

***Analysis of rental
apartments in different
boroughs in Berlin and Brandenburg***

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Overview

- ➡ Aim and interest
- ➡ Analysis of apartments in different boroughs
- ➡ Venues and Clustering
- ➡ Outlook

Aim and interest

- ➡ Overview of the price for apartments in a borough
- ➡ Distribution of apartments in a borough
- ➡ Frequency of venues in a borough

Analysis of apartments in different boroughs

- ➡ Data source
- ➡ Distribution of n-room apartments
- ➡ Average cold rent
- ➡ Average $\text{€}/\text{m}^2$ (cold rent)
- ➡ Distribution of apartments in a borough
- ➡ Number of apartments in a borough

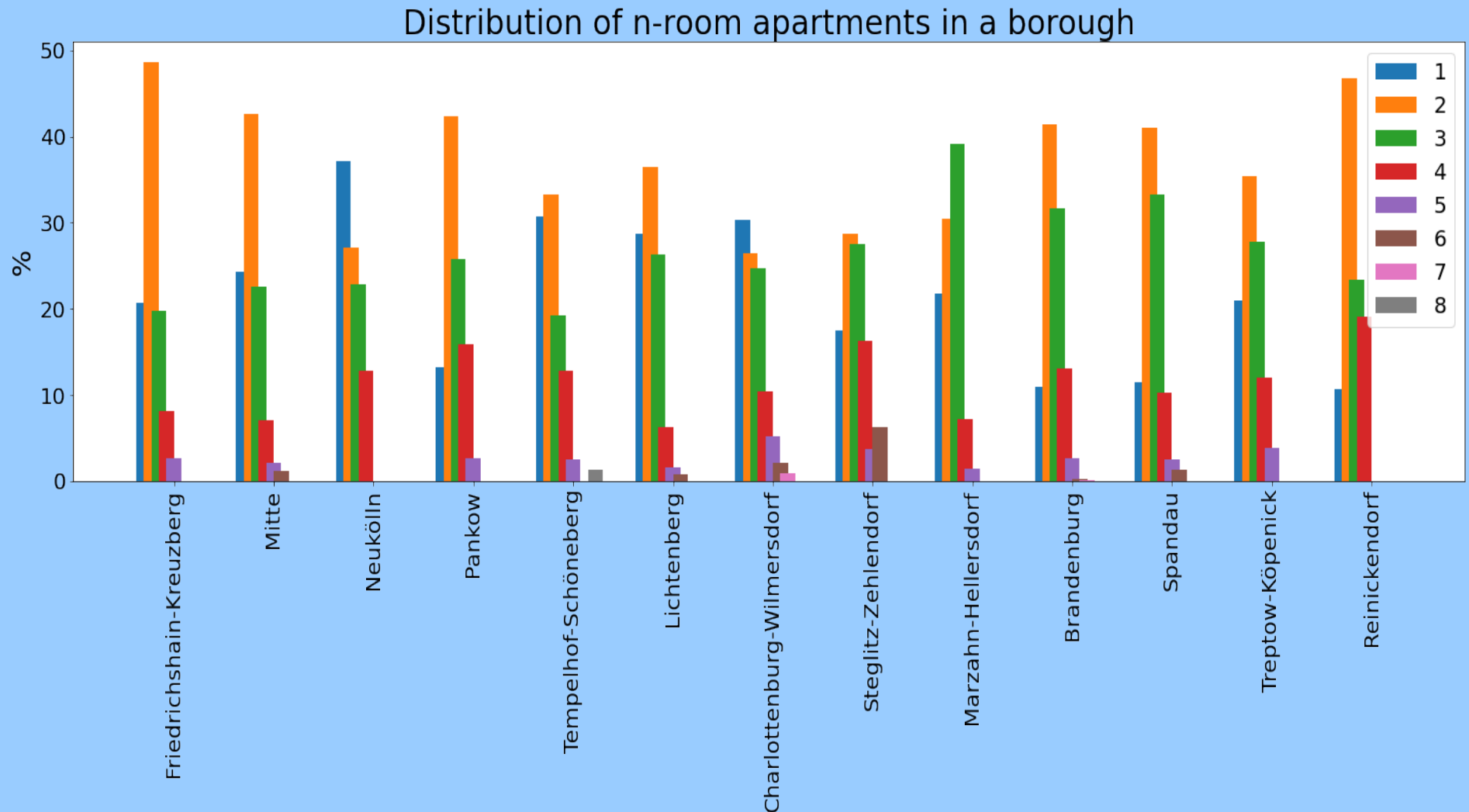
Data source

- ➞ Apartments: immobilienscout24
- ➞ Edges from the broughs: GitHub Gist ¹⁾
- ➞ Neighborhoods in boroughs: Wikipedia ²⁾

