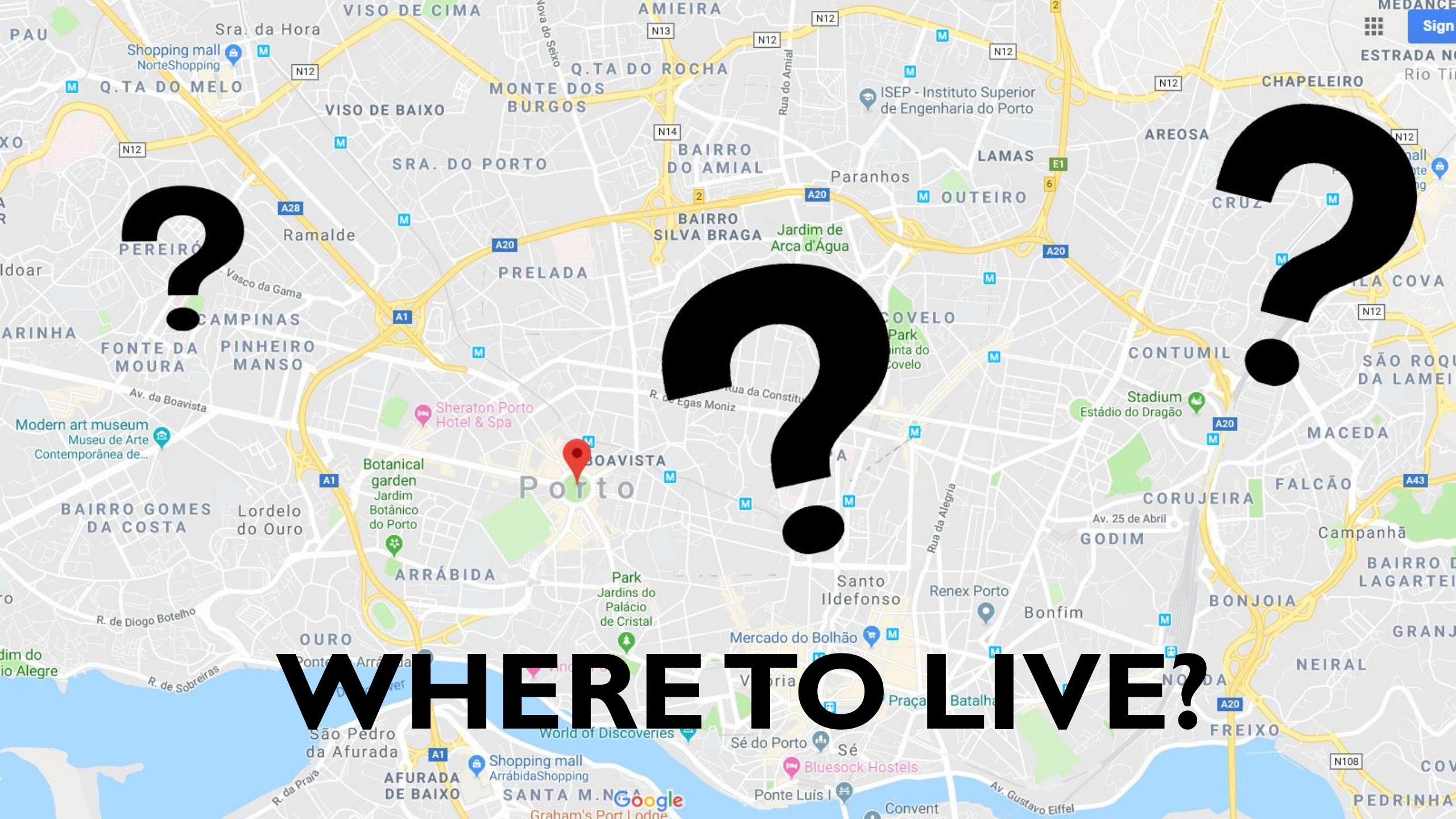


PROJECT P

**PINPOINT PERFECT PARISH
IN PORTO**

RELOCATION TO PORTO CITY





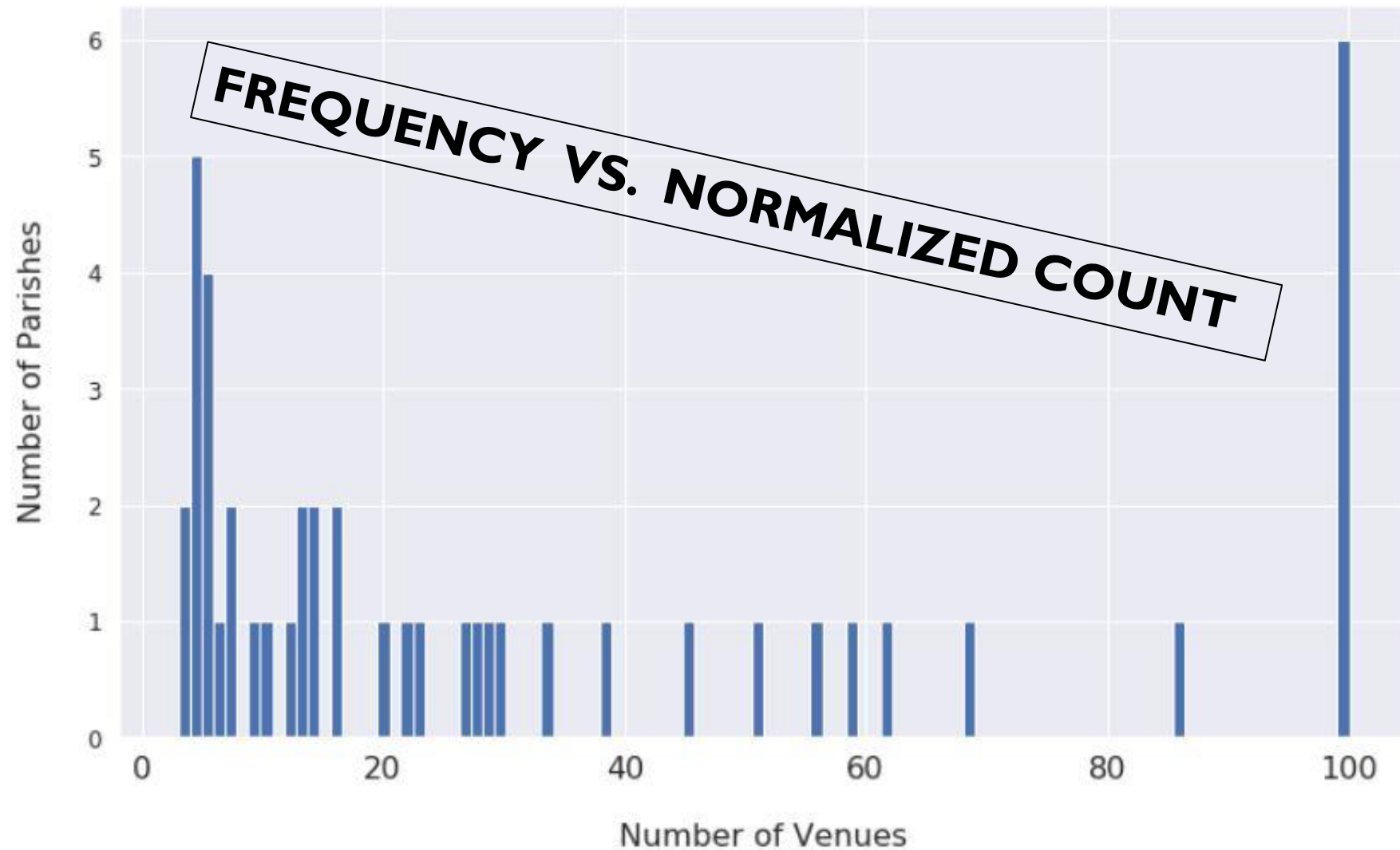
WHERE TO LIVE?

DATA

- **List of all Parishes** (administrative division of Portugal, Wikipedia)
- **Geocoding services:** coordinates, distances
- **Foursquare:** venues
- **Customer's preferences:** feature weights

