

The Battle of the Neighborhoods.

Where to place a new yoga studio in Toronto?

1. Introduction.

1.1 Background.

Opening a Yoga studio is different from opening of ordinary fitness center. Indeed, fitness center hold many activities, most of which are dynamic and are accompanying by energetic music. That is why it can be situated anywhere, even on a busy street or in a commercial center. People that practice yoga are calm, concentrated and nature-oriented. Some yoga classes include meditation.

Taking all this into account, it is better to place a yoga studio in a quite district.

1.2 Business problem.

The client wants to open a yoga studio in Toronto. What is the best Toronto neighborhood to open it?

It is known that location is the most important characteristic for any business that imply direct contact with customers. That is why the neighborhoods should be examined carefully.

There are some requirements that should be fulfilled:

1) Not a lot of similar studios around. If yoga studios are common in the area, we can imagine that populations needs are saturated.

2) Relatively calm environment (minimum of restaurants and night life). Practicing yoga requires certain state of mind. We can presume that busy area with vibrant nightlife can be disturbing and repulse future customers from visiting the venue.

Therefore, the ideal neighborhood to open a new yoga studio should response to next criteria:

- Absence of yoga studio;
- Small number of restaurants.

2. Data description.

Our analysis should reveal the list of venue categories for each neighborhood and their frequency. Then, we will choose neighborhoods without yoga studio and cluster them according to restaurant frequency.

To perform this analysis, I will retrieve the list of Toronto neighborhoods from [Wikipedia's List of postal codes of Canada](#).

I will transform it to the data frame, clean it and add a geospatial coordinates from http://cocl.us/Geospatial_data.

To retrieve type and number of venues (i.e. Yoga Studios, Restaurants) I will use [Foursquare](#) social network. Foursquare is a location-based social network that collect data about venues. It also includes venues coordinates, so its data can be easily superposed on the map of Toronto.