

Find your new home



Comparison of neighborhoods can help to find a place for living

- graduates students want to stay and work in the EU
- challenge of not knowing the local language
- search a job in English in Paris, Berlin or Amsterdam
- find a place which you can call a new home
- compare neighborhoods with my current location (Stationsplein, Eindhoven, Netherlands)

Data acquisition and cleaning

- collect neighborhoods from Wikipedia
- collect latitudes and longitudes from each neighborhood
- explore venues in the radius of 500 meters of the center of each neighborhood
- drop places with too small number of venues (3 and less)

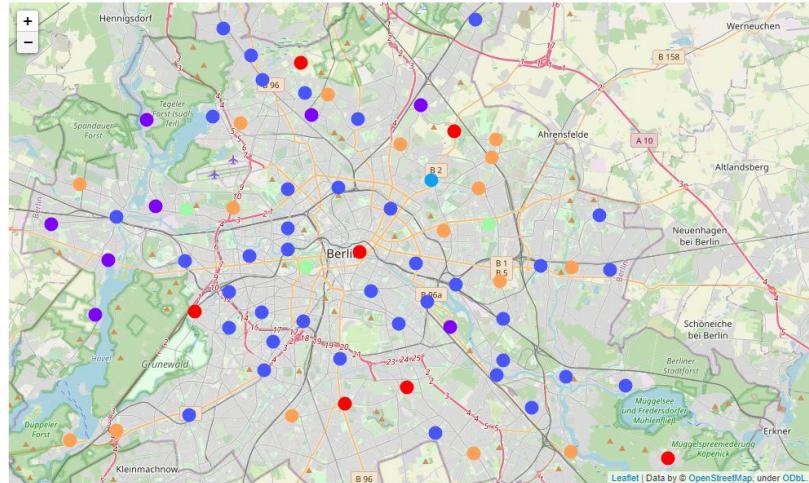
Methodology

- no labels - unsupervised techniques
- k-mean clustering
- 10 clusters
- repeat 1000 times
- drop clusters with 3 or less neighborhoods from future analysis

Results

Cluster Labels	Neighborhood	
1.0	13	
2.0	76	
3.0	19	
6.0	35	
8.0	21	
10.0	46	

Berlin



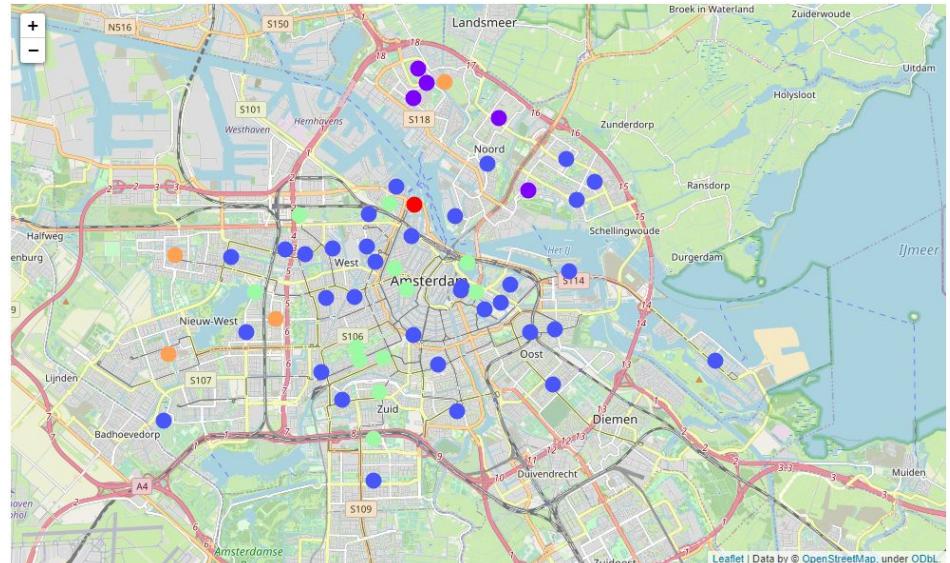
Neighborhood

Cluster Labels

1.0	8	
2.0	38	
3.0	1	
6.0	3	
8.0	16	
10.0	7	

- Berlin is a very diverse
- only 3 neighborhoods which are similar to my current location
- Berlin has neighborhoods from each cluster which I received.

