

# **A Recommend living place for relaxing travel in Toronto- ---- Capstone Project**

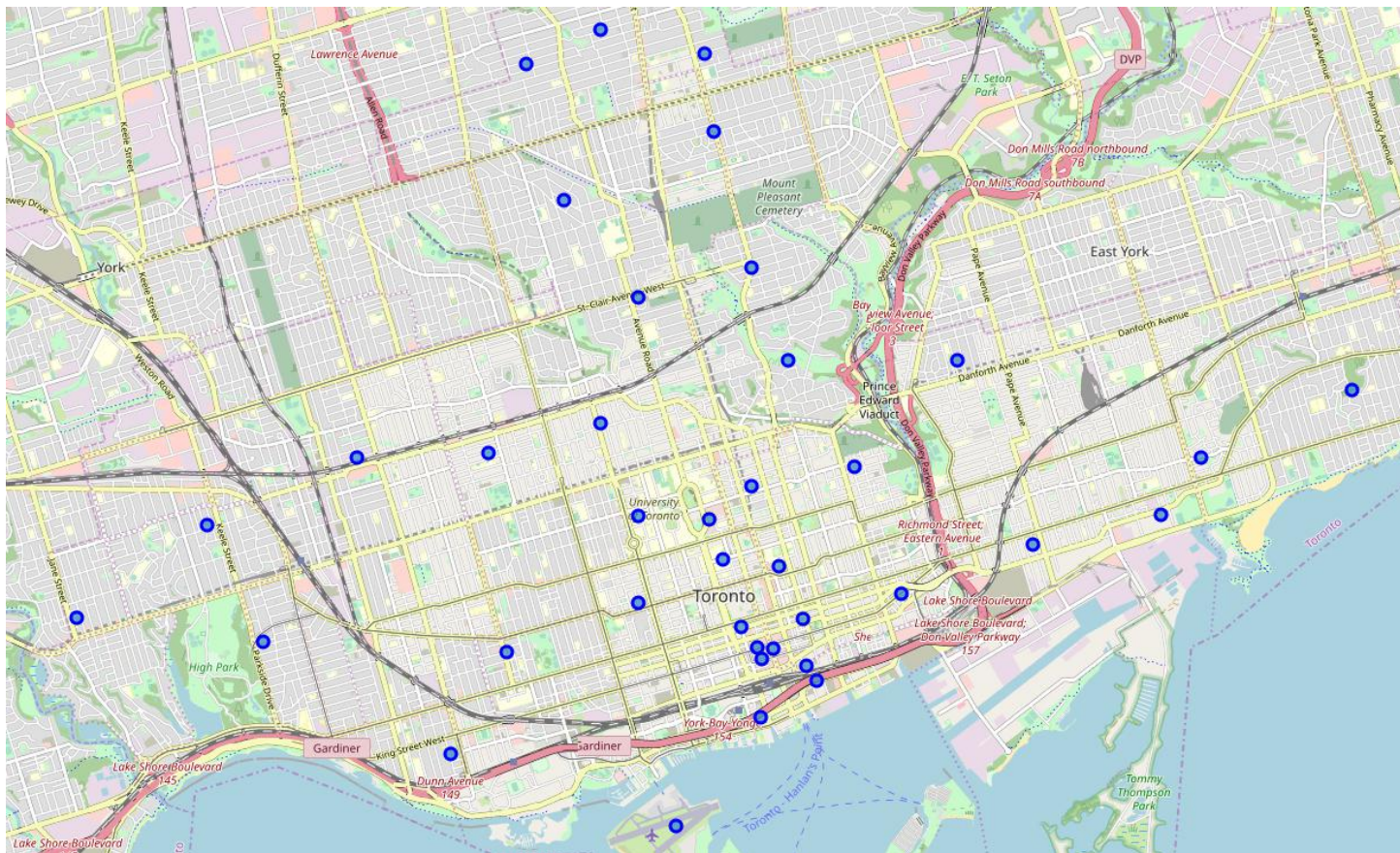
**by Haowen Wang**

# 1. Introduction: About the Problem

**Toronto can be a famous place for tourists from all over the world, and it has many tourist attractions in the old Toronto (East/ Central/ Downtown/ West Toronto). So when tourists want to have a visit to old Toronto, they have to choose a place to live. For tourists who want to experience the life of Toronto residents, variable venues can be necessary. This recommend system is designed to help tourists to choose the best place to live in Toronto. To some extent, better place means better quality of holiday.**

