# **Capstone Project Report**

The Battle of Neighborhoods

Soumyadeep Bhattacharjee

#### 1.Introduction

### 1.1 Background

In order to find the perfect house, one needs to find the perfect neighborhood. This is no small feat, especially if a person is about to move into a completely unknown area and cannot discern one neighborhood from another.

Even for a person who wishes to open a store or a Restaurant, he needs to understand the vibe of the neighborhood. An area with less footfall might not be a profitable zone to start a business. Similarly, regions which have limited Restaurants or stores could be a prospective area to open a new Restaurant, as the business might prosper owing to lesser market competition.

#### 1.2 Problem Statement

With the ever-increasing demand for real estate, the decision to choose a neighborhood to build a House or start a Restaurant, needs to be made quickly and accurately.

To allow for an easier decision-making process, neighborhoods can be clustered into prospective zones based on popularity/availability of venues. These clusters would help in identifying the ideal neighborhood based on the need.

To better illustrate this, a sample segmentation has been performed on the neighborhoods in Toronto leveraging the Foursquare API and all other relevant data collected throughout the course of this project.

## 1.3 Interest Groups

- Expats wishing to relocate to a new area
- Budding entrepreneurs or Businesspersons wishing to find a neighborhood to start a new Store, Mall or Restaurant
- Real Estate agencies who wish to identify zones and ascertain House prices based on the popularity of the neighborhood