

Coursera Capstone

IBM Applied Data Science Capstone

Opening an Indian Restaurant in New York



Business Problem

The objective of this Capstone project is to analyze and select the best locations in the city of New York to open a new Indian restaurant. Using Data Science methodology and instruments such as Data Analysis and Visualization, this project aims to provide solutions to answer the business question: Where the Indian restaurant should be open by the investor, in the city of New York ?



Data

- **Data required**

1. List of borough and neighborhoods of New York
2. Latitude and longitude coordinates of those neighborhoods
3. Venue data, particularly data related to restaurants

- **Sources of data**

1. Open source dataset of New York: https://cocl.us/new_york_dataset
2. Geocoder package for latitude and longitude coordinates
3. Foursquare API for venue data



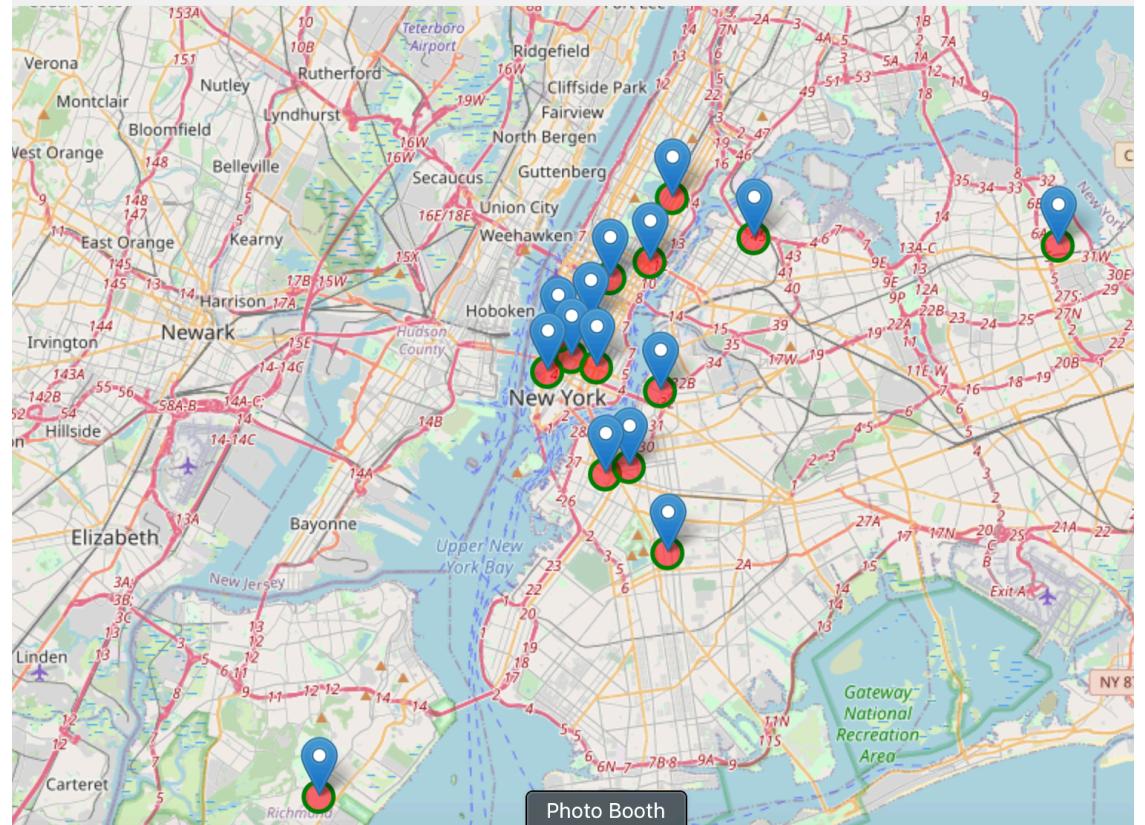
Methodology

- Collect the data from https://cocl.us/new_york_dataset. Clean and process the data into a dataframe.
- Using FourSquare, locate all venues and then filter by Indian restaurants. Ratings, tips, and likes by users will be counted and added to the dataframe.
- Sort the data based on rankings.
- Visually assess the data be will be using graphing from Python libraries.



Results

- Manhattan has the highest number of Indian restaurants comparing to the other boroughs.
- Manhattan has the highest average rating for Indian Restaurants.
- Two neighborhoods with the highest average rating for Indian Restaurants are Tribeca and Noho (both located in Manhattan).



Results Discussion

- Based on the results of our analysis, Manhattan and Staten Island are the best locations for India cuisine in NYC.
- Staten Island is a more promising place to open a new Indian restaurant.
- Neighborhood in New Dorp is the best place in Staten Island to open a new Indian restaurant.



Conclusion

- Answer to business question: Where the Indian restaurant should be open by the investor, in the city of New York ?
- Best rated Indian Restaurant in NYC is The Kati Roll Company Restaurant in Manhattan.
- The findings of this project may be used in real life to better understand the advantages and disadvantages of different New York neighborhoods/boroughs in terms of opening an Indian restaurant.