## 2. Data

We focus on Neighborhoods in old Toronto



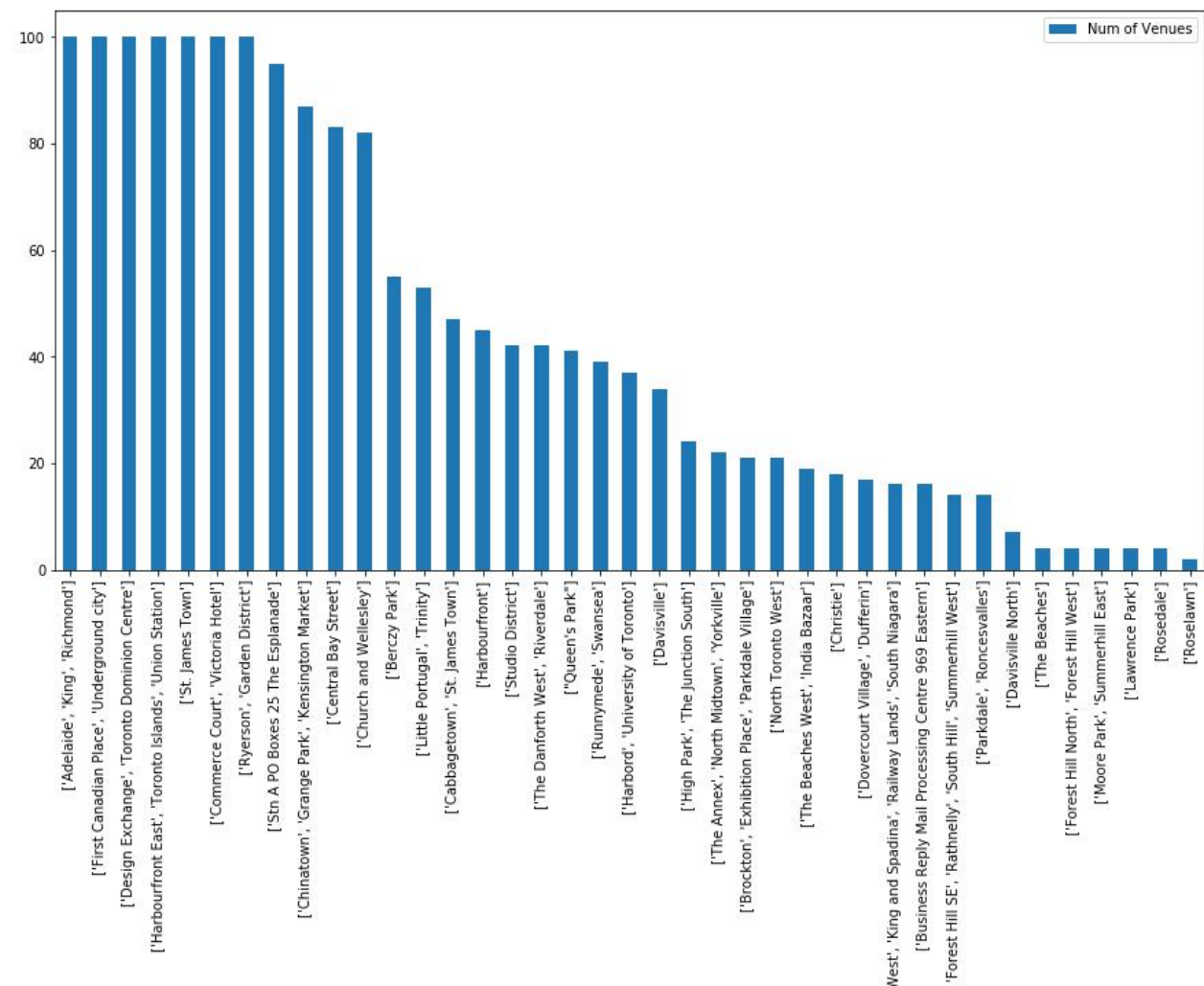
We have 1713 popular Venues in old Toronto to analyze

```
Toronto_data.count()
```

