

Description of the problem

Data science is a power tool that allows us analyze a big amount of data helping businesses in the decision making process to see things that are sometimes not intuitive. The problem to be address in this project has been thought as a hypothetical case of someone that has a job offer in 2 different cities. Let's, call him John. John lives in the city of Toronto and works as a data scientist and got a job offer from the same company in two cities, Bogota Colombia and Berlin, Germany. John has live his entire live in Toronto and wonder how similar these cities are, also would like to know which Neighborhoods are similar to the one he is living in, and maybe other Neighborhoods in his hometown.

Description of the data

A Neighborhood list of the cities of Toronto, Bogota and Berlin is available online and has been taken from the following links:

Toronto

https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M

Bogota

https://en.wikipedia.org/wiki/Boroughs_and_neighborhoods_of_Berlin#Localities

Berlin

https://en.wikipedia.org/wiki/Boroughs_and_neighborhoods_of_Berlin#Localities

To explore each Neighborhoods in each city the Foursquare API is going to be consulted. the category the of places and businesses in each area will be used to characterize each Neighborhood and compare them. This is planned to be achieved thru K-means clustering or other machine learning method to group and categorize the Neighborhoods in the different cities.