



# DECIDING WHICH LOCATION IS BETTER TO HOST A CONGRESS

Georgina Company

# INTRODUCTION

- Every year and every month many congresses are celebrated around the world.
- Good accommodations near the congress are a must in order to host the attendants.
- The question to answer is: “**which is the most suitable university to host the congress?**”



Polytechnic University  
of Catalonia



University of Barcelona

- This methodology of analysis is interesting for the organization committee of the congress in order to decide which location is more suitable for the congress, which in turn will represent more money for the congress as more people will want to attend to it.

# DATA ACQUISITION AND CLEANING

- I am going to use **Foursquare data**.
- For the Polytechnic University of Catalonia the address is: **C. Jordi Girona, 3208034 Barcelona Cataluña España**
- For the University of Barcelona the address is: **Gran Via de les Corts Catalanes, 585, 08007 Barcelona Cataluña España**
- We are going to extract the information of the hotels near both locations and keep only the data that is associated with the location of the different hotels as well as the hotel's names for both locations.

dataframe\_filtered1.head()

	name	categories	address	lat	lng	labeledLatLngs	distance	postalCode	cc	city	state	country	formattedAddress	crossSt
0	AC Hotel Victoria Suites by Marriott	Hotel	Beltran I Rózpide, 7-9	41.389324	2.121338	[{"label": "display", "lat": 41.389324, "lng": ...}	579	08034	ES	Barcelona	Cataluña	España	[Beltran I Rózpide, 7-9, 08034 Barcelona Catal...	
1	Gran Hotel Princesa Sofia	Hotel	Plaça de Pius XII, 4	41.386517	2.123076	[{"label": "display", "lat": 41.3865174622853...	710	08028	ES	Barcelona	Cataluña	España	[Plaça de Pius XII, 4 (Av. Diagonal), 08028 Ba...	Diag
2	Hotel Sansi Pedralbes	Hotel	Av. Pearson, 1-3	41.393435	2.111722	[{"label": "display", "lat": 41.39343506028381...	680	NaN	ES	Barcelona	Cataluña	España	[Av. Pearson, 1-3, Barcelona Cataluña]	
3	Hotel Sofia Barcelona - In the Unbound Collect...	Hotel	Plaça De Pius XII 4	41.385980	2.123314	[{"label": "display", "lat": 41.38598, "lng": ...}	743	08028	ES	Barcelona	Cataluña	España	[Plaça De Pius XII 4, 08028 Barcelona Cataluña]	
4	Fairmont Hotel Rey Juan Carlos I (Hotel Rey Ju...	Hotel	Av Diagonal 661 671	41.381291	2.109191	[{"label": "display", "lat": 41.381291, "lng": ...}	855	08028	ES	Barcelona	Cataluña	España	[Av Diagonal 661 671, 08028 Barcelona Cataluña]	

dataframe\_filtered2.head()

	name	categories	address	lat	lng	labeledLatLngs	distance	postalCode	cc	city	state	country	formattedAddress	crc
0	Hotel NH Collection Barcelona Gran Hotel Calderón	Hotel	Rbla. de Catalunya, 26	41.389264	2.166129	[{"label": "display", "lat": 41.38926386465471...	344	08007	ES	Barcelona	Cataluña	España	[Rbla. de Catalunya, 26, 08007 Barcelona Catal...	
1	Hotel Pulitzer	Hotel	C. Bergara, 8	41.386245	2.168272	[{"label": "display", "lat": 41.38624508838907...	374	08002	ES	Barcelona	Cataluña	España	[C. Bergara, 8, 08002 Barcelona Cataluña]	
2	Axel Hotel	Hotel	Aribau, 33	41.387351	2.160403	[{"label": "display", "lat": 41.38735095471836...	295	08011	ES	Barcelona	Cataluña	España	[Aribau, 33, 08011 Barcelona Cataluña]	
3	Hotel Catalonia Plaza Catalunya	Hotel	C. de Bergara, 11	41.386406	2.168230	[{"label": "display", "lat": 41.38640606572736...	369	08002	ES	Barcelona	Cataluña	España	[C. de Bergara, 11 (Pl. de Catalunya), 08002 B...	
4	Hotel Condestable	Hotel	Plaça Universitat, 1	41.386140	2.164967	[{"label": "display", "lat": 41.38614013259076...	113	08007	ES	Barcelona	Cataluña	España	[Plaça Universitat, 1, 08007 Barcelona Cataluña]	



