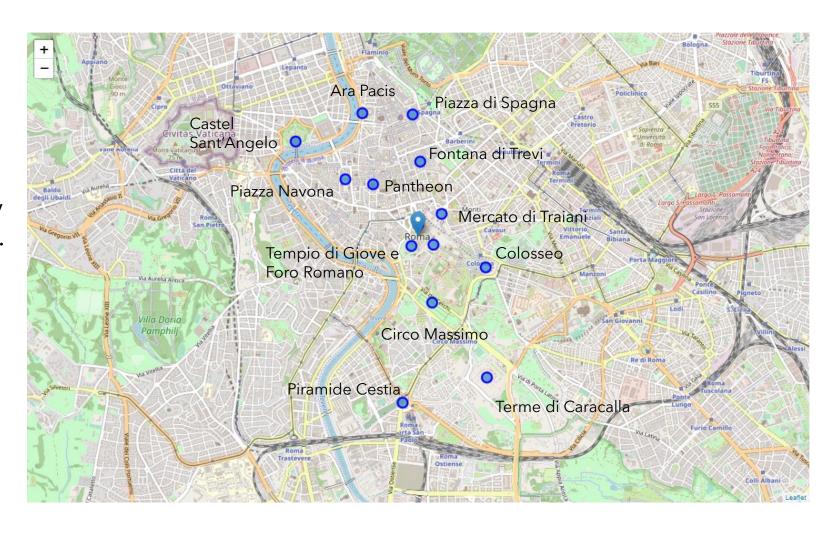
Fast Foods in the Eternal City

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Where should I open a fast food in Rome?

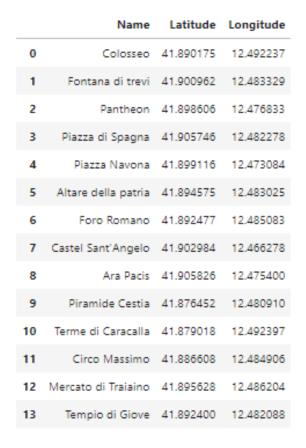
Rome is one of the most visited cities by tourist, and for sure opening a new business in the city has a lot of potential in economic term. The aim of this study is to find a "hot" area in the city where to open a new activity.

For this reason the main sites/monuments in the city center are taken into consideration

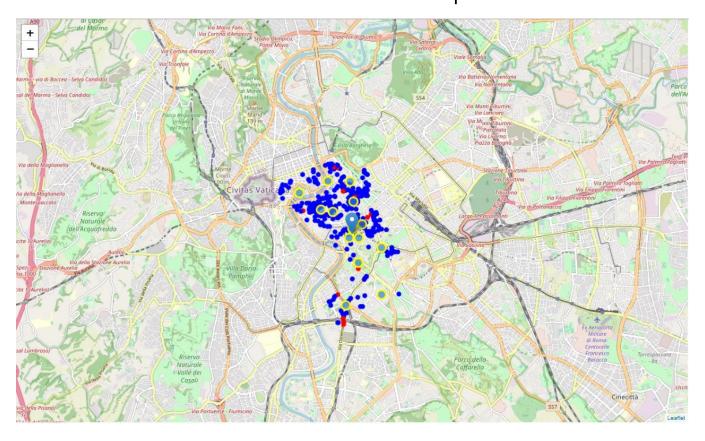


Geographical coordinates of the monuments/sites chosen were imported and transformed into dataframes

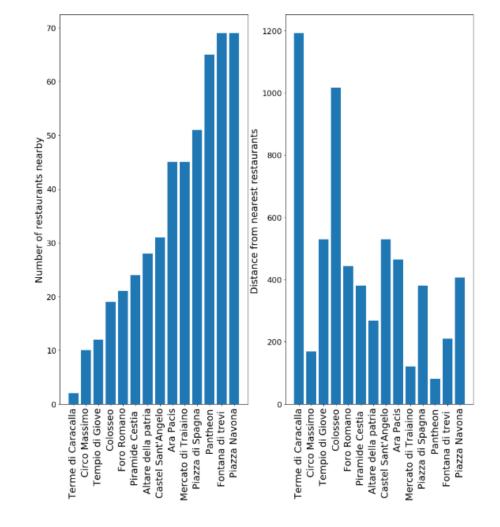
Name	Latitude	Longitude
Colosseo	41.890175	12.492237
Fontana di trevi	41.900962	12.483329
Pantheon	41.898606	12.476833
Piazza di Spagna	41.905746	12.482278
Piazza Navona	41.899116	12.473084
Altare della patria	41.894575	12.483025
Foro Romano	41.892477	12.485083
Castel Sant'Angelo	41.902984	12.466278
Ara Pacis	41.905826	12.4754
Piramide Cestia	41.876452	12.48091
Terme di Caracalla	41.879018	12.492397
Circo Massimo	41.886608	12.484906
Mercato di Traiaino	41.895628	12.486204
Tempio di Giove	41.8924	12.482088



