# Captone Project

Comparison between Lisbon and Toronto Neighborhoods

Pedro Matos – May2020

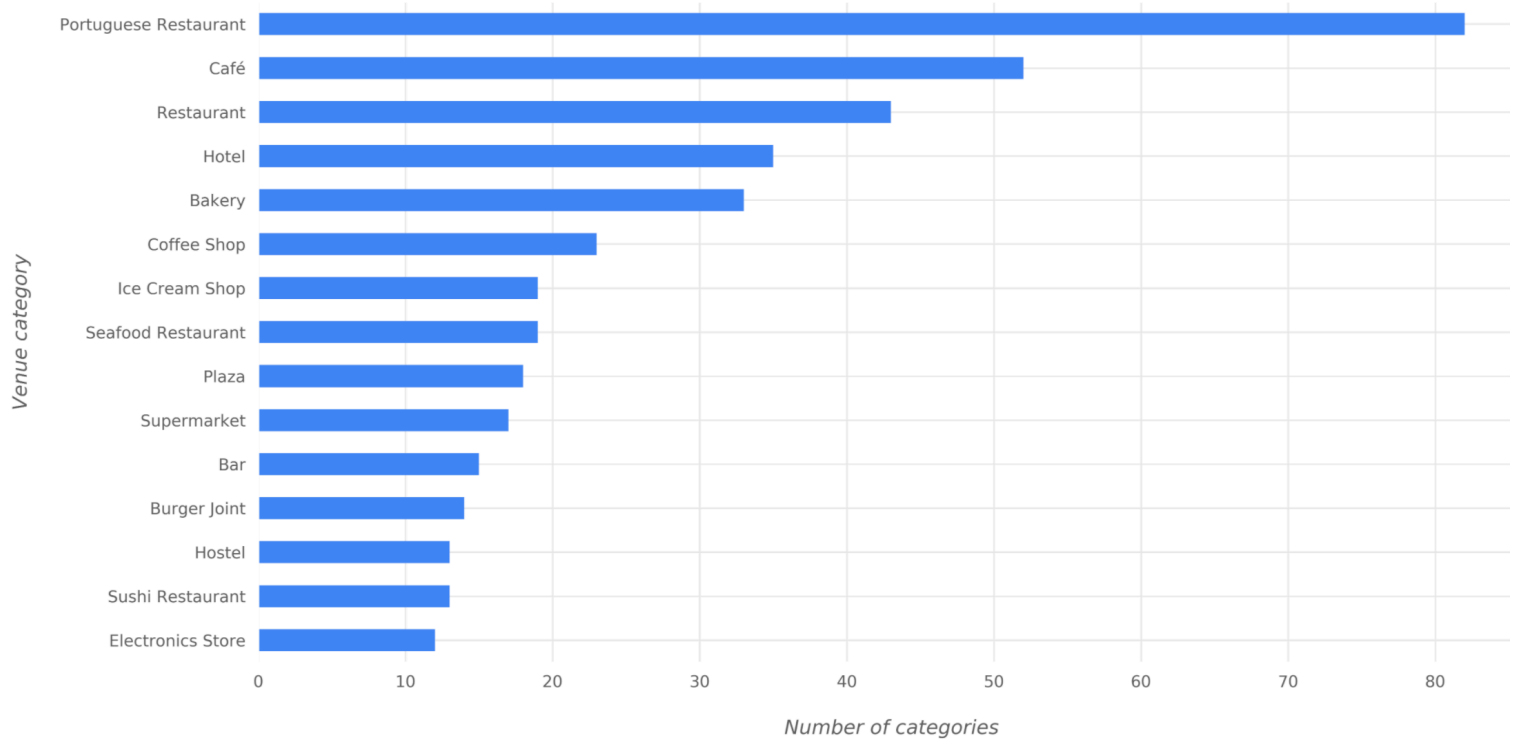
# Loading Data and Cleaning

- CSV files for Lisbon neighborhoods
- Google API for Lisbon coordinates
- Scrapping wiki page using BeautifulSoup4 library for Toronto post codes
- Foursquare API to get the venues
- Adjust column names
- Remove unnecessary data
- Display city maps with Folium