Sample customer: FEUP student

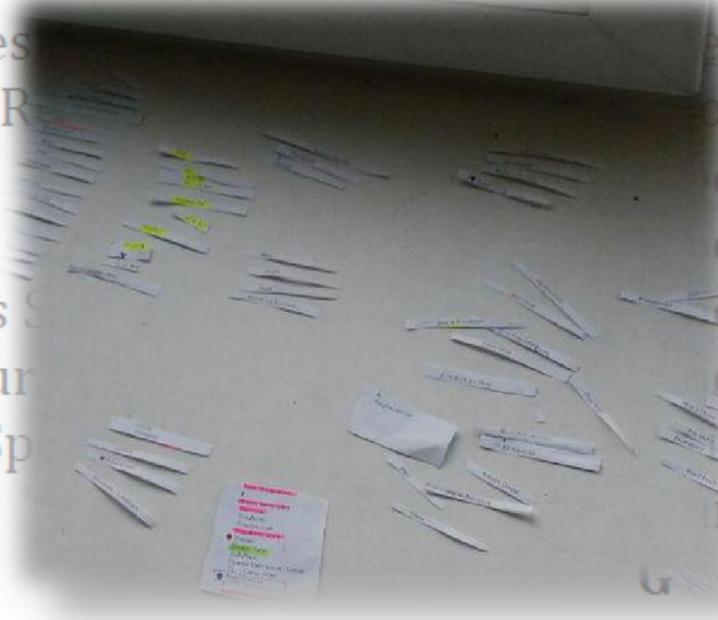
CHOICE OF METRICS



FEATURE ENGINEERING

DISTANCES

VENUES

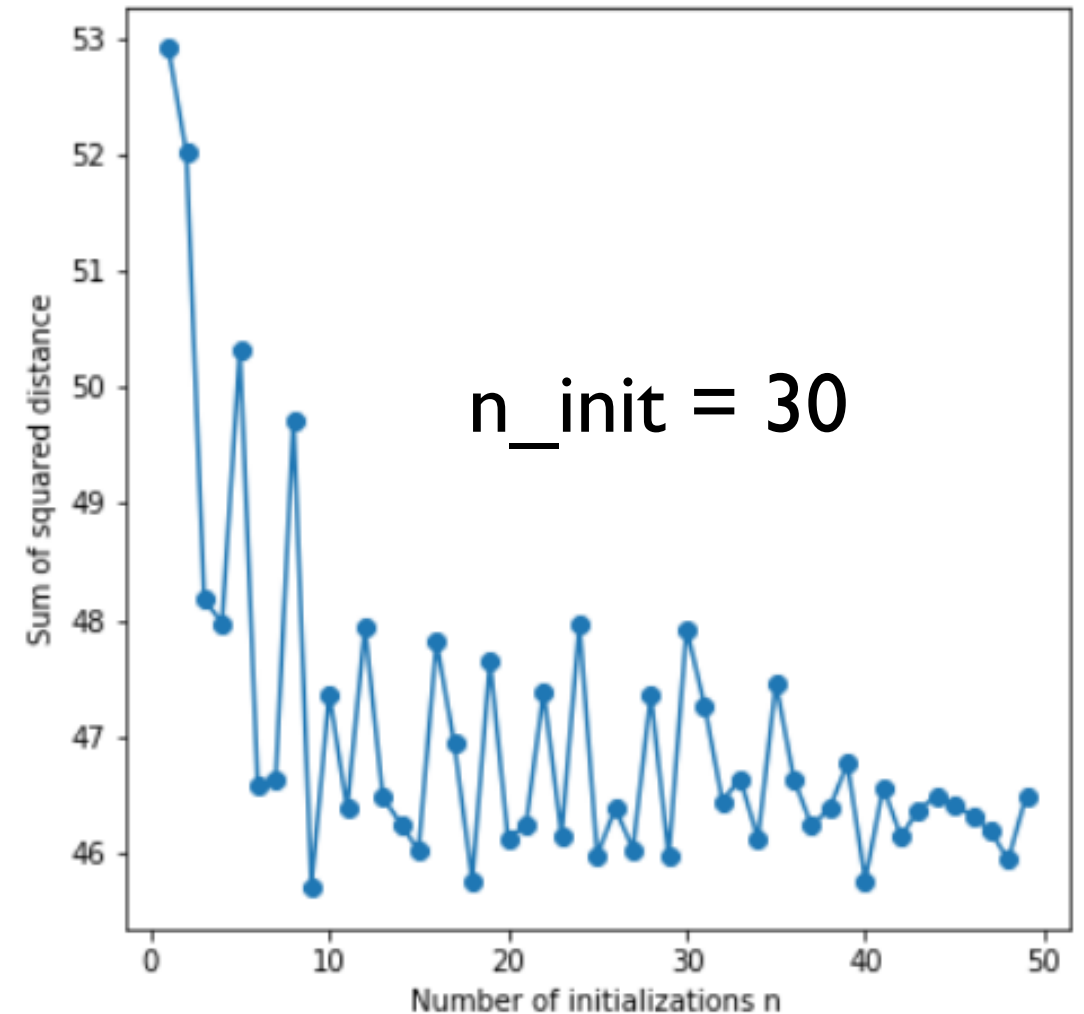
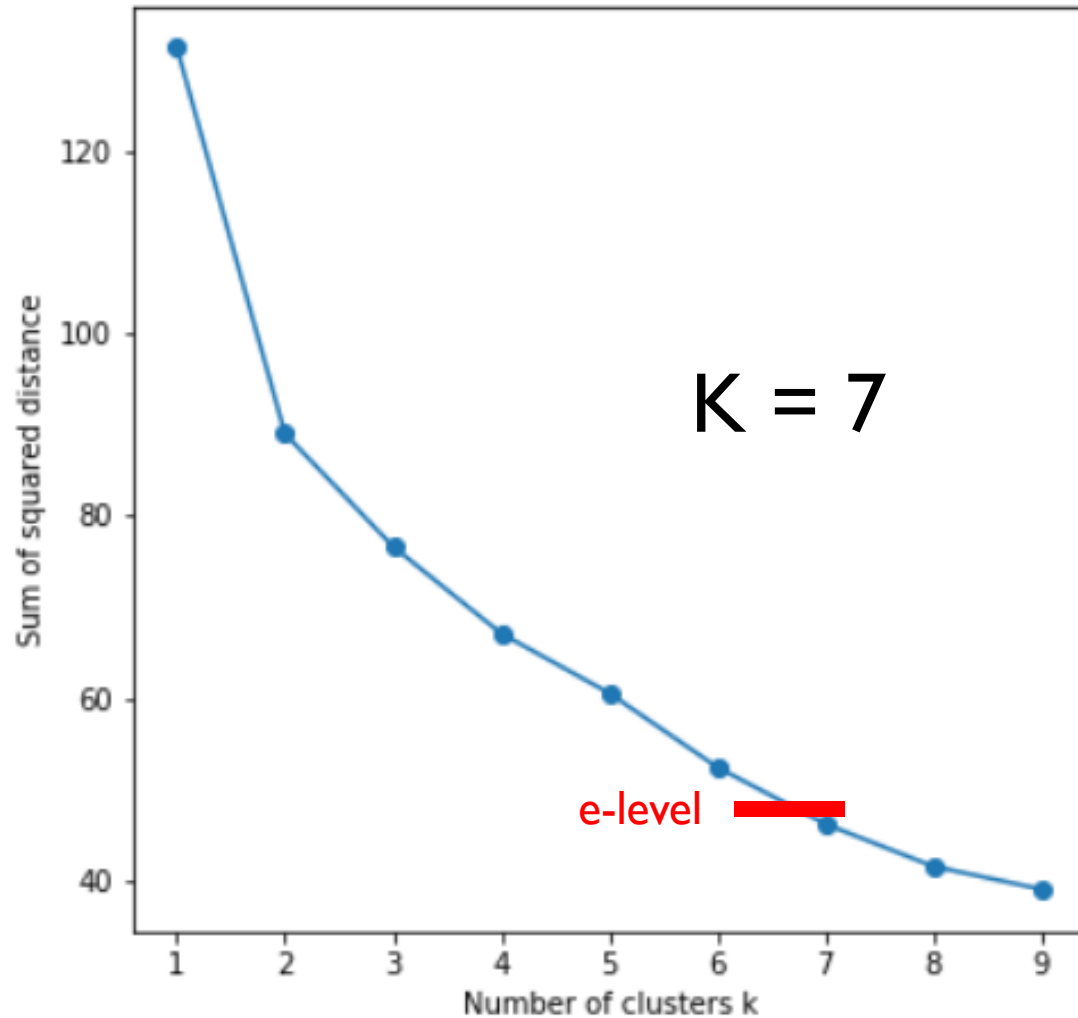


CUSTOMER'S PREFERENCES

Feature	Importance	Description
<i>Remoteness_km</i>	Important	<i>Distance to City Centre</i>
<i>Airport_km</i>	Important	
<i>Unversity_FEUP_km</i>	Normal	
	Not important	
<i>To_sea_km</i>	Normal	<i>Distance to seashore</i>
<i>Alcohol</i>	Normal	
<i>Arts & Museums</i>	Not important	
<i>Basic Shops & Services</i>	Normal	
<i>Café and Desserts</i>	Important	
<i>Car Service</i>	Normal	
<i>Chillout</i>	Not important	<i>Spa etc.</i>
<i>Entertainment</i>	Not important	
<i>Fitness & Sports</i>	Important	
<i>Food Places</i>	Normal	