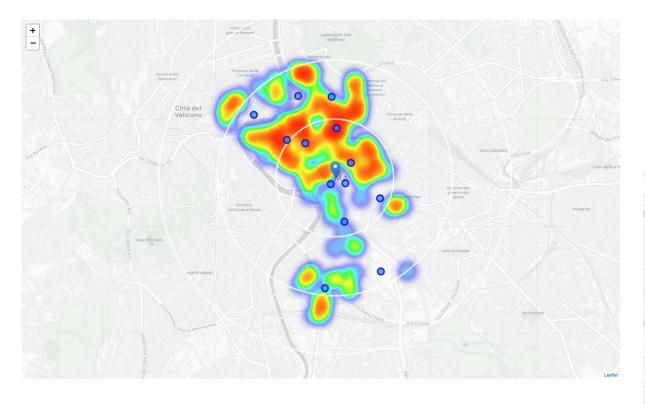
Thanks to the Foursquare API, the restaurants (blue points) and fast foods (red points) were identified round the points of interest, and an histogram was created to see the number of venues around each points of interest

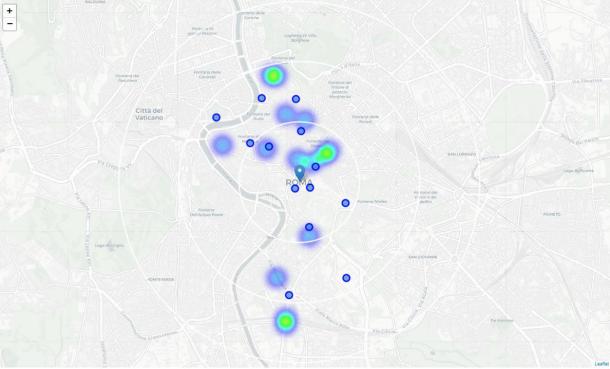


Number of resturants and minimum distance for each site/Monument

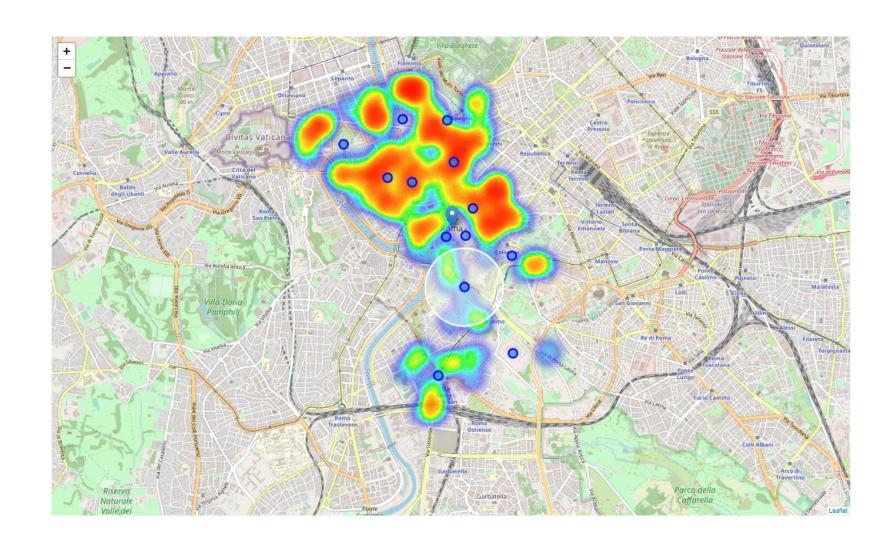


In order to find the potential areas with few restaurants and/or fast foods, two heatmaps were created, and as a result three potential candidates were selected, i.e. the Colosseo, the Circo Massimo and the Terme di Caracalla

