

German beer battle of neighbor cities Cologne and Düsseldorf

Introduction

- **Background:**

The German cities of Cologne and Düsseldorf are in just 50 km distance from each other at the lower river Rhine. Cologne is the largest city in the district of North-Rhine-Westfalia, Düsseldorf is second largest and its Capital. Both claim to have the best carnival, best beer and most pubs.

- **Problem:**

It is a kind of culture clash. Both kind of beers, “Kölsch” from Cologne and “Altbier” from Düsseldorf, are a specialty of its hometown and have a long lasting history.

I live in Duisburg with Düsseldorf in the middle between Duisburg and Cologne. With my gained knowledge in Data Science I want to bring data and facts into the discussion about which city has more or better breweries. Foursquare is the ideal data source and folium the right tool to visualize data in a map.

- **Interest:**

On our journey we may find a clear winner and a clear loser. Or we may find certain strengths and weaknesses of each city. Tourist Offices of both cities would surely have a high interest to base their city marketing on strong facts.

Data

For the analysis we will focus on “pub breweries”, breweries with its own integrated pub resp. pubs with own brewery inside. First we will find out the right search term or category to search for in Foursquare. This will become base of analysis in quantity, quality, maybe density (of hotspots) or more characteristic to be explored.

We will use data, including:

- For quantity: Number of “pub breweries” in a city.
- For quality: Amount and level of ratings.
- For density: Geographical distances between pubs for clustering and detecting hotspots.

Datasources will be:

- My own knowledge about neighbor cities.
- Internet research for background information, if needed.
- Foursquare.