

Coursera Capstone Project – The Battle of Neighborhoods

British Columbia (BC) is the westernmost [province in Canada](#), located between the [Pacific Ocean](#) and the [Rocky Mountains](#). With an estimated population of 5.1 million as of 2020, it is Canada's [third-most populous province](#).

According to the [2016 National Household Survey](#) 365,705 British Columbians had South Asian origins. This accounted for just over 8% of the total provincial population. The growth of the population is attributed to sustained invitations of immigration from South Asian nations. The vast majority of South Asian immigrants who immigrate to and reside in British Columbia trace their roots to the [Punjab region](#) of India and Pakistan; the province has the largest [Punjabi](#) population in Canada. According to a 2011 study conducted by [Statistics Canada](#) British Columbians from South Asia will grow to between 508,000 and 684,000 by 2036 or 10% to 11.1% of the provincial population overall. [\[66\]\[67\]](#)

With this diverse culture, comes diversity in cuisines. There are many different restaurants in British Columbia, catering to varied tastes with cuisines like Indian, Chinese, French, etc.

As part of this project, we will list and visualize all major parts of British Columbia that have great Indian Restaurants.

Data

For this project we need the following data:

- **British Columbia Data:** *contains a list of [Boroughs](#), [Neighborhoods](#) along with their location coordinates.*
- **Data source:** <http://www.geonames.org/postal-codes/CA/BC/british-columbia.html>
- **Description:** *This webpage contains the required information. And we will scrape this data set to explore various neighborhoods of British Columbia.*
- **Indian Restaurants in each neighborhood of British Columbia**

- **Data source:** [Foursquare API](#)
- **Description:** *By using this API we will get all the venues in each neighborhood. We can filter these venues to get only Indian Restaurants.*
- *We can then get the likes, ratings, etc., to rank the restaurants.*
- **GeoSpace Data:**
- **Data source:** 'pgeocode' library of Python.
- *By using this data we draw boundaries and visualize venues on the map.*

Approach

- View British Columbia's city data from URL.
- Using Web Scrapping technique, collect required data.
- Using the FourSquare API, we will find all venues for each neighborhood.
- Filter out all venues that are Indian Restaurants.
- Find rating, tips, and like count for each Indian Restaurants using Foursquare API.
- Using the rating for each restaurant, we will sort that data.
- Visualize the Ranking of neighborhoods on the map.

Inferences that can be drawn from the above-mentioned datasets.

- *What is the best place in BC for [Indian Cuisine](#)?*
- *Which areas have potential Indian Restaurant Market? Any drawbacks?*
- *Which areas have a low density of Indian Restaurants?*
- *Which is the best place to stay if I prefer Indian Cuisine?*