Neighbourhood	1713
Neighborhood Latitude	1713
Neighborhood Longitude	1713
Venue	1713
Venue Latitude	1713
Venue Longitude	1713
Venue Category	1713
Venue summary	1713
dtype: int64	

# 3. Methodology and analyze

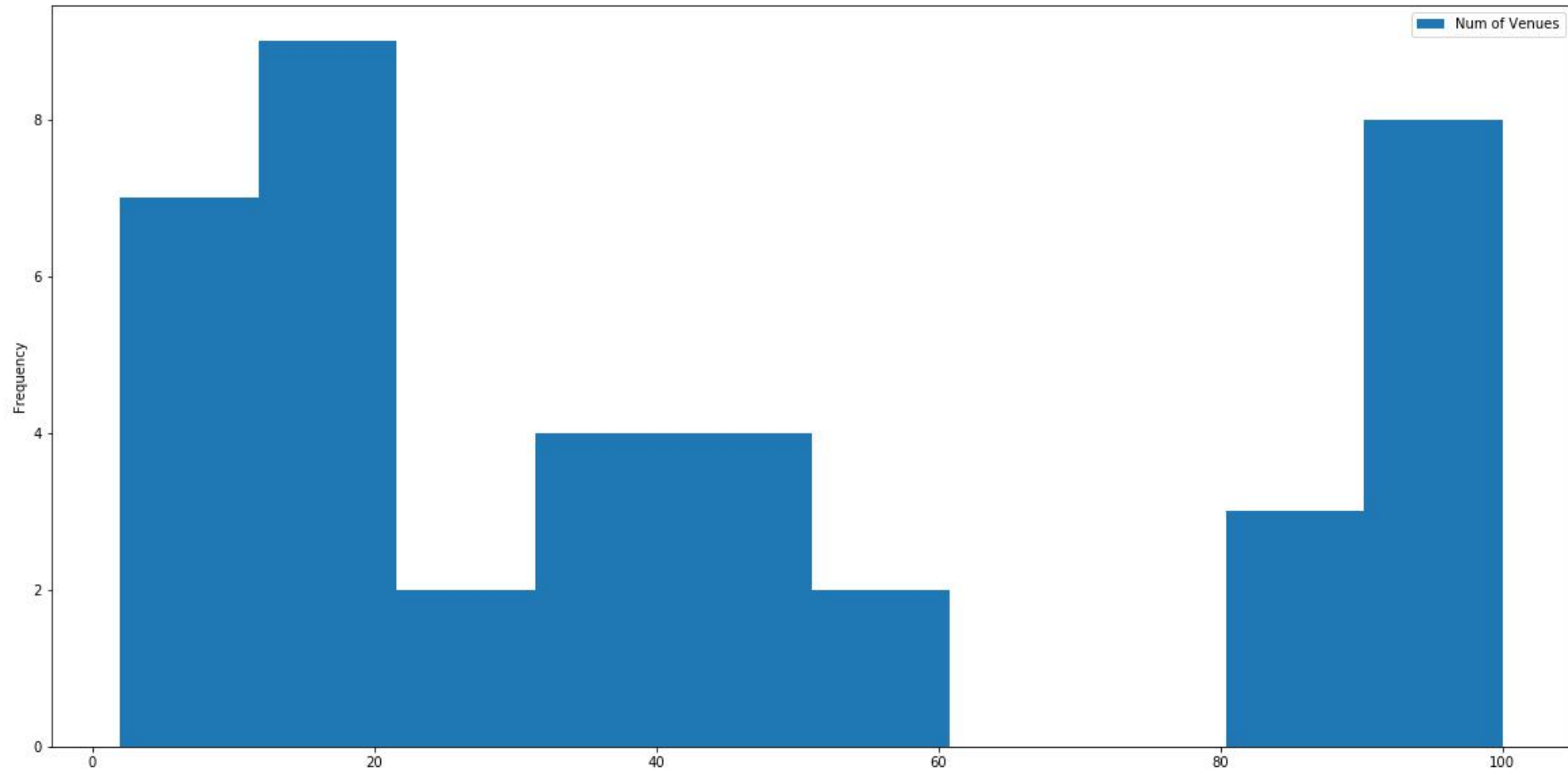
The top 10 Neighbourhoods which has the most Venues



