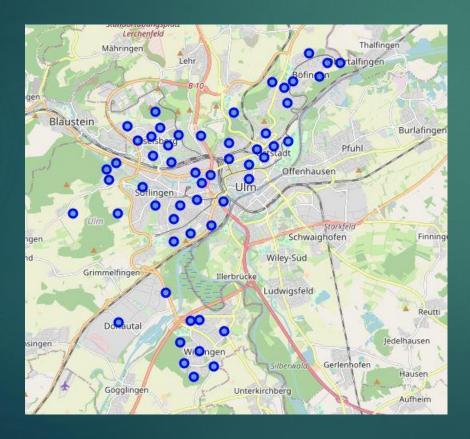
# Find the optimal Restaurant Location in Ulm using Machine Learning

# Location: Ulm, Germany

▶ Ulm is a city in the South of Germany. Its population is ca. 120.000 (EU notation).



The city is divided up into 18 districts, which can further be split up into 55 neighborhoods.

This map shows the neighborhoods.

# The location of a restaurant is crucial for ist revenue

Ulm Geodatab ase

Neighborhoods with high restaurant revenue

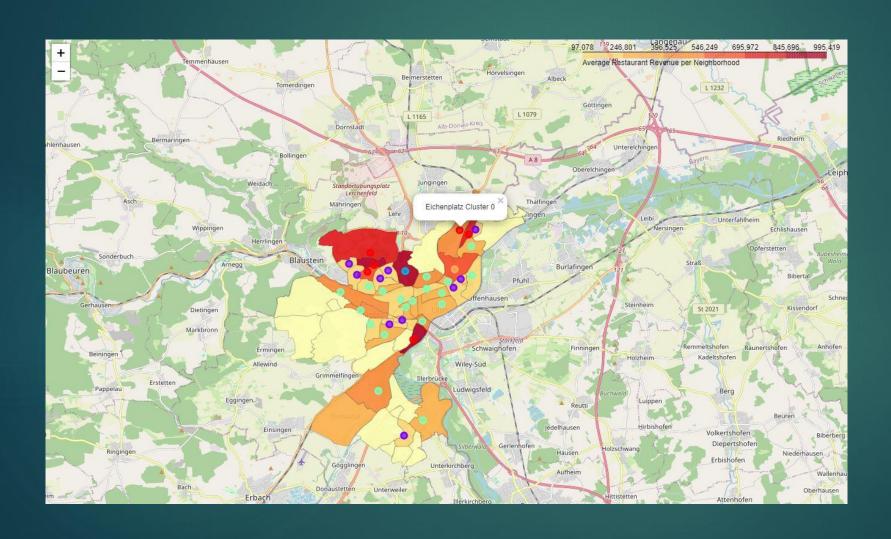
Neighborhoods with similar venues

Foursquare

Is there a relationship between venues of a neighborhood and the expected restaurant revenue?

K-means

# Yes, there is a relationship



- Dark red choropleth areas are neighborhoods with high restaurant revenues
- Circles of same color are neighborhoods clustered together
- → Cluster 0 (red circles) lie in red areas of high restaurant revenue

### Recommendation

- Open a restaurant in the neighborhoods of cluster 0 (red circles)
- These neighborhoods are "natural", i.e. by a river, park or forest.
- Natural neighborhoods seem to produce high restaurant revenues because people are attracted to visit these areas due to their attractive nature. They then visit the restaurant.