

# **FINAL REPORT**

## **Capstone Project - The Battle of Neighbourhoods**

### **Introduction:**

The demographics of Toronto, Ontario, Canada make Toronto one of the most multicultural and multiracial cities in the world. In 2016, 51.5% of the residents of the city proper belonged to a visible minority group, compared with 49.1% in 2011, and 13.6% in 1981. Toronto also has established ethnic neighbourhoods such as the multiple Chinatowns, Corso Italia, Little Italy, Little India, Greektown, Koreatown, Little Jamaica, Little Portugal and Roncesvalles, which celebrate the city's multiculturalism.

In this project a specific problem is addressed.

Stark Co. is a company based in Toronto for organizing events, currently it works on a project to organize an event for 5 days for a group of photographers from all over the world. The company is supposed to come up with a good program, including a hotel of residence, a hall for meetings, places of landscape to visit, stores for shopping, restaurants, and cafes.

### **Problem:**

The company's purpose is to make a list of places of landscape in Toronto, including the nearest restaurants, cafes, and shopping stores for each place.

### **Data Description:**

The data used in this project is provided by Foursquare location data. The data are grouped by landscape area, and each area included the information about this area and all information about restaurants, cafes, and stores which in this area.

### **Methodology:**

1. Import Libraries
2. Define Foursquare Credentials
3. Define the city and get its latitude & longitude
4. Search for Hotels & clean dataframe
5. Search for Parks & clean dataframe
6. Search for Restaurants & clean dataframe
7. Search for Cafeteria & clean dataframe
8. Search for Shopping Stores & clean dataframe
9. Generate map to visualize hotels, shopping stores and Cafeteria and how they cluster together
10. Generate map to visualize Park, Restaurant and Cafeteria and how they cluster together