



JULY 2020

The Battle of Neighborhoods

Best Chinese Restaurant in New York City

Introduction

New York is a city of superlatives: America's biggest; its most exciting; its business and cultural capitals; the nation's trendsetter. The city seems to pull in the best and the brightest from every corner of the country. The city's ethnic flavor has been nuanced by decades of immigrants whose first glimpse of America was the Statue of Liberty guarding New York Harbor and by large expatriate communities such as the United Nations headquartered there.

New York City comprises 5 boroughs sitting where the Hudson River meets the Atlantic Ocean. At its core is Manhattan, a densely populated borough that's among the world's major commercial, financial and cultural centers.

New York City is experiencing a Chinese food renaissance. Never before have the city's offerings been so diverse. Some even say that New York is living in what's surely just the beginning of a golden age of Chinese food.

Problem

- Mr.Chan is a die-hard foodie coming from Singapore.
- With a Chinese background, he decides to spend his retire life as a Chinese restaurant owner in New York City.
- As a Data Science professor himself, he plans to make a proper analysis before he spends all of his lifetime savings.

Interest

Based on his professional experience and data-sensitive mindset, Mr.Chan decides to focus on the following elements:

- Neighborhood with few Chinese restaurant
 - Neighborhood with best rated Chinese food
- ... And ultimately,
- The best place to open a Chinese restaurant in New York.



Data Source

As the restaurant will be located in New York City, the data we are going to use will also revolve around NYC.

Data I: New York City Geo Data

	Borough	Neighborhood	Latitude	Longitude
0	Bronx	Wakefield	40.894705	-73.847201
1	Bronx	Co-op City	40.874294	-73.829939
2	Bronx	Eastchester	40.887556	-73.827806
3	Bronx	Fieldston	40.895437	-73.905643
4	Bronx	Riverdale	40.890834	-73.912585