Amsterdam



Neighborhood

Cluster Labels

1.0	5	
2.0	35	
6.0	12	
8.0	4	
10.0	1	

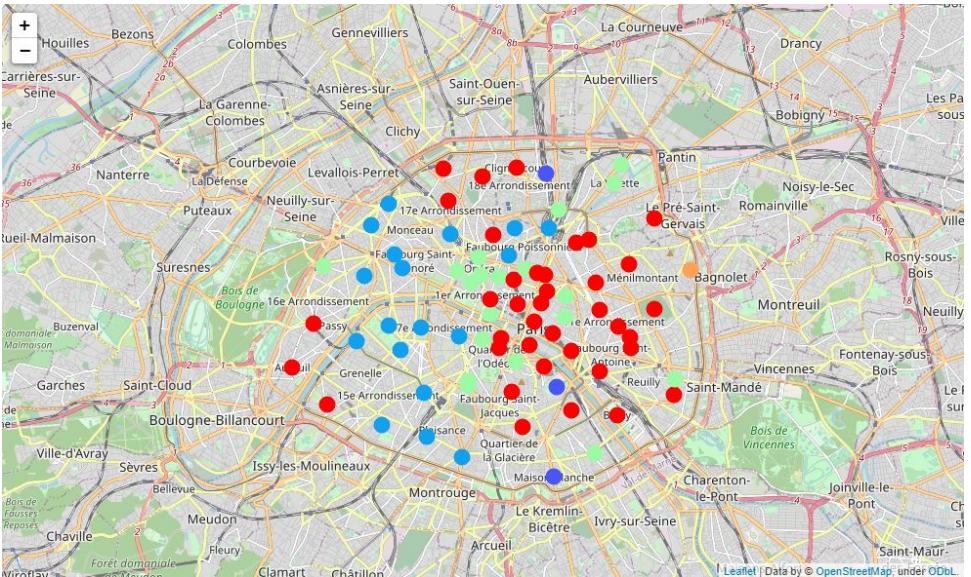
- Berlin is less diverse than Berlin
- it has a lot of neighborhoods (12) which are similar to my current location
- Amsterdam doesn't have any neighborhoods from cluster 3.

Amsterdam. Lack of cluster 3

Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
9 (0302) Weißensee, Berlin, Germany	Local Cuisine Restaurant	Hotel	Park	Beach	Vietnamese Restaurant	Café	Fishing Store	Falafel Restaurant	Farm	Farmers Market
183 Saint-Thomas-d'Aquin, Paris, France	Local Cuisine Restaurant	Hotel	Italian Restaurant	Art Gallery	Café	Bakery	American Restaurant	Cheese Shop	Bistro	Tailor Shop
184 Les Invalides, Paris, France	Hotel	Local Cuisine Restaurant	Italian Restaurant	Plaza	Café	History Museum	Cocktail Bar	Japanese Restaurant	Cheese Shop	Coffee Shop
185 École-Militaire, Paris, France	Local Cuisine Restaurant	Hotel	Plaza	Coffee Shop	Japanese Restaurant	Historic Site	Sculpture Garden	Brasserie	Supermarket	Bistro
186 Gros-Caillou, Paris, France	Local Cuisine Restaurant	Italian Restaurant	Hotel	Bistro	Ice Cream Shop	Coffee Shop	Café	Cheese Shop	Bakery	Garden
187 Champs-Élysées, Paris, France	Hotel	Local Cuisine Restaurant	Japanese Restaurant	Italian Restaurant	Tailor Shop	Clothing Store	Art Gallery	Boutique	Cosmetics Shop	Spa
188 Faubourg-du-Roule, Paris, France	Hotel	Local Cuisine Restaurant	Jewelry Store	Italian Restaurant	Japanese Restaurant	Electronics Store	Sporting Goods Shop	Café	Bakery	Scandinavian Restaurant
190 Europe, Paris, France	Local Cuisine Restaurant	Hotel	Thai Restaurant	Restaurant	Bistro	Asian Restaurant	Korean Restaurant	Mediterranean Restaurant	Sushi Restaurant	Sandwich Place
193 Faubourg-Montmartre, Paris, France	Local Cuisine Restaurant	Hotel	Italian Restaurant	Pizza Place	Cocktail Bar	Japanese Restaurant	Chinese Restaurant	Gym / Fitness Center	Burger Joint	Bakery

We can observe that these places are full of local restaurants, Hotels, Cafes, etc. and Amsterdam has a lack of such neighborhoods.