Neighbourhood	Num of Venues
['Adelaide', 'King', 'Richmond']	100
['First Canadian Place', 'Underground city']	100
['Design Exchange', 'Toronto Dominion Centre']	100
['Harbourfront East', 'Toronto Islands', 'Union Station']	100
['St. James Town']	100
['Commerce Court', 'Victoria Hotel']	100
['Ryerson', 'Garden District']	100
['Stn A PO Boxes 25 The Esplanade']	95
['Chinatown', 'Grange Park', 'Kensington Market']	87
['Central Bay Street']	83

### 3. Methodology and analyze

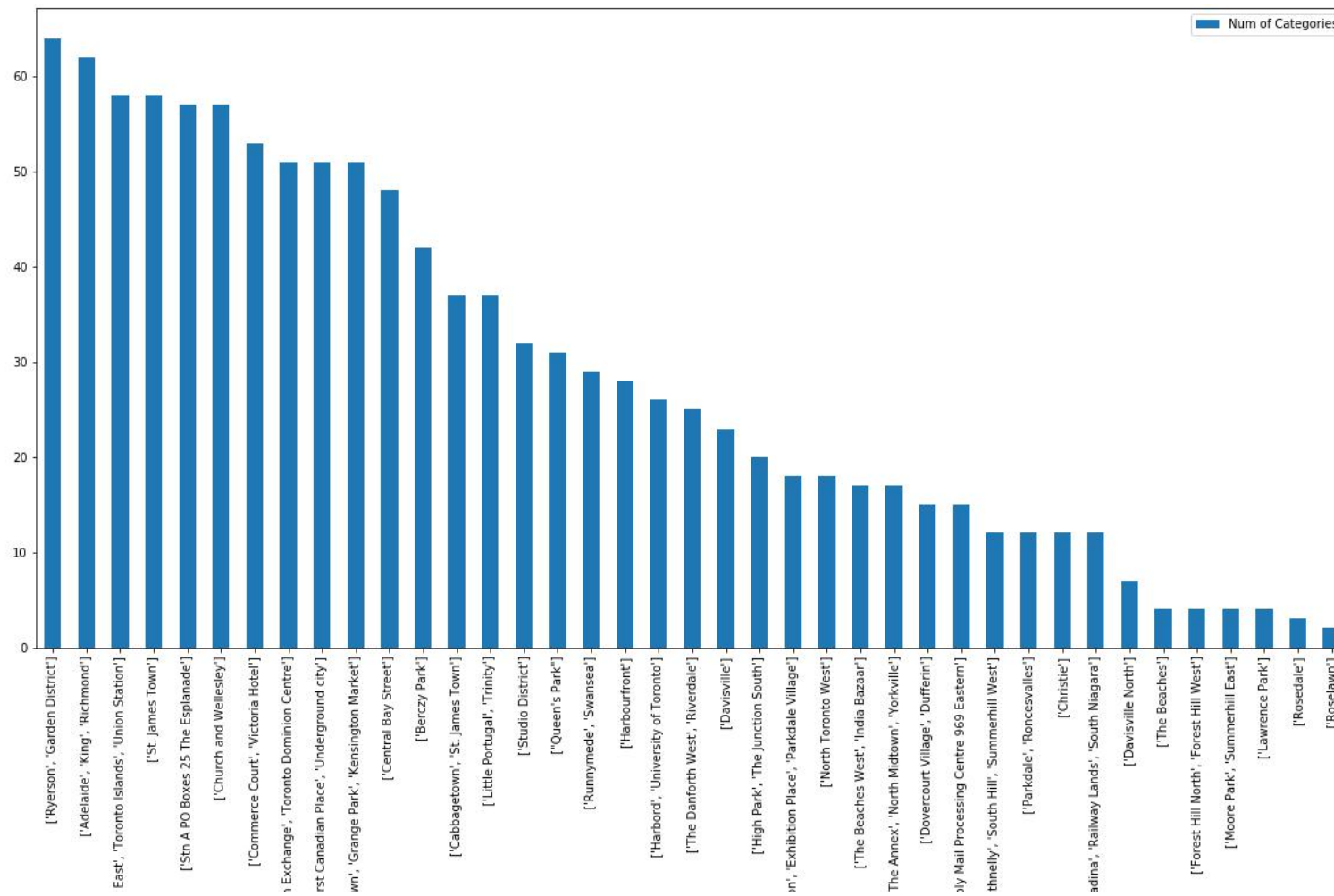
The Neighbourhoods which has the most Venues Neighborhoods which are at the top and the bottom are the most