MODEL SELECTION

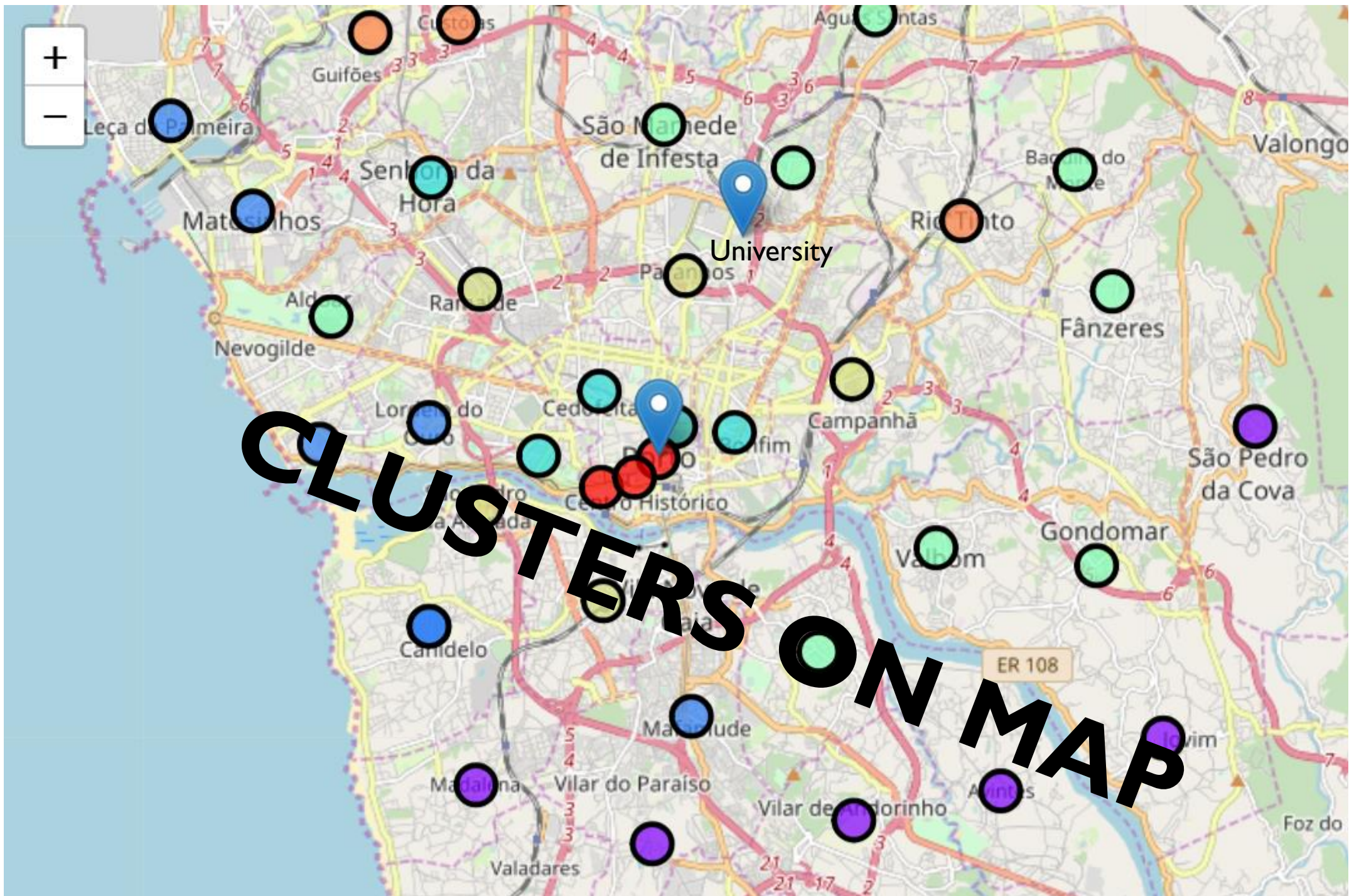
K-means++ clustering



CLUSTER PROFILES

	Municipality	Parish	Latitude	Longitude	Cluster	1st Feature	2nd Feature	3rd Feature
43	Vila Nova de Gaia	Vilar de Andorinho	41.101582	-8.576659	0	Unversity_FEUP_km Outsider	Remoteness_km Normal	To_sea_km
45		Cluster 0	41.149451	-8.610788	0	Unversity_FEUP_km Outsider	To_sea_km Normal	Remotenes C

