

Battle of the Neighbourhood: Toronto Renting Solutions

The hunt for a house that feels like home

Who are we & What we do

Good Host is an upcoming startup providing housing solutions that go beyond just the rent. We want to make you feel right at home when you are looking for a house.

We Leveraging our data analysis expertise we aim to bring highly customised search criteria and deliver the best solutions to our clients, at just a click away.

Target Audience: DIVERSE IMMIGRANT COMMUNITIES IN TORONTO

Toronto is a hot pot of diversity. As per the 2016 Census, 46.1% of the total population is made up of immigrants and expats. Of these Indians represent 11.4%

Source: https://www.statcan.gc.ca/





PILOT RUN OF DEVELOPMENT OF GOOD HOST APP

Sample Profile: Working Indian

Sample's requirements:

- Nearby access to Indian food
- Nearby access to Indian grocery stores
- Have Indian neighbours

Business Problem: APP DEVELOPMENT

(Pilot run)

The sample chosen is from India and is looking for accommodation having nearby access to Indian food, Indian supermarkets, and Indian neighbours.

Given the criteria we are going to consider one parameter initially. The presence of Indian restaurants, which would indicate that it is within a locality wherein its main customers, mostly Indians, live/work nearby. Procurement of ingredients would also be from within the vicinity, indicating Indian marketplaces nearby.



DATA COLLECTION

List of Neighbourhoods as on Wikipedia

 Latitudes and Longitude Coordinates from the Geocoder Python Package

 Venue data of Indian restuarants using Foursquare API





Methodology

- Extraction and web scrapping of Neighbourhood data using pandas html tables
- Merging dataset with the Geocoder package on latitudinal and longitudinal coordinates
- Obtaining Venue data from Foursquare API using coordinates
- Grouping and analysis of neighbourhoods mean on the frequency of occurrence of each venue category required for clustering of data
- K-means clustering performed to determine the quantum of frequency of occurrence of "Indian Restaurants"



Clustering the Neighbourhoods into 3 clusters the following was observed:

- Purple Markers- Cluster 0: Neighbourhoods with no Indian restaurants
- Green Markers- Cluster 1: Neighbourhoods with high number of India restaurants
- Red Markers- Cluster 2: Neighbourhoods with little or no of Indian restaurants

DATA ANALYSIS & RESULTS

CONCLUSION

As observed from the Clustering, cluster 1 shows more of a density of Indian restaurants especially in the neighbourhoods of Central Bay Street, The Annex, North Midtown and Yorkville. Hence suggestions of properties from these neighbourhoods should be priorities for the sample client. The areas are relatively dispersed and hence should provide a sufficient coverage to obtain rental properties.

The first trial of producing results for rental solutions using customised criterion and preferences enables us to obtain concrete results to work with. With more input data on other factors would help our model grow before we can launch it in the market.