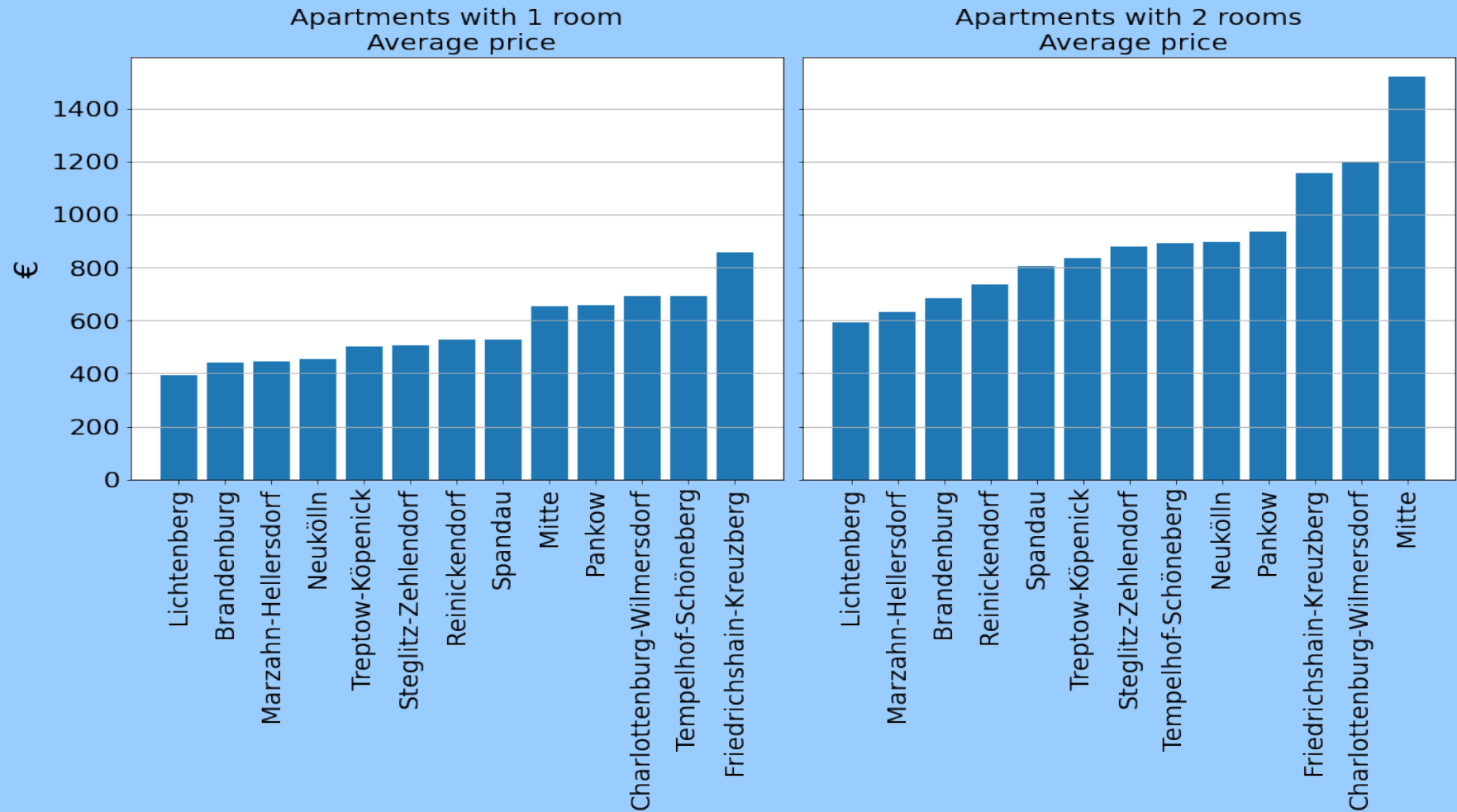
1) <https://gist.github.com/chaudum/e8097ab9873ec71666b2>

