# The Chinese Restaurants Battle in Hong Kong

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# 1. Introduction

## 1.1 Background

People always come up with a place in the world with various cultures and languages in a place, which is Hong Kong. Although the size of Hong Kong is relatively small to some countries in Europe, there are over 7.5 million people in 18 districts here. This is a place inherited ancient Chinese culture and experienced a period of western colonial influence.

There are so many good restaurants in Hong Kong, including Chinese, Japanese, Western, etc. Many investors in the world would like to build up their reputation in Hong Kong and set up a restaurant here. However, it is never easy to survive in this battlefield without research and delicious food. Chinese restaurants will be one of the good choices for HongKongers based on its appealing dishes and fresh ingredients.

In this project, we will try to investigate the neighborhoods in the districts of Hong Kong. By the end, we will solve the problems, and tell you the good choice of opening a Chinese restaurant in Hong Kong.

## 1.2. Business Problem

The objective of this project is to find out the optimum place in Hong Kong to open a new Chinese restaurant. For investors, it would be critical for them to know which places are important to have the new restaurants. It may be also important for them to set up a restaurant with similar dishes around the districts. Some districts may probably have more good Chinese restaurants compared to the others. This may help them stand out and build the reputation.

For us, it is always helpful to have more information of good Chinese restaurants. This project will also provide a good insight for audience to understand the distribution of Chinese restaurants in Hong Kong.

## 1.3.Problem Statement

- Where are the best districts for Chinese cuisine in Hong Kong?
- In disticts should the investor open a Chinese restaurant to have the best chance of being successful?

- Where can we go in Hong Kong to have the best Chinese food?

## 2. Data and Methodology

To solve the business problem, the following data is required for analysis.

- The data of Hong Kong containing the districts name
- Latitude and Longitude coordinates of those districts
- Venue places with the information of location, name, categories

### 2.1 Data sources

Firstly, the data will be collected from https://www.geodatos.net/en/coordinates/hong-kong and cleaned for the later process. Then FourSquares will be used to locate the venues in those districts. Then the number and frequencies of restaurant types will be recorded and summarized into the data frame. Data will be sorted based on rankings. At the end, the data will be visually visualized by the graphics using the Python libraries.

### 2.2 Data cleaning

Districts, geographical coordinates from www.geodatos.net. In total, there are 17 rows and 2 columns in the raw dataset. We split the coordinates column by the delimiter and turned into Longitude and Latitude. The cleaned data contains 3 columns (Districts, Longitude and Latitude). Then we obtain the venues of neighborhood from Foursquares and details of 26 Chinese restaurants are obtained.

Table 1. Example of cleaned table obtained from Geodatos.net

| City | Coordinates | Latitude | Longitude |
|---|---|---|---|
| Hong Kong | 22.27832, 114.17469 | 22.27832 | 114.1747 |
| Kowloon | 22.31667, 114.18333 | 22.31667 | 114.1833 |
| Tsuen Wan | 22.37137, 114.11329 | 22.37137 | 114.1133 |
| Yuen Long Kau Hui | 22.45, 114.03333 | 22.45 | 114.0333 |
| Tung Chung | 22.28783, 113.94243 | 22.28783 | 113.9424 |