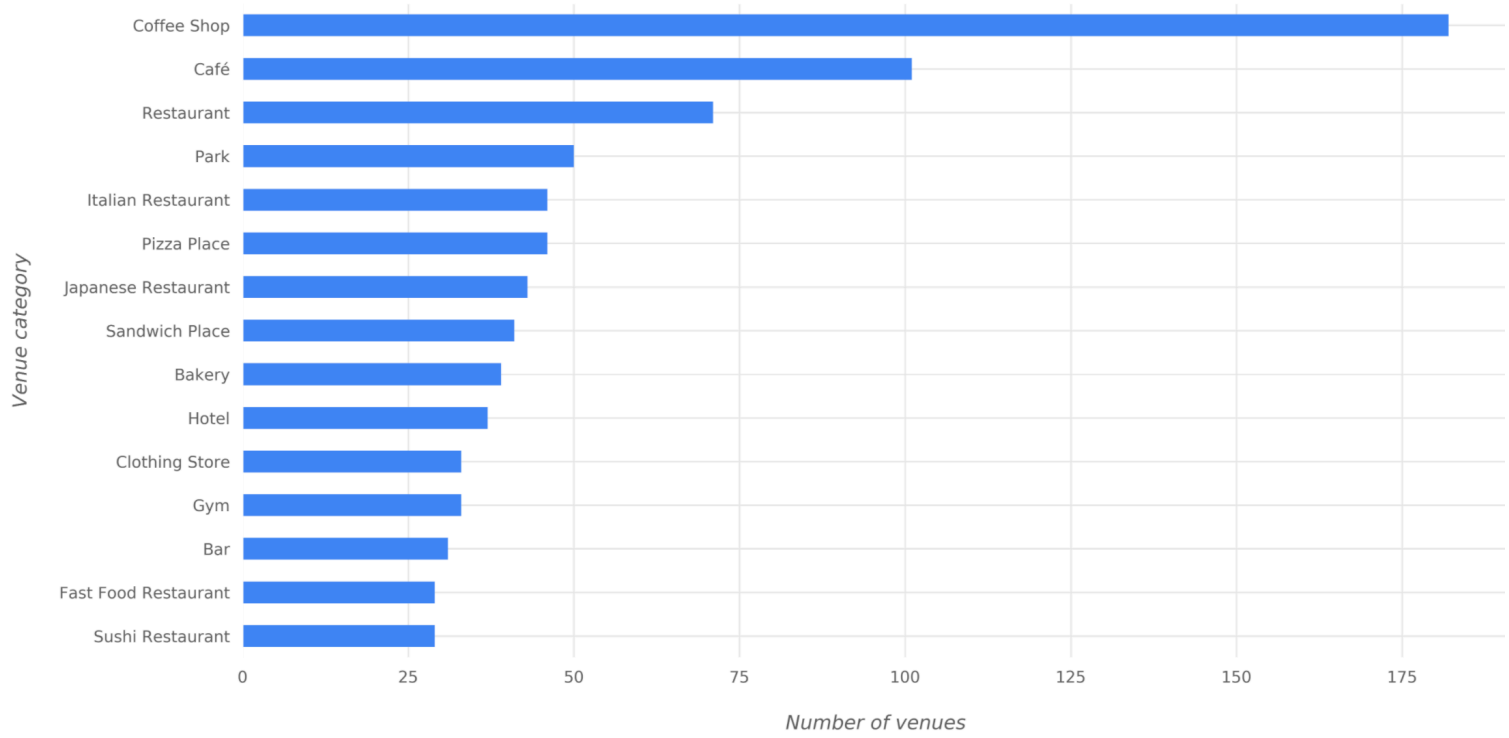
# Analysis

- Get the most common categories (5) for each neighborhood
- Display the most common categories for each city
- Use K-means to define the clusters (5) for each city