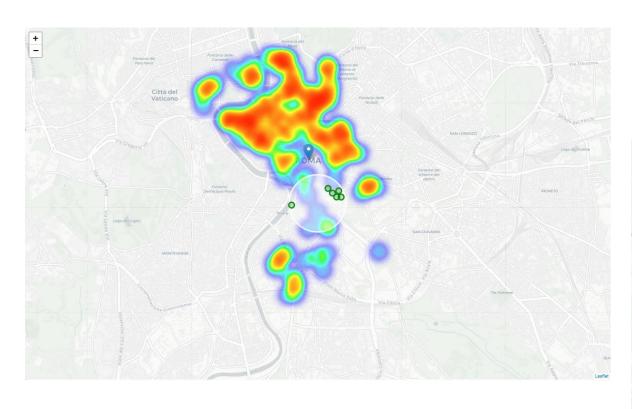


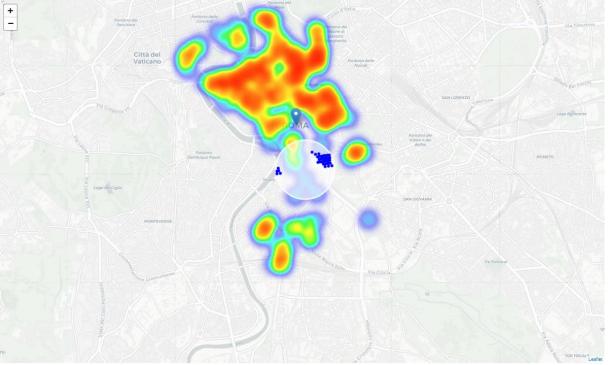


The Colosseo and Circo Masimo were chosen as the right candidates, being more close to the city center and being also two of the most visited monuments of the city (the Colosseum is visited every year by almost 7 millions people!!)

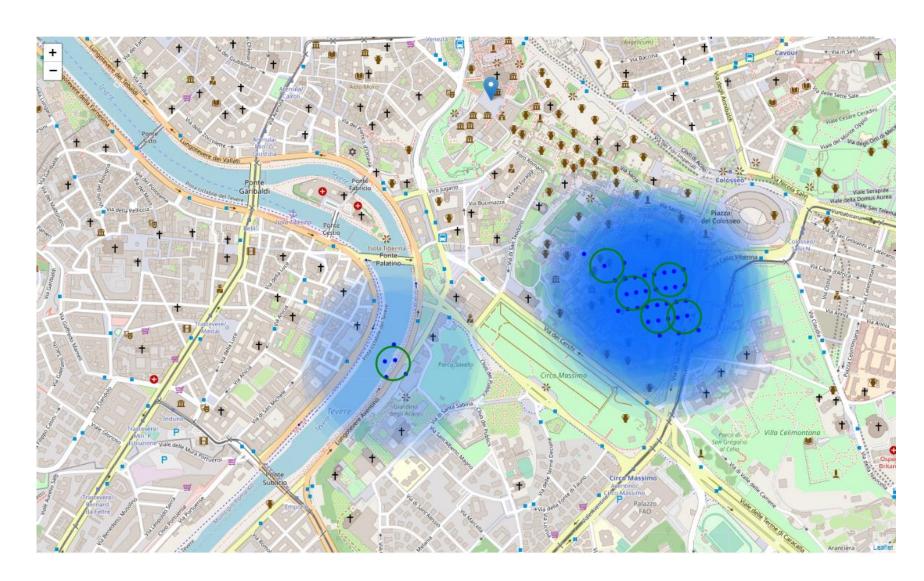


A further analysis was performed around this area and a clustering technique (k-means) was used to find the areas where two conditions are met, namely no more than 2 restaurants in 250 m and no Fast Food in 200 m.





The final result was the identification of two macro areas were all the requirements previously defined are met. This are the areas provided to stakeholders as a preliminary indication.



Conclusions

By calculating restaurant density distribution from Foursquare data we have first identified general boroughs that justify further analysis and then generated extensive collection of locations which satisfy some basic requirements regarding existing nearby restaurants. Clustering of those locations was then performed in order to create major zones of interest (containing greatest number of potential locations) and the coordinates of those zone centers can then be used as starting points for final exploration by stakeholders.

Thanks for the attention