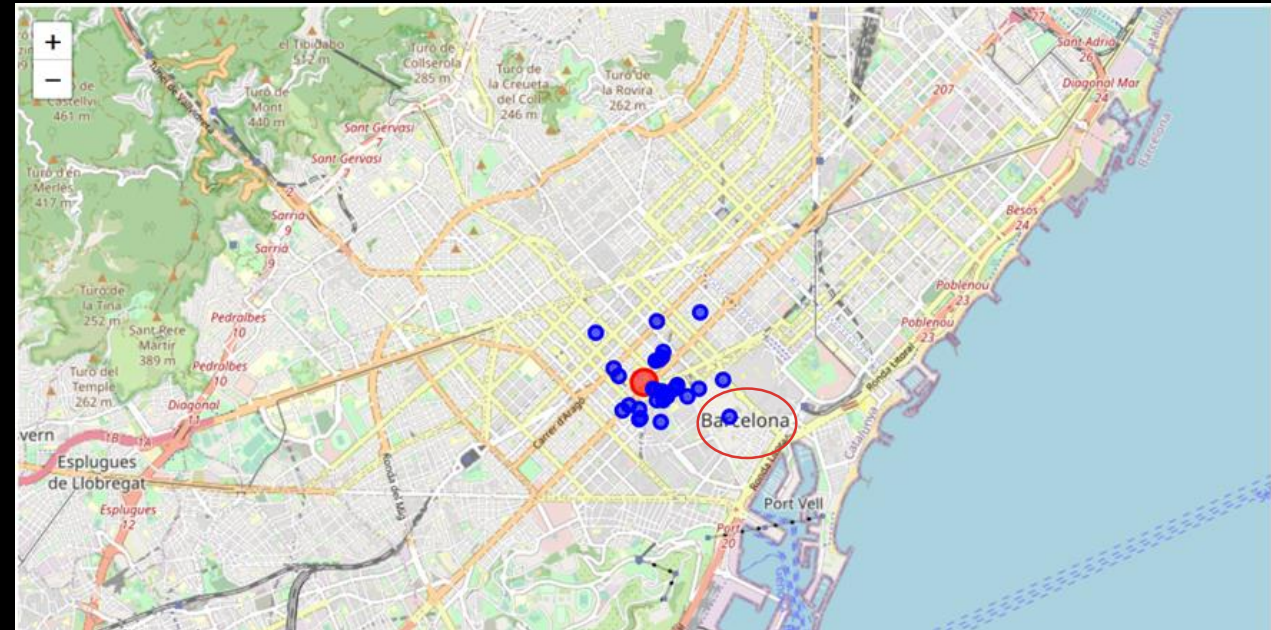
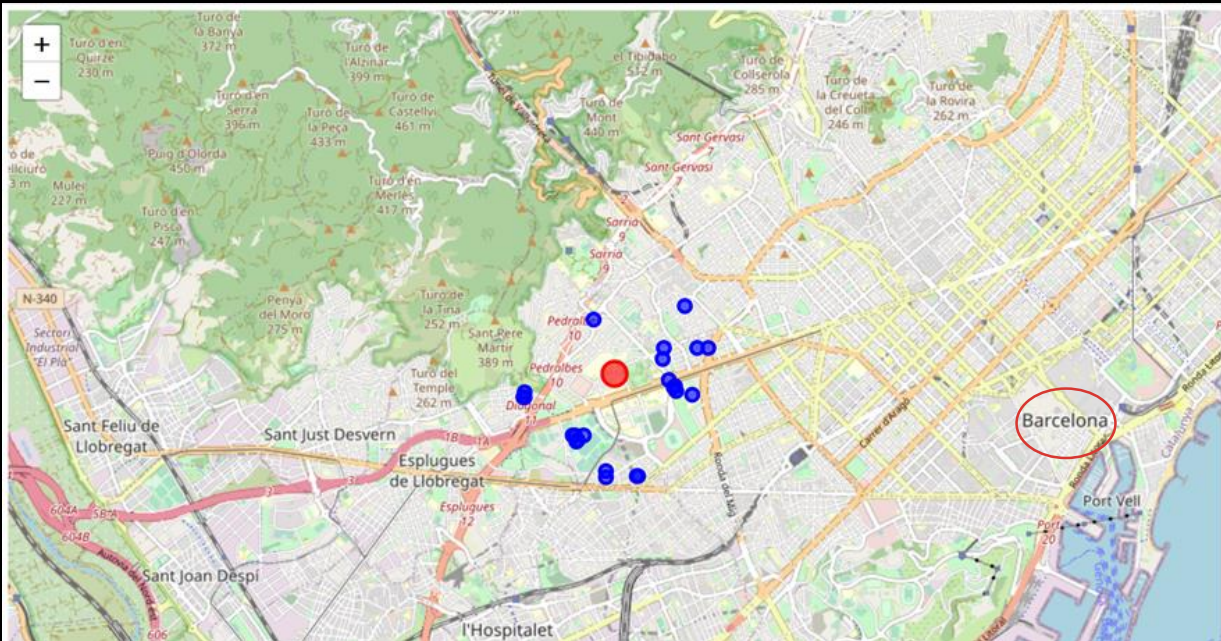
# VISUALIZATION OF THE DIFFERENT HOTELS