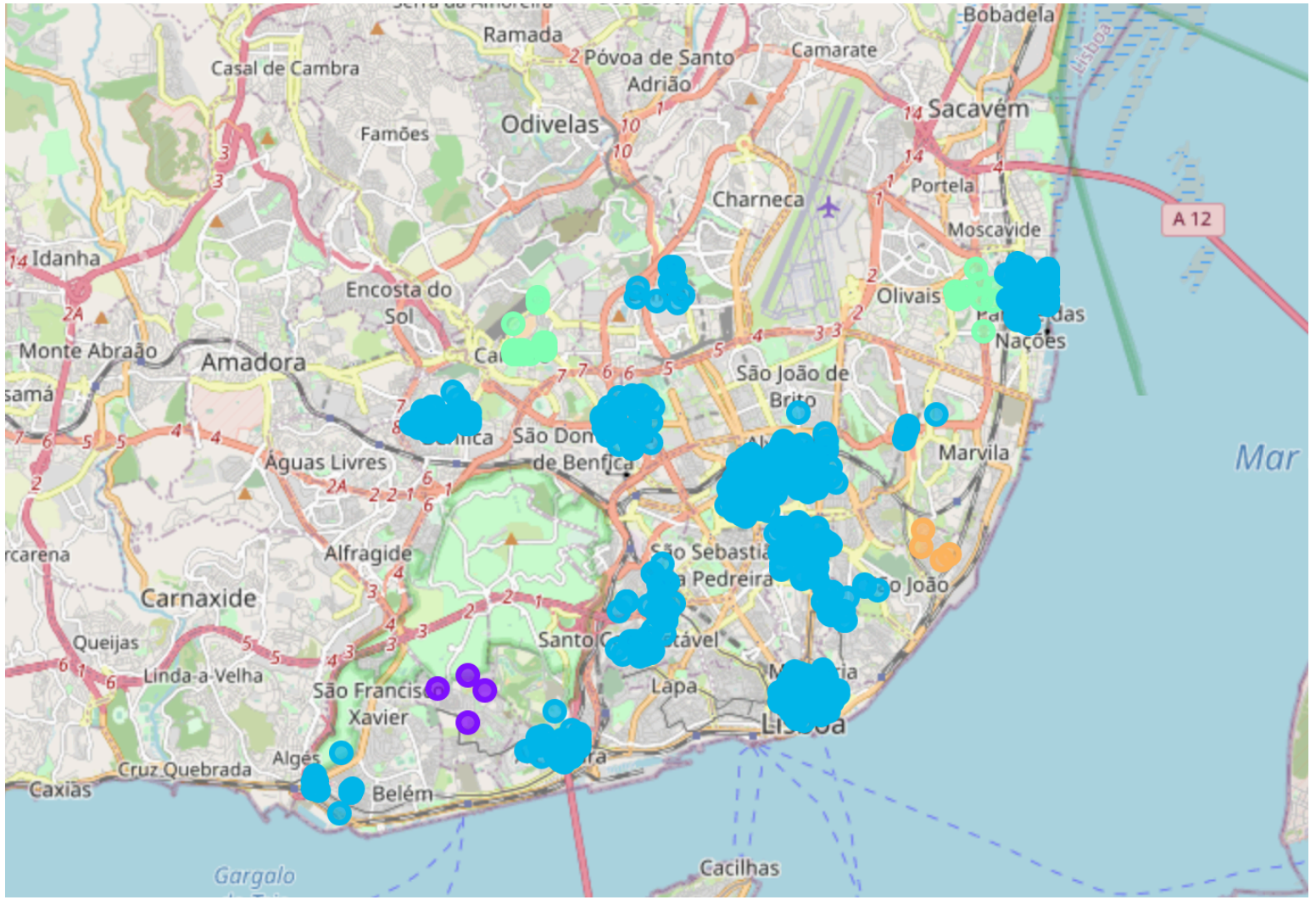
# Lisbon Category Plot



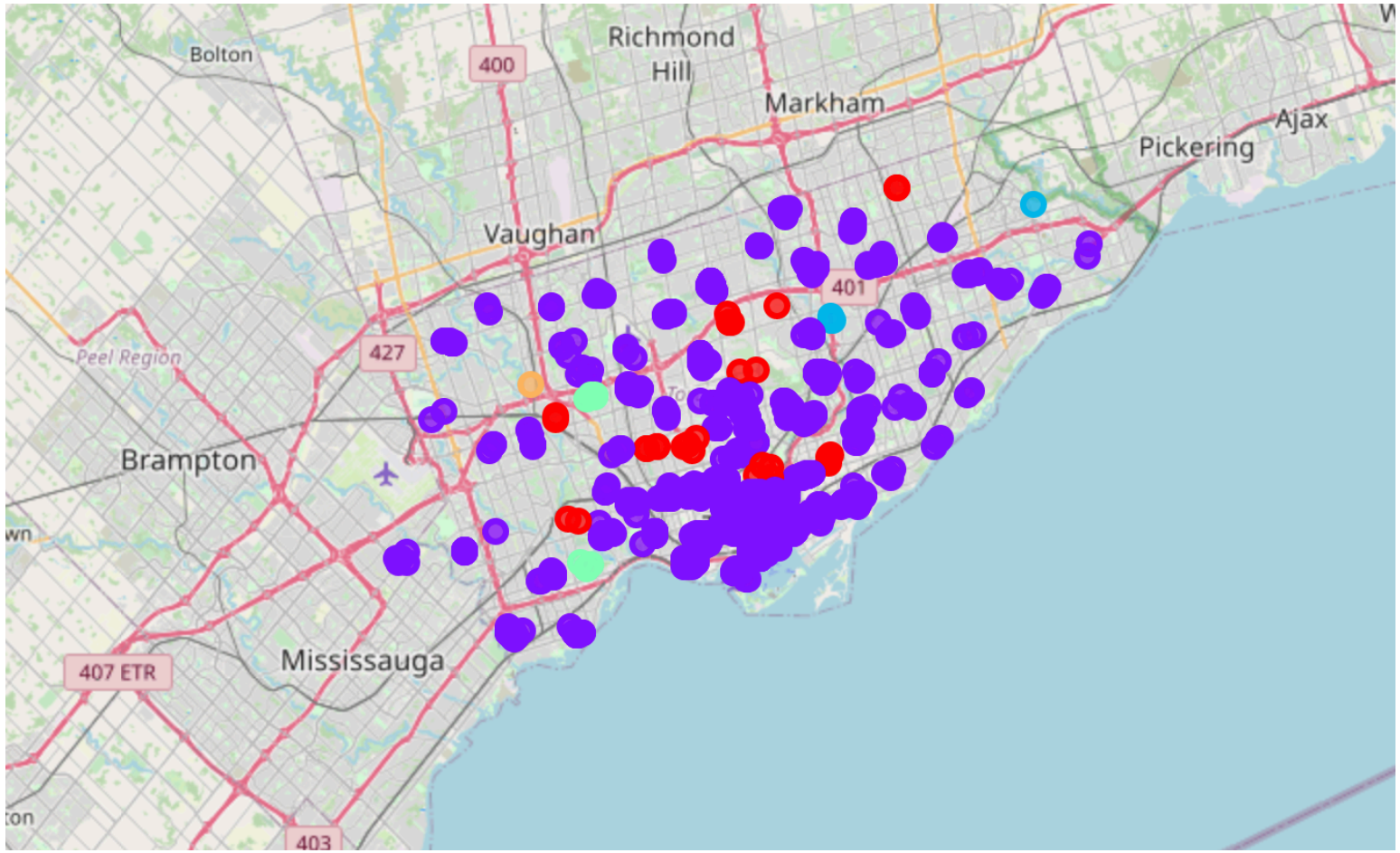
# Toronto Category Plot



# Lisbon Cluster



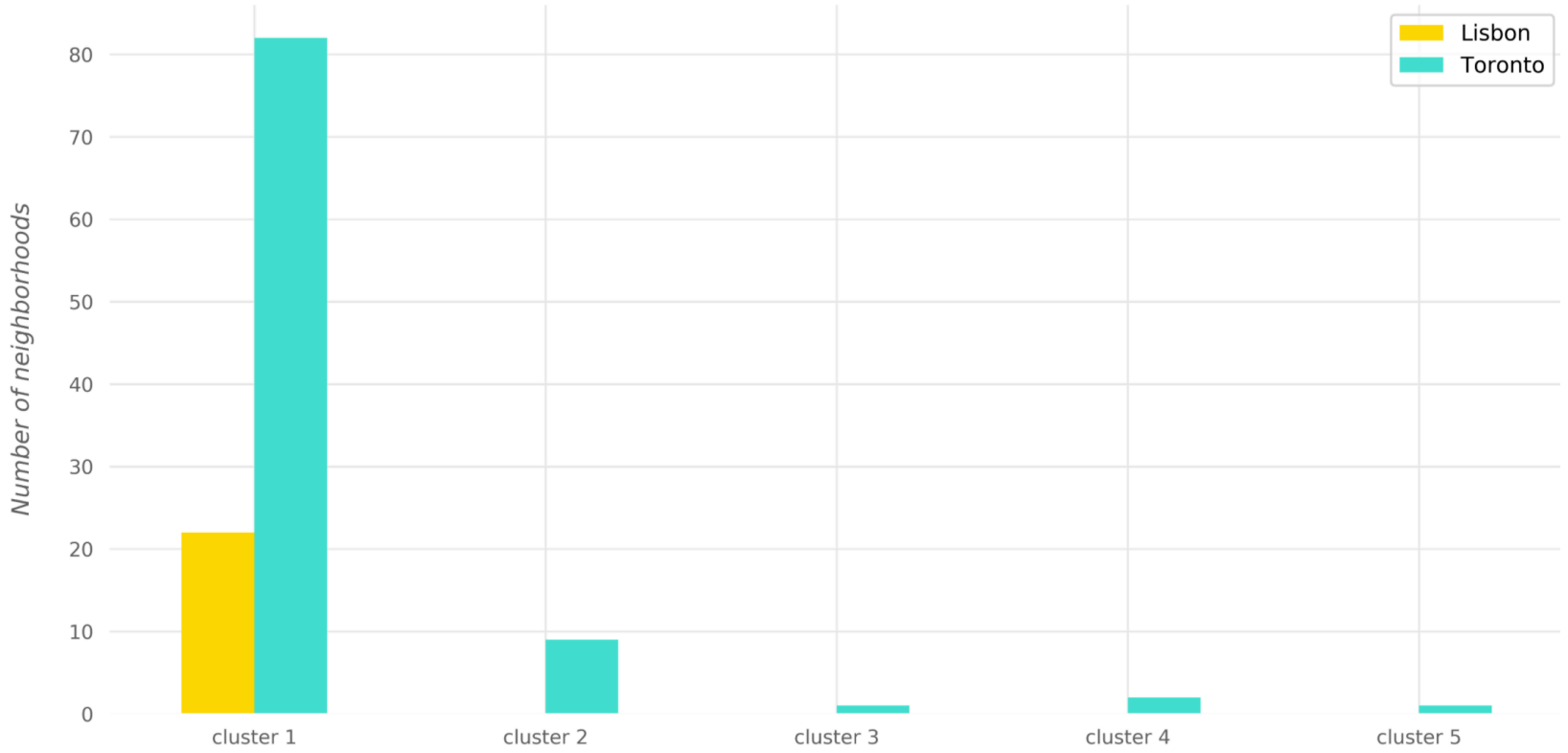
# Toronto Cluster



# Results

- Group the neighborhoods of each city into one table
- Define clusters (5) using K-means to see the similarity or dissimilarly
- Final ouput using a plot Bar

# Final Cluster Plot



# Conclusions

- Each city differs from each others
- Only 1 cluster in common for both cities
- The 4 remains clusters only occurs in Toronto
- The one which combines both cities contains the highest number of neighborhoods in Toronto