2) https://de.wikipedia.org/wiki/Verwaltungsgliederung_Berlins

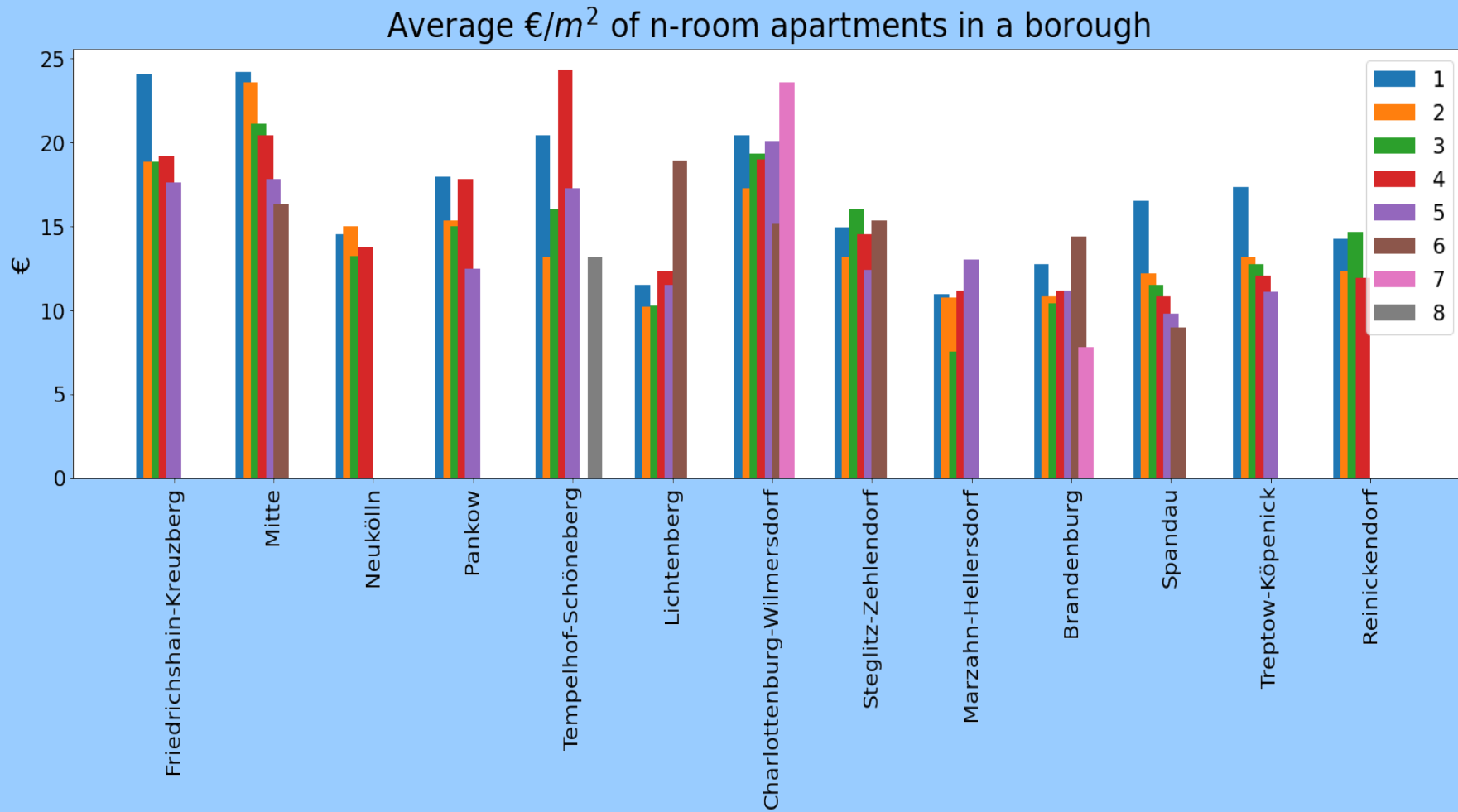
Distribution of n-room apartments in a borough



