

## **CAPSTONE PROJECT: BATTLE OF NEIGHBOURHOODS.**

### **1. Introduction.**

We are a Consultancy in Toronto which main activity is the Strategic support for new business into the City.

We are supporting a new Spanish customer to select the best type of business and the Best Venue to place it.

To be able to give a proper advise to our customer, we will do an analysis of the density of businesses in Toronto depending on the venue.

### **2. Data**

We use:

- Wikipedia ([https://en.wikipedia.org/wiki/List\\_of\\_postal\\_codes\\_of\\_Canada: M](https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:M)) to get Postal code, Borough and Neighbourhood in Toronto
- Geospatial data from Toronto([http://cocl.us/Geospatial\\_data](http://cocl.us/Geospatial_data)) to get the geographical coordinates of each postal code
- Foursquare API to obtain more information about venues
- Random user data, with a random number of preferences to check, how our system works.

### **3. Methodology**

1. We will retrieve Geospatial data from for Toronto Neighbourhood from the sources.
2. Using Foursquare API we retrieve the data about "Popular Spots" venues
3. We cluster using Kmeans algorithm acc. Location and number of venues.
4. We detect areas with low density of Popular venues where giving a hint about where to place a new business.