Data II: NYC Geo-spatial Data



Data III: Foursquare API

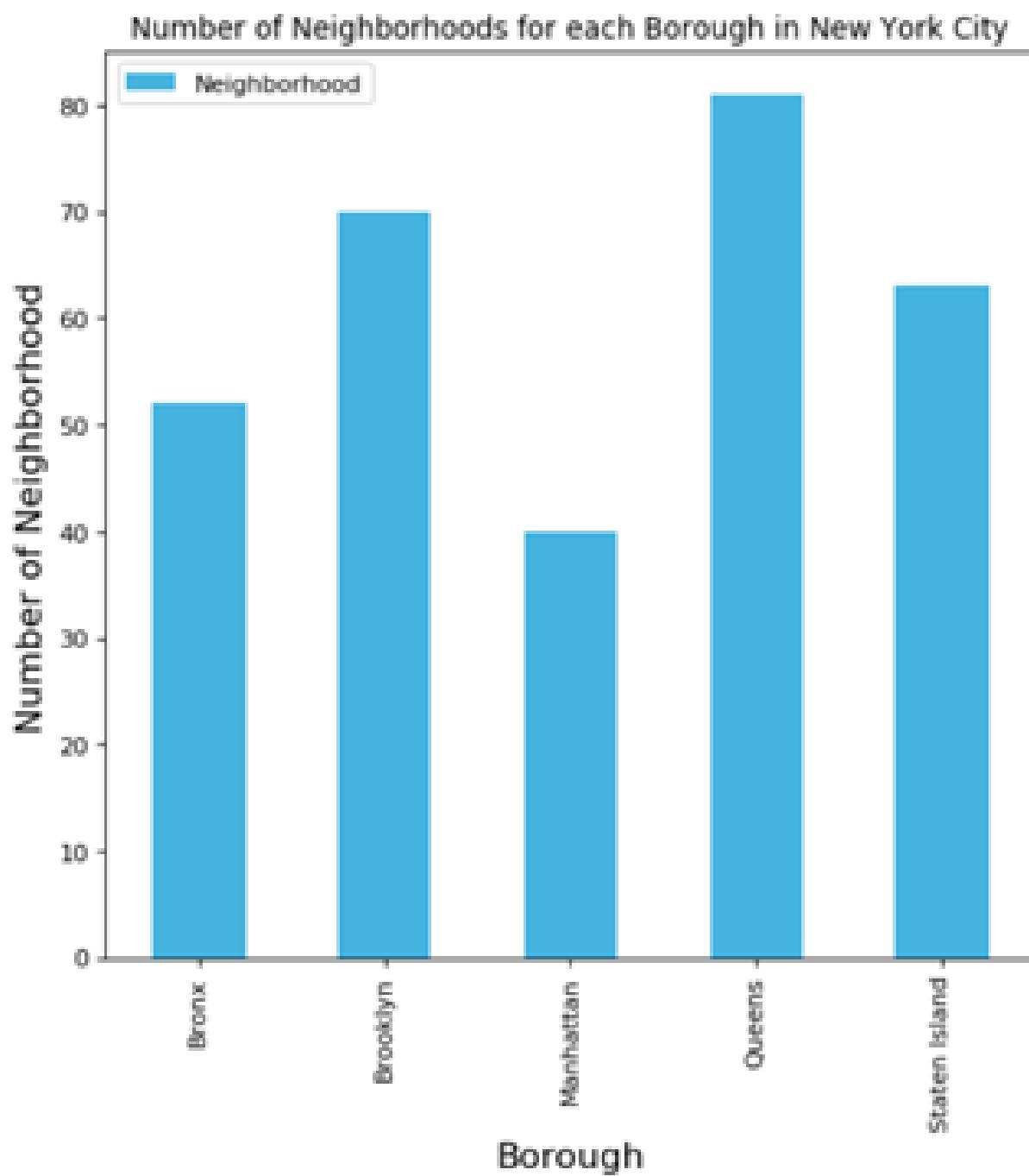
Data Cleaning

- Fetch the data from the sources mentioned above
- Conduct specific requests to obtain relevant information about Chinese cuisines from Foursquare API
- Examine the ratings and reviews of popular Chinese restaurants
- Use Matplotlib and Folium to assist the analysis visually