Average cold rent

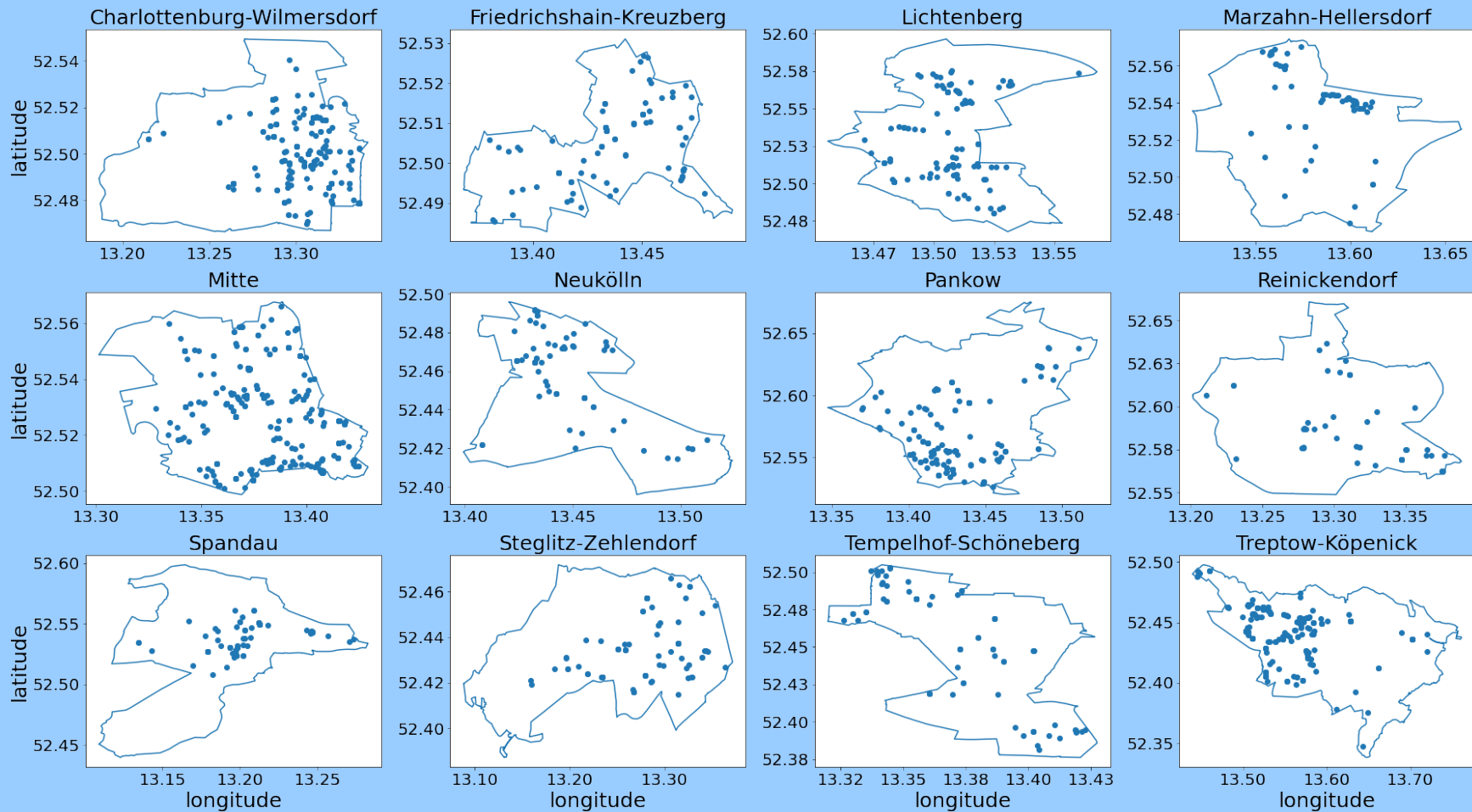


Average €/m² (cold rent)