	Remoteness_km	Unversity_FEUP_km	To_sea_km	Alcohol	Basic Shops & Services	Café and Desserts	Car Service	Fitness & Sports	Food Places
Cluster									
Cluster 0	Outsider	Outsider	Normal	Normal	Normal	Outsider	Normal	Outsider	Outsider



ORANGE: "Rail stations only"

GREEN: "Mediocrity"

BLUE: "Good but far"

RED: Central Core

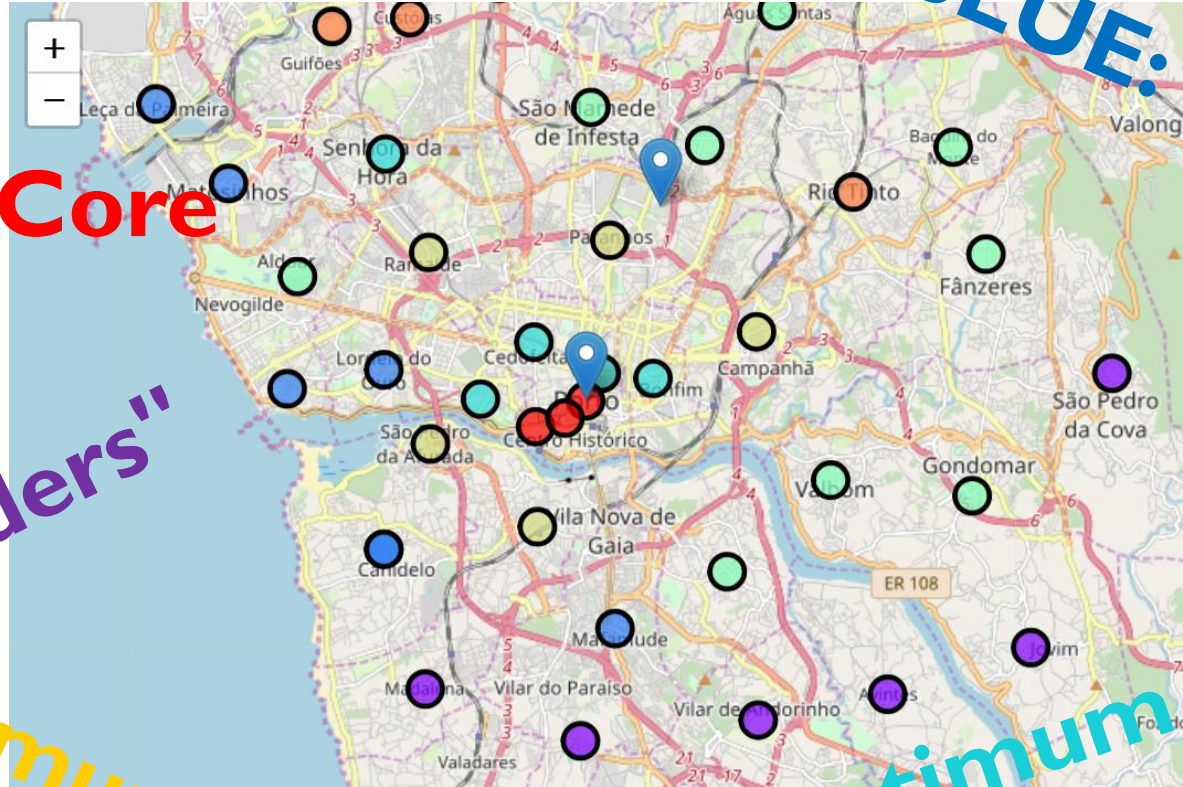


YELLOW: "Outsiders"

VIOLET: "Optimum"

15. "Optim

BLUE:
"Life"



CONCLUSION

The study useful for anyone who is going to relocate in Porto or just to explore its Parishes in detail.

Future improvements:

- Denser geo-data
- More geo-data providers
- More info about local venues
- More interesting visualization
- Web-based application



THE END

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