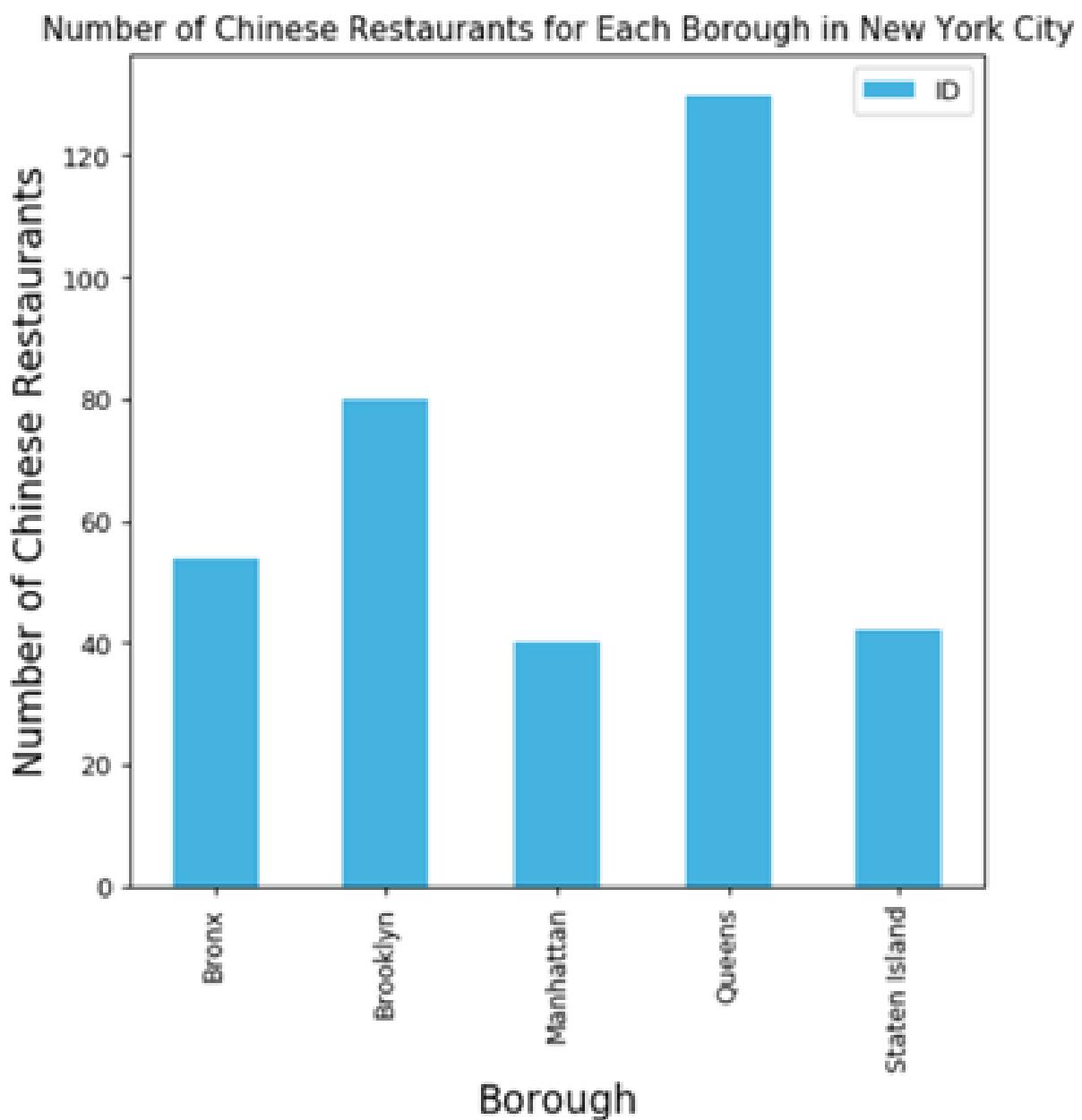
Exploratory Data Analysis

Number of Neighborhoods in each of the Borough in New York City



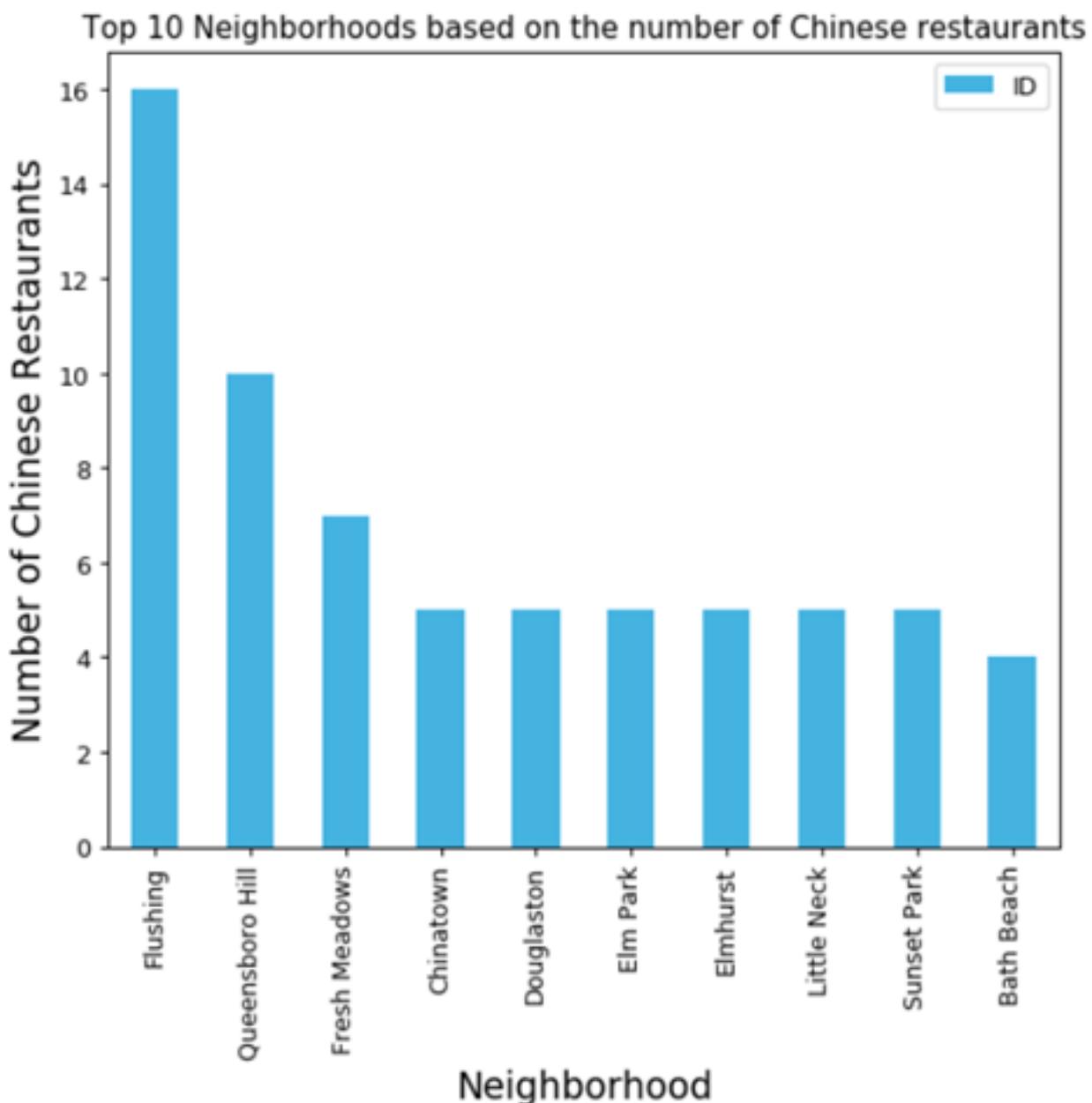
Exploratory Data Analysis

Number of Chinese Restaurants among each Borough



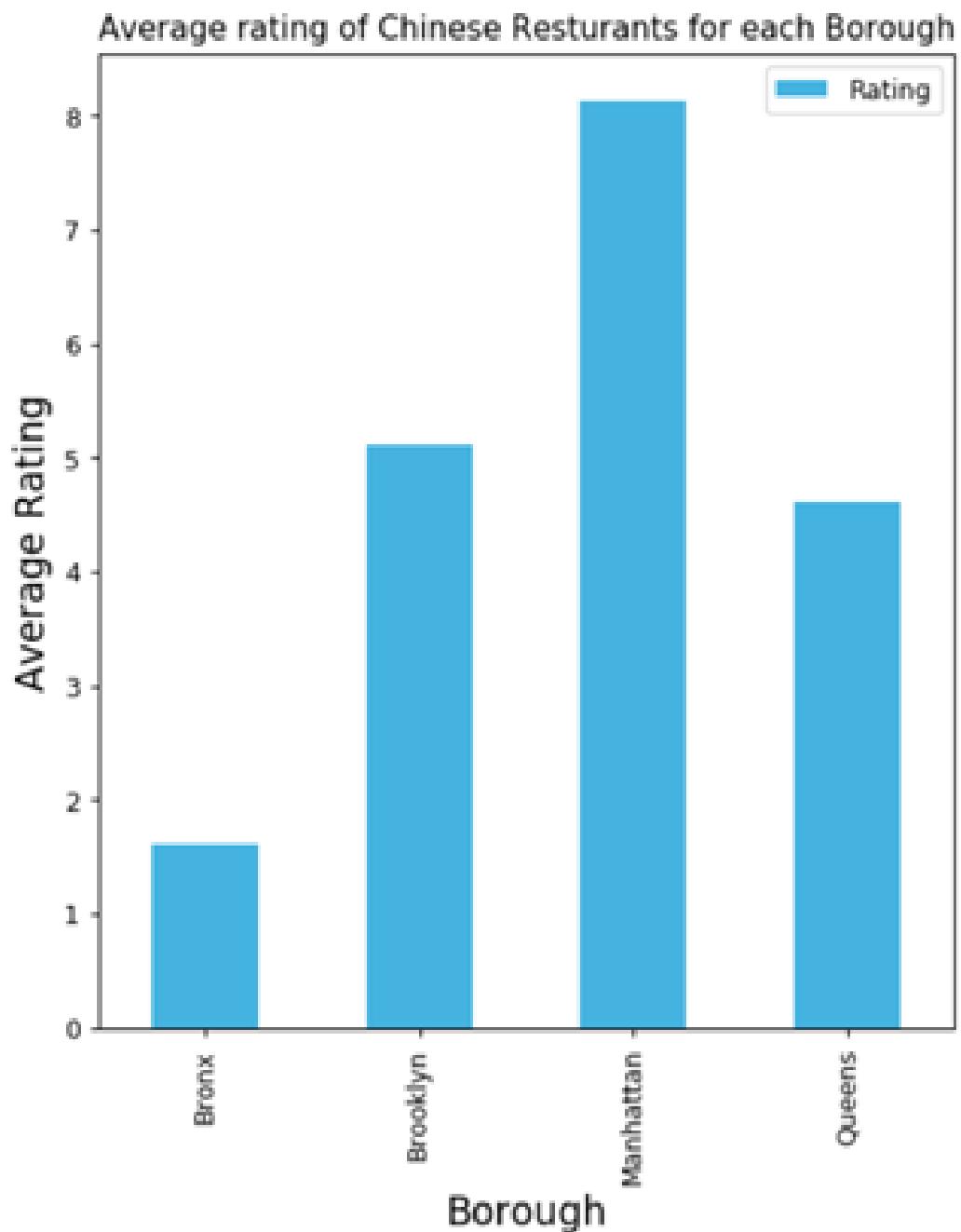
Exploratory Data Analysis

Neighborhoods that are popular with Chinese restaurants



Exploratory Data Analysis

Average rating of Chinese restaurants for each Borough



Results

Boroughs with the average rating as Choropleth map



Top Neighborhood based on average rating

Lower East Side in Manhattan has an average rating of 9.0 based on the data collected and analyzed above.

Conclusion

Based on the data analysis conducted above, we/Mr.Chan now have a better understanding about the distribution of Chinese restaurants in New York. We know now that:

- Lower East Side has the best Chinese restaurants in NYC. It is a good idea to pay a visit to the local markets and explore how they are so successful.
- Bronx in general isn't so fond of Chinese food and Mr.Chan should be careful to choose the location even if the rental fee is lower there.
- Flushing already has a huge amount of Chinese restaurants. It is better not to try competing as Mr.Chan doesn't have much experience opening restaurant in the US.