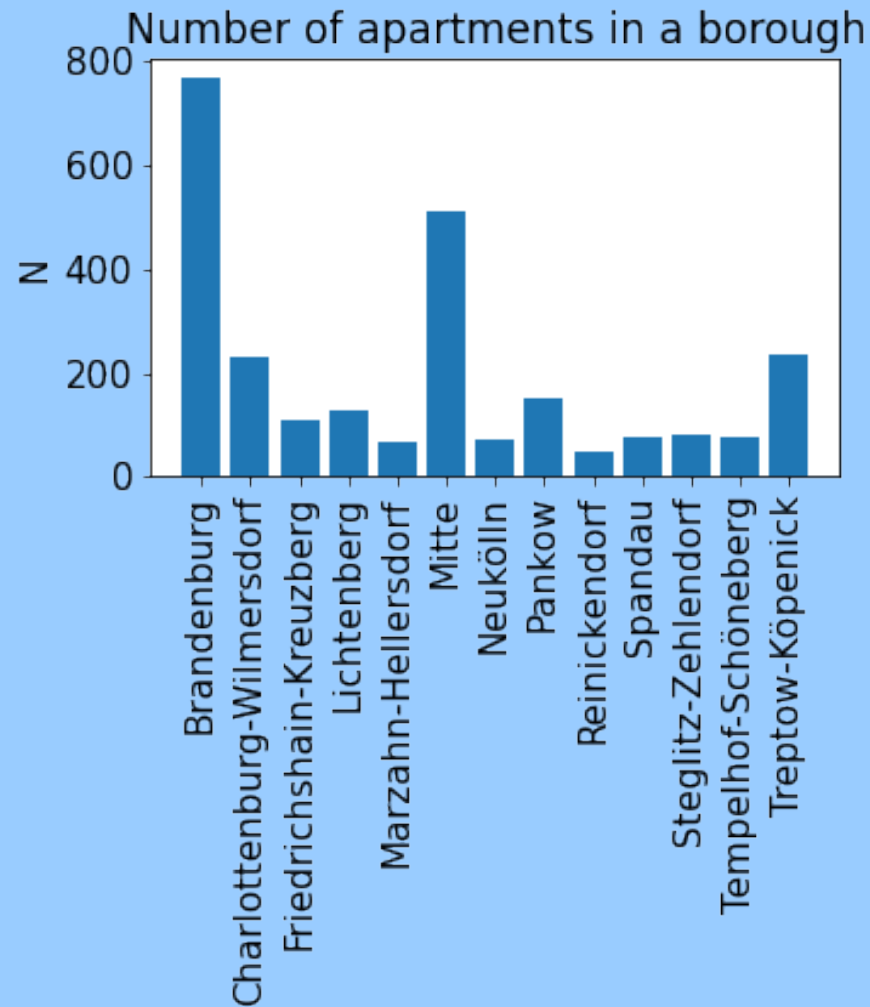


Distribution of apartments in a borough

Distribution of apartments in a borough



Number of apartments in a borough



Venues and Clustering

- ➡ Information about the data and the procedure
- ➡ Most frequent venues
- ➡ Clustering

Information about the data and the procedure

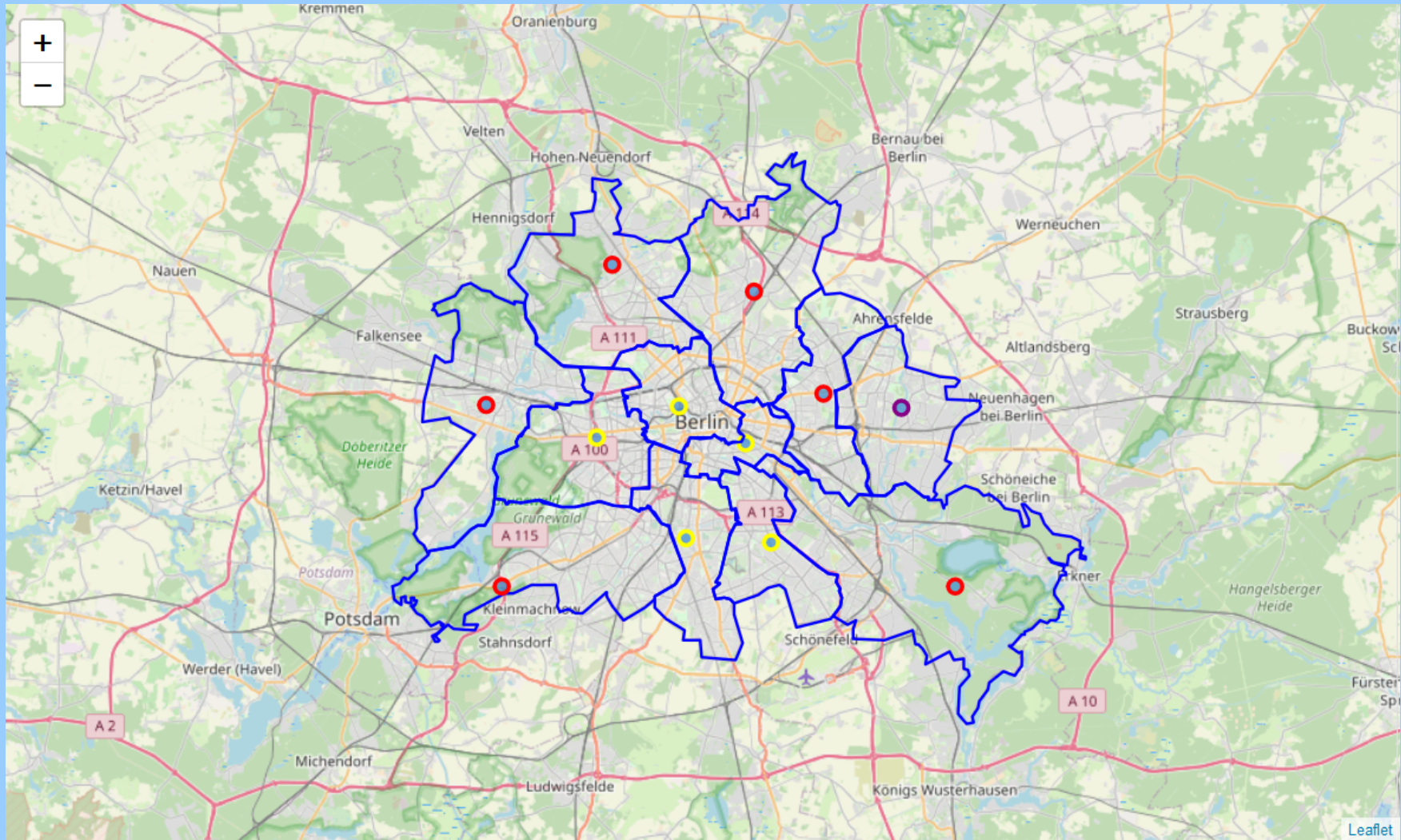
- ➡ Venues that are located within a radius of 500 m were determined by the Foursquare API
- ➡ Counting of each venue in a borough
- ➡ One hot encoding
- ➡ Clustering