Table 2. The table of ID and Chinese restaurants name obtained from Foursquares

| City | ID | Name |
|---|---|---|
| Hong Kong | 4b67b864f964a520f15b2be3 | Liu Yuan Pavilion (留園雅敍) |
| Hong Kong | 4bb2cdfb715eef3b41bf85bb | Trusty Congee King (靠得住粥麵小館) |
| Tsuen Wan | 4d400e3789616dcb823f00b5 | Nice Capital Restaurant (麗都讌客) |
| Tsuen Wan | 4be40308b02ec9b684c450c0 | Sportful Garden Restaurant (陶源酒家) |
| Tsuen Wan | 4e33f15062e1733d7aa708c4 | The Great Restaurant (一品雞煲火鍋) |
| Tung Chung | 4d16c7aab15cb1f737efaf21 | Super Super 一粥麵 |
| Tung Chung | 4c936bcd1221b1f768cf19e2 | Federal Palace (Federal Palace 聯邦皇宮) |
| Tung Chung | 5243fe4711d27f0bc9d8d08d | Old Cheng Du 老城都 |
| Tai Po | 4e89b10d6c25bf8636514f83 | China House (家傳滬曉) |
| Tai Po | 4bf0eb5fb315c9b6c97f93ff | Kwan Kee (群記清湯腩) |
| Tai Po | 4d06140e37036dcb43ff19fb | Tong Kee Bao Dim 唐記包點 |
| Tai Po | 4c86006b2f1c236af53c5943 | 新明發食家 |
| Yung Shue Wan | 4bc307e84cdfc9b613be9621 | Lung Kong Restaurant (龍江川粵菜館) |
| Yung Shue Wan | 4d4007211bd2a143b884ee7c | 蔡記小食 |
| Ngong Ping | 4c1b0402eac020a1f74744c2 | Ngong Ping Garden Restaurant (昂坪膳坊) |
| Ngong Ping | 5296c17c498e6bae2ed31b3c | Feng Chia Market (逢甲工房) |
| Tai O | 4cba94d4f50e224b6fecf4fb | Fook Moon Lam Restaurant 福滿林酒樓 |
| Tai O | 5063e14ee4b05840d81e4b36 | 金培餐廳 |
| Central | 5288ad13498e14da0d2188fd | China Tang (唐人館) |
| Central | 5662695e498ee423e725baf7 | Howard's Gourmet (好酒好蔡) |
| Central | 51937957498e1228fa669b99 | Duddell's (都爹利會館) |
| Central | 4b91df7ef964a520eedc33e3 | Cuisine Cuisine (國金軒) |
| Wan Chai | 4b0588d8f964a520d5dc22e3 | One Harbour Road (港灣壹號) |
| Wan Chai | 4b67b864f964a520f15b2be3 | Liu Yuan Pavilion (留園雅敍) |

| | | |
|---|---|---|
| Sham Shui Po | 4cda99864006a14382a4d2b2 | Shia Wong Hip (蛇王協) |
| Sham Shui Po | 50dd8548e4b021301ef05370 | 利星海鮮小炒火鍋 |

## 3. Result

The number of Chinese restaurants in Central and Tai Po ranked the highest among the districts in Hong Kong.
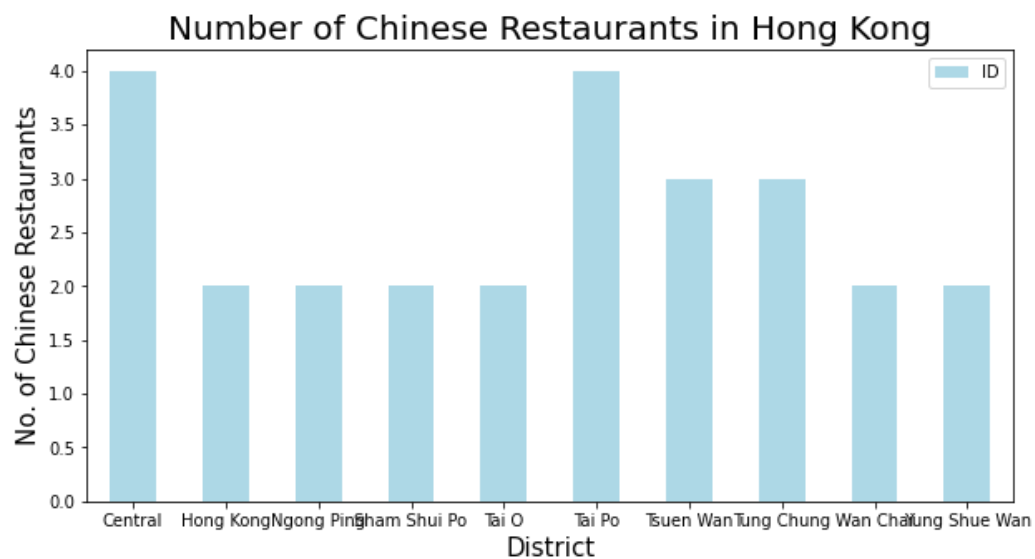


Figure 1. Distribution of Chinese restaurants in Hong Kong districts

From Foursquares, we can obtain the id, name and comments (Like, Rating and Tips from the customers). Then we can utilize this information to useful insight.

| | City | ID | Name | Likes | Rating | Tips |
|---|---|---|---|---|---|---|
| 21 | Central | 4b91df7ef964a520eedc33e3 | Cuisine Cuisine (國金軒) | 41 | 7.2 | 20 |
| 22 | Wan Chai | 4b0588d8f964a520d5dc22e3 | One Harbour Road (港灣壹號) | 40 | 8.7 | 17 |
| 23 | Wan Chai | 4b67b864f964a520f15b2be3 | Liu Yuan Pavilion (留園雅敘) | 35 | 8.2 | 24 |
| 24 | Sham Shui Po | 4cda99864006a14382a4d2b2 | Shia Wong Hip (蛇王協) | 10 | 7.5 | 8 |
| 25 | Sham Shui Po | 50dd8548e4b021301ef05370 | 利星海鮮小炒火鍋 | 4 | 6.2 | 1 |