## 3. Methodology and analyze

The top 10 Neighbourhood which have the most Venues Categories



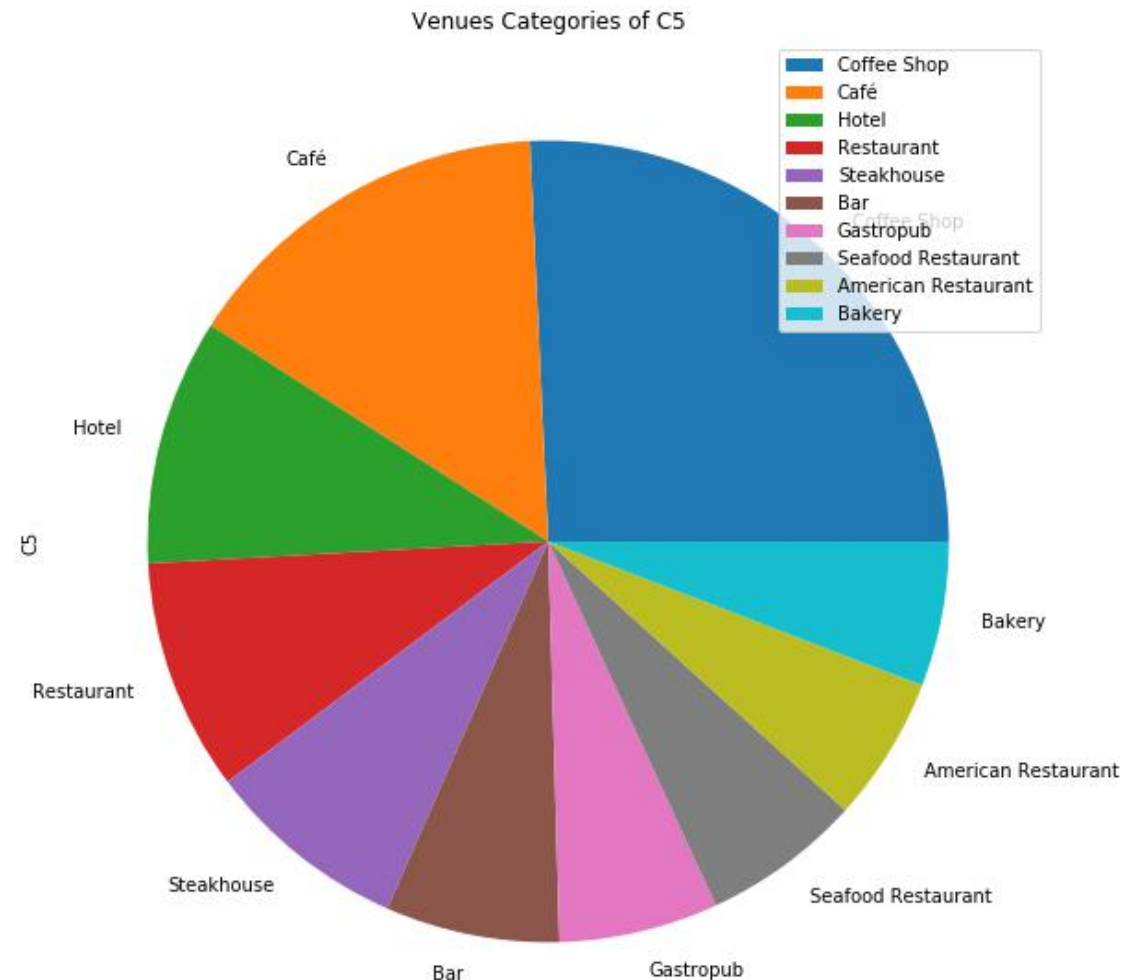
Neighbourhood		
['Ryerson', 'Garden District']		64
['Adelaide', 'King', 'Richmond']		62
['Harbourfront East', 'Toronto Islands', 'Union Station']		58
['St. James Town']		58
['Stn A PO Boxes 25 The Esplanade']		57
['Church and Wellesley']		57
['Commerce Court', 'Victoria Hotel']		53
['Design Exchange', 'Toronto Dominion Centre']		51
['First Canadian Place', 'Underground city']		51
['Chinatown', 'Grange Park', 'Kensington Market']		51