Most frequent venues

	1. most frequent venue	2. most frequent venue	3. most frequent venue	4. most frequent venue	5. most frequent venue	6. most frequent venue	7. most frequent venue	8. most frequent venue	9. most frequent venue	10. most frequent venue
Brandenburg	Hotel	German Restaurant	Supermarket	Café	Vacation Rental	Bakery	Italian Restaurant	Clothing Store	Drugstore	French Restaurant
Charlottenburg-Wilmersdorf	Hotel	Italian Restaurant	Supermarket	Café	Bakery	German Restaurant	Vietnamese Restaurant	Plaza	Chinese Restaurant	Trattoria/Osteria
Friedrichshain-Kreuzberg	Café	Bar	Coffee Shop	Italian Restaurant	Bakery	Nightclub	Hotel	Supermarket	Vegetarian / Vegan Restaurant	Pizza Place
Lichtenberg	Supermarket	Tram Station	Drugstore	Bakery	Café	Bus Stop	Park	Fast Food Restaurant	Shopping Mall	Hotel
Marzahn-Hellersdorf	Supermarket	Tram Station	Bus Stop	Bank	Bakery	Gym / Fitness Center	Multiplex	Shopping Mall	Climbing Gym	Drugstore
Mitte	Hotel	Coffee Shop	Café	Bakery	Italian Restaurant	Hotel Bar	Supermarket	Restaurant	Bar	Gym / Fitness Center
Neukölln	Bar	Café	Coffee Shop	Supermarket	Bakery	Bus Stop	Italian Restaurant	Breakfast Spot	Plaza	Turkish Restaurant
Pankow	Café	Supermarket	Bakery	Tram Station	Italian Restaurant	Coffee Shop	Vietnamese Restaurant	Organic Grocery	Park	Bar
Reinickendorf	Supermarket	Bakery	Restaurant	Café	Bus Stop	Italian Restaurant	German Restaurant	Indian Restaurant	Ice Cream Shop	Clothing Store
Spandau	Supermarket	Bus Stop	Pizza Place	Drugstore	Clothing Store	Italian Restaurant	Ice Cream Shop	Fast Food Restaurant	Hotel	Bakery
Steglitz-Zehlendorf	Café	Supermarket	Bus Stop	Italian Restaurant	Park	Drugstore	German Restaurant	Bakery	Bank	Organic Grocery
Tempelhof-Schöneberg	Supermarket	Café	Italian Restaurant	German Restaurant	Bus Stop	Hotel	Bakery	Plaza	Drugstore	Vietnamese Restaurant
Treptow-Köpenick	Supermarket	Café	Tram Station	Bakery	German Restaurant	Drugstore	Italian Restaurant	Ice Cream Shop	Pizza Place	Park

Table 1. Most frequent venues

Clustering



3 Clusters

Outlook

- ➡ Other sources of apartment offers
- ➡ Include occupied apartments in the analysis
- ➡ Information on the distribution of rooms of all built apartments
- ➡ Information about the number of single households and families and their number of rooms, price and size of the apartment.

Thank you for your attention