Polytechnic University  
of Catalonia



University of  
Barcelona

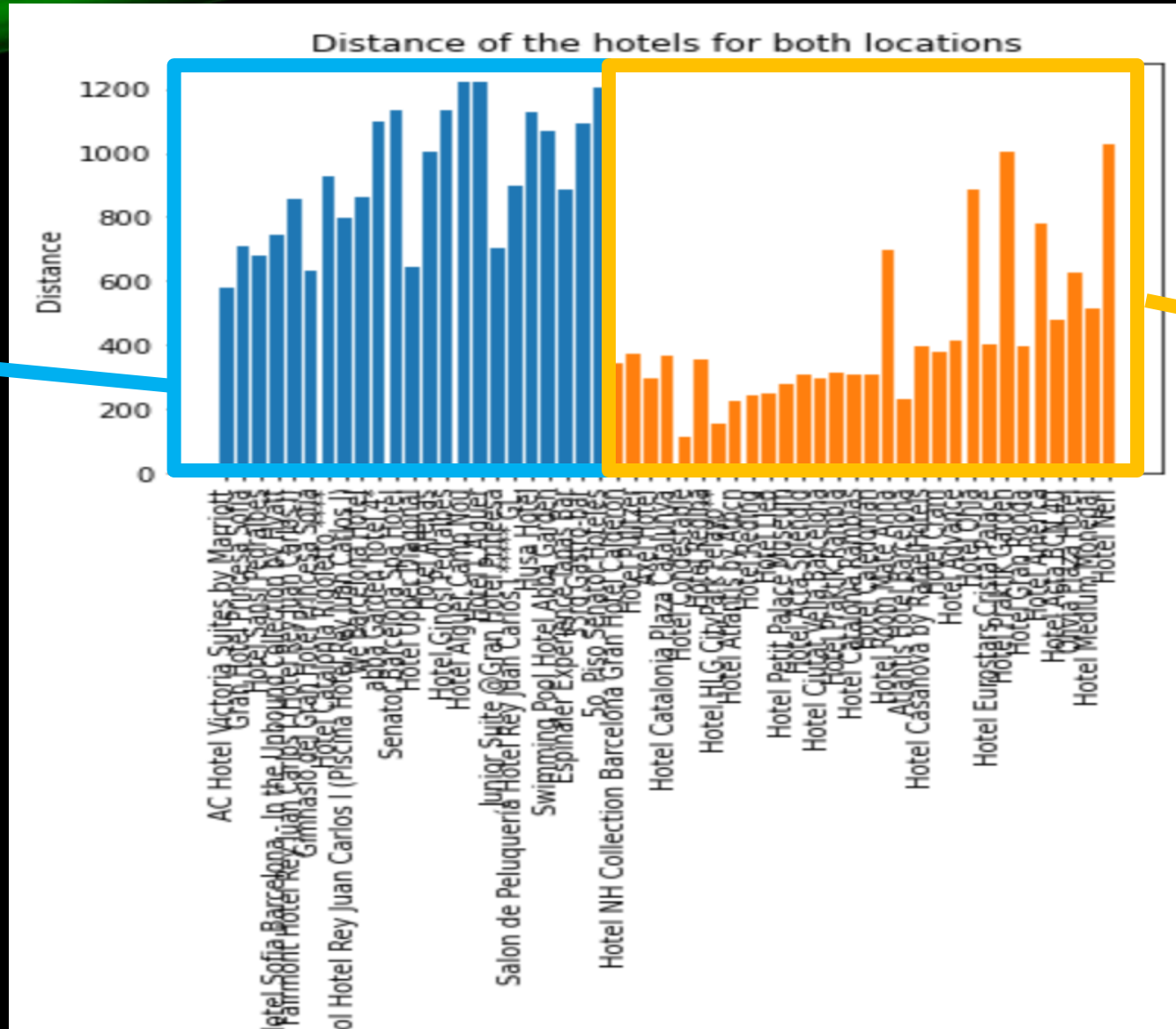


More centric

# DISTANCES FROM THE DIFFERENT HOTELS TO THE PLACES



Polytechnic University  
of Catalonia

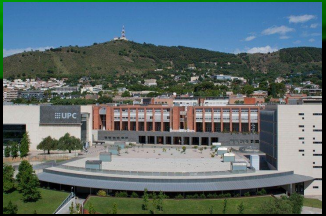


University of  
Barcelona

Hotels are near



# COMPARISON OF THE RATING OF THE HOTELS



Polytechnic University  
of Catalonia



University of  
Barcelona

**Hotels are better  
rated**

```
mean_r1= np.mean(rating1)
mean_r2= np.mean(rating2)
print('Mean of the rating of the hotels of the Polytechnic University of Catalonia is:', mean_r1)
print('Mean of the rating of the hotels of the University of Barcelona is:', mean_r2)
```

```
Mean of the rating of the hotels of the Polytechnic University of Catalonia is: 5.9125
Mean of the rating of the hotels of the University of Barcelona is: 6.859090909090909
```

# CONCLUSIONS



Polytechnic University  
of Catalonia



University of  
Barcelona

The best location is University of Barcelona because:

- More centric location
- More hotels
- Hotels nearer the place of the congress
- Hotels better rated