Paris



Neighborhood

Cluster Labels

2.0	3	
3.0	18	
6.0	19	
8.0	1	
10.0	38	

Paris. Lack of cluster 1

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
10	(0303) Blankenburg, Berlin, Germany	Bus Stop	Supermarket	Greek Restaurant	Café	Flower Shop	Farm	Farmers Market	Fast Food Restaurant	Field	Fish & Chips Shop
20	(0313) Wilhelmshruh, Berlin, Germany	Bus Stop	Post Office	Mexican Restaurant	Supermarket	Bakery	Cycle Studio	Dance Studio	Farmers Market	Fast Food Restaurant	Field
29	(0502) Haselhorst, Berlin, Germany	Park	Furniture / Home Store	Supermarket	Automotive Shop	Bus Stop	Metro Station	Flea Market	Falafel Restaurant	Farm	Farmers Market
31	(0504) Staaken, Berlin, Germany	Lake	Supermarket	Restaurant	Bus Stop	Flower Shop	Exhibit	Falafel Restaurant	Farm	Farmers Market	Fast Food Restaurant
32	(0505) Gatow, Berlin, Germany	Italian Restaurant	Supermarket	Trattoria/Osteria	Bus Stop	Harbor / Marina	Hotel	Fishing Store	Exhibit	Falafel Restaurant	Farm
36	(0509) Wilhelmstadt, Berlin, Germany	Bus Stop	Harbor / Marina	Lake	Supermarket	Boat or Ferry	Park	Sporting Goods Shop	Department Store	Endoune Restaurant	Farmers Market
56	(0902) Plänterwald, Berlin, Germany	Bus Stop	Supermarket	Light Rail Station	Flower Shop	Falafel Restaurant	Farm	Farmers Market	Fast Food Restaurant	Field	Fish & Chips Shop
87	(1203) Konradshöhe, Berlin, Germany	Bus Stop	Italian Restaurant	Supermarket	Restaurant	River	Diner	Falafel Restaurant	Farm	Farmers Market	Fast Food Restaurant
108	Banne Buikslot, Amsterdam, Netherlands	Bus Stop	Supermarket	Park	Bakery	Shopping Mall	Restaurant	Turkish Restaurant	Fish Market	Event Space	Exhibit
109	Buikslot, Amsterdam, Netherlands	Bus Stop	Park	Health & Beauty Service	Campground	Rest Area	Ice Cream Shop	Fishing Store	Falafel Restaurant	Farm	Farmers Market
113	Molenwijk, Amsterdam, Netherlands	Pharmacy	Theater	Shopping Mall	Plaza	Bookstore	Supermarket	Bus Stop	Zoo Exhibit	Farm	Farmers Market
115	Oostzanehaven, Amsterdam, Netherlands	Bus Stop	Supermarket	Furniture / Home Store	Shopping Mall	Bookstore	Zoo Exhibit	Flower Shop	Farm	Farmers Market	Fast Food Restaurant
118	Tuindorp Oostzaan, Amsterdam, Netherlands	Bus Stop	Plaza	Theater	Snack Place	Business Service	Motorcycle Shop	Baseball Field	Convenience Store	Food Service	Farm

These neighborhoods mostly have a lot of bus stops, farms and farmers markets and Paris has a lack of these places.

Conclusion

Personally, I'm searching for a city/neighborhood which is not similar to my current life situation. Because of it I don't choose Amsterdam and Paris as the cities with many neighborhoods similar to mine. I see that Berlin is the most interesting city for me with plenty different neighborhoods.

Also this script can be applied for any current location and allows to compare it with different places for living.