



Toronto vs Brazil

Battle of the neighbourhoods – Coursera
Capstone Project

Fernando Grillo



Background

- Globalization has been affecting people's jobs in plenty of ways. Most people will not always live in the city they were born and are likely to move to another town.

The problem

Although moving to other towns or countries is becoming quite common because of globalization, people might not be prepared to live in a different culture.

Let's pretend someone received a quite good job offer in another country, a very different one compared to where he lives, and is considering moving.

Since the person lives in Brazil, and Toronto is on the other side of the world, it would be easier to adapt to a neighbourhood that is similar to the one he lives (Praia da Costa).

The problem

Although moving to other towns or countries is becoming quite common because of globalization, people might not be prepared to live in a different culture.

Using Data Science, we may help him to solve this problem. One way is to find the most similar neighbourhoods in the new town to the one the person currently lives. There are many variables that might be used to find these. In this project, the variables chosen are the frequency of venue types in the neighbourhoods

Data and methodology

- 1) obtaining the name and coordinates of the neighbourhoods in Toronto (using Wikipedia) and the ones of my neighbourhood.
- 2) Using the Foursquare data to obtain the 40 most common venues in each neighbourhood
- 3) Using the K-nearest mean method to cluster the neighbourhoods based on the similarity of the venues' frequency
- 4) Identifying which cluster Praia da Costa (the current neighbourhood) is in and list the similar neighbourhoods of the new town (Toronto).

Results



Similar neighbourhoods

The similar neighbourhoods are:

0	The Danforth West, Riverdale
1	The Beaches West, India Bazaar
2	Studio District
3	Davisville North
4	North Toronto West
5	Davisville
6	Deer Park, Forest Hill SE, Rathnelly, South Hi...
7	Cabbagetown, St. James Town
8	Church and Wellesley
9	Harbourfront, Regent Park
10	Ryerson, Garden District
11	St. James Town
12	Berczy Park
13	Central Bay Street
14	Adelaide, King, Richmond
15	Harbourfront East, Toronto Islands, Union Station
16	Design Exchange, Toronto Dominion Centre
17	Commerce Court, Victoria Hotel
18	The Annex, North Midtown, Yorkville
19	Harbord, University of Toronto
20	Chinatown, Grange Park, Kensington Market
21	CN Tower, Bathurst Quay, Island airport, Harbo...
22	Stn A PO Boxes 25 The Esplanade
23	First Canadian Place, Underground city
24	Christie
25	Dovercourt Village, Dufferin
26	Little Portugal, Trinity
27	Brockton, Exhibition Place, Parkdale Village
28	High Park, The Junction South
29	Parkdale, Roncesvalles
30	Runnymede, Swansea
31	Business Reply Mail Processing Centre 969 Eastern

Discussion

There were 31 similar neighbourhoods in Toronto. A quite expressive amount considering two countries that are so far apart and have very different cultures.

This result is probably caused by the fact that Praia da Costa is one of the major neighbourhoods in the Brazilian town Vila Velha, close to the State Capital, Vitória.

People in bigger towns of Brazil have been more adapted to globalization, making the lifestyle similar to the one in global cities as Toronto. This reflects on the venues of the neighbourhoods, that were used to compare the similarity of them.

The obtained results go toward the fact that the globalization is really making lifestyle in countries that have very few contacts. This reflects on the neighbourhoods' venues and, although adaptation problems exist, they tend to reduce in time, since the growing similarity of towns and cultures.



Conclusion

The project was useful to determine the similar neighbourhoods of two different countries, with different cultures and far apart from each other.

This method may be useful for people facing immigration situations and shows that, although there are differences between these two countries, the number of similar neighbourhoods are big enough to promote easy adaptation. This is probably mainly due to the globalization phenomenon.

Thank you!



Praia da Costa