## 4. Results and Discussion

We cluster the data in 6 clusters, Because 6 Neighborhoods has the same most Venues Categories

Top 3 clusters are C5, C2 and C6

Venues Categories of C5:

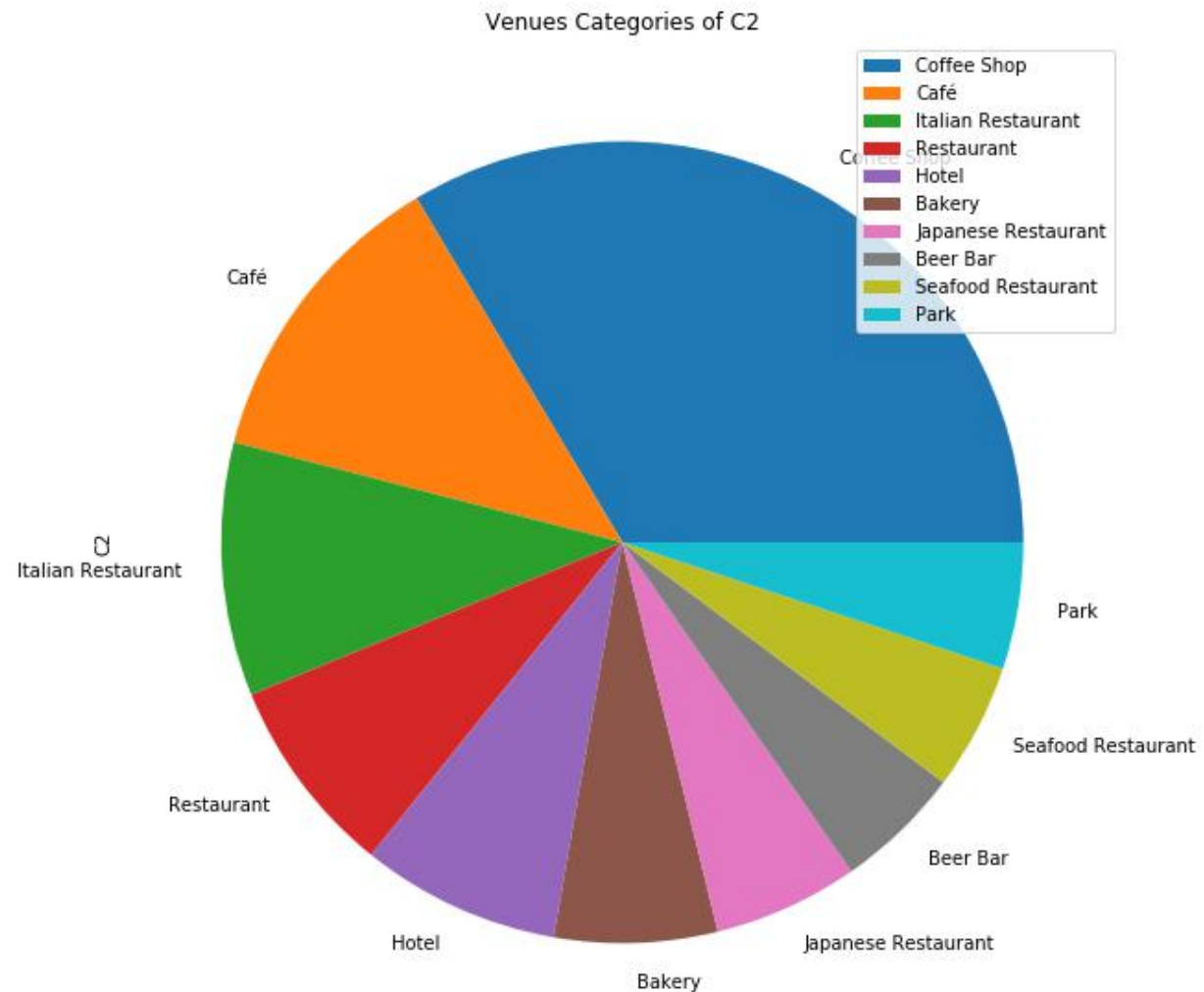


## 4. Results and Discussion

We cluster the data in 6 clusters, Because 6 Neighborhoods has the same most Venues Categories

Top 3 clusters are C5, C2 and C6

Venues Categories of C2:





## 4. Results and Discussion

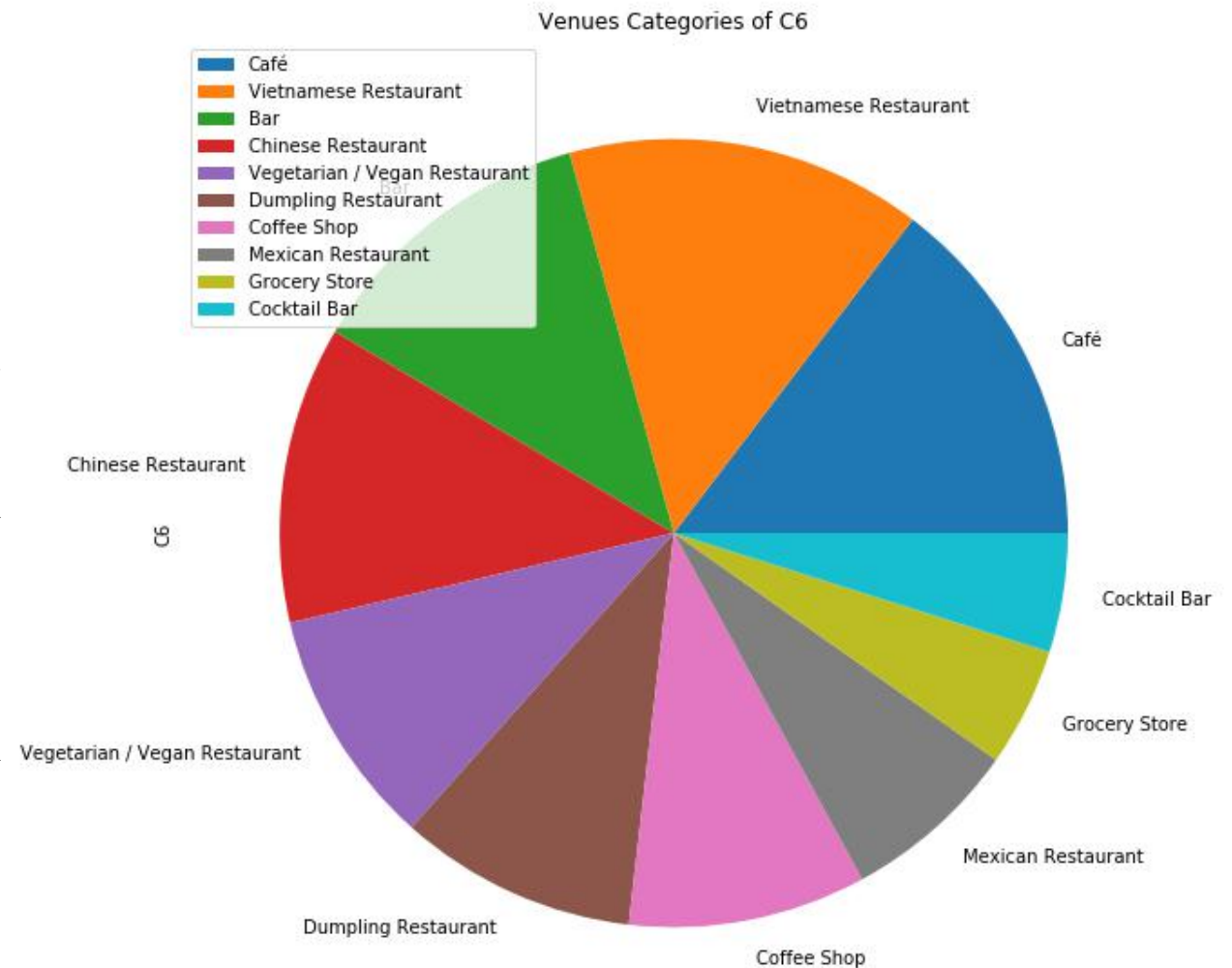
We cluster the data in 6 clusters, Because 6 Neighborhoods has the same most Venues Categories

Top 3 clusters are C5, C2 and C6

Venues Categories of C6:

Discussion:

In fact, we can find that Coffee Shops and Cafe are popular in all 6 clusters, Hotel is easier to find both in C5 and C2. If tourists want to go to the park, they are more likely to consider C2, and for those who like Chinese food including dumplings, C6 can be a better choice. Seafood Restaurant can be easier to find in C5 and C2. Overall speaking, C6 is more suitable for tourists to have dinner while C5 and C2 can be easy to find a hotel to stay.



## 5. Conclusion

### The Best Neighborhoods

especially for those want to live in hotel and eat seafood restaurant

Neighborhood	Group
['Adelaide', 'King', 'Richmond']	5
['First Canadian Place', 'Underground city']	5
['Design Exchange', 'Toronto Dominion Centre']	5
['Commerce Court', 'Victoria Hotel']	5

### Second Best Neighborhoods

especially for those want to live in hotel and eat Japanese restaurant and go to park

Neighborhood	Group
['Central Bay Street']	2
['Harbourfront East', 'Toronto Islands', 'Union Station']	2
['Stn A PO Boxes 25 The Esplanade']	2
['St. James Town']	2

### Third Best Neighborhood

especially for those want to eat Chinese Restaurant, and this Neighborhood is also popular with other food

Neighborhood	Group
['Chinatown', 'Grange Park', 'Kensington Market']	6