Figure 2. The sample table of information obtained from Foursquares in Python

After categorizing different restaurants with rating into their own districts, it is found that Central and Wan Chai have the highest rating of Chinese restaurants in Hong Kong in average. The average rating of these two districts almost approaches 8.
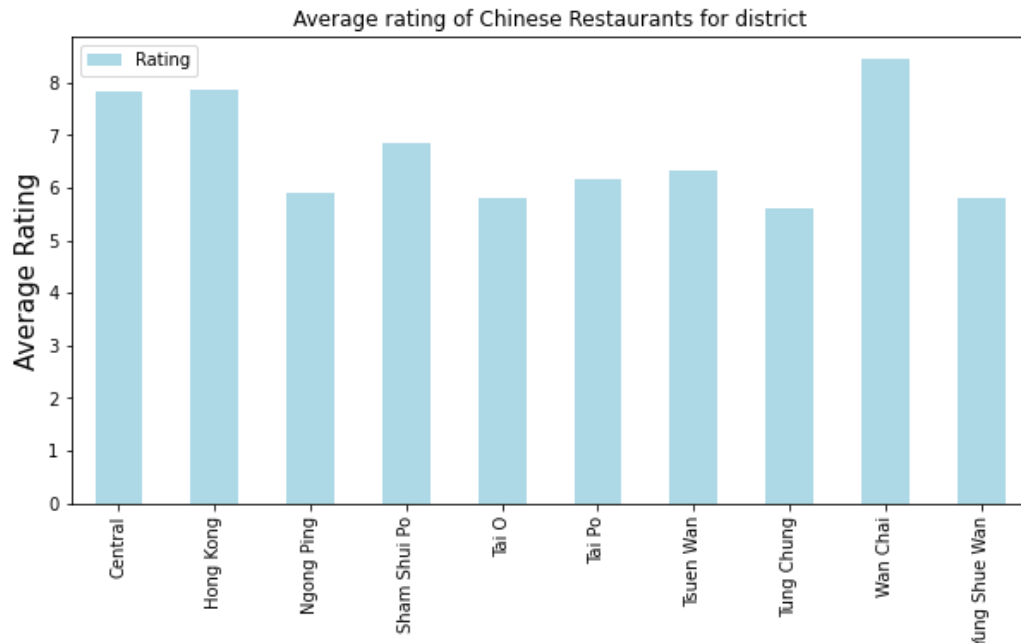
Figure 3. The average rating by customers of Chinese restaurants in Hong Kong districts

Then we merge the tables into a new data frame with more information. This would help us to draw the interactive map for audience to look for Chinese restaurants in Hong Kong.

| | City | ID | Name | Likes | Rating | Tips | Coordinates | Latitude | Longitude |
|---|---|---|---|---|---|---|---|---|---|
| 0 | Hong Kong | 4b67b864f964a520f15b2be3 | Liu Yuan Pavilion (留園雅敍) | 35.0 | 8.2 | 24.0 | 22.27832, 114.17469 | 22.27832 | 114.17469 |
| 1 | Hong Kong | 4bb2cdfb715eef3b41bf85bb | Trusty Congee King (靠得住粥麵小館) | 30.0 | 7.5 | 17.0 | 22.27832, 114.17469 | 22.27832 | 114.17469 |
| 2 | Tsuen Wan | 4d400e3789616dcb823f00b5 | Nice Capital Restaurant (麗都誘客) | 6.0 | 6.6 | 2.0 | 22.37137, 114.11329 | 22.37137 | 114.11329 |
| 3 | Tsuen Wan | 4be40308b02ec9b684c450c0 | Sportful Garden Restaurant (陶源酒家) | 6.0 | 6.2 | 4.0 | 22.37137, 114.11329 | 22.37137 | 114.11329 |
| 4 | Tsuen Wan | 4e33f15062e1733d7aa708c4 | The Great Restaurant (一品雞煲火鍋) | 13.0 | 6.2 | 3.0 | 22.37137, 114.11329 | 22.37137 | 114.11329 |
| 5 | Tung Chung | 4d16c7aab15cb1f737efaf21 | Super Super 一粥麵 | 7.0 | 5.6 | 0.0 | 22.28783, 113.94243 | 22.28783 | 113.94243 |
| 6 | Tung Chung | 4c936bcd1221b1f768cf19e2 | Federal Palace (Federal Palace 聯邦皇宮) | 36.0 | 5.6 | 22.0 | 22.28783, 113.94243 | 22.28783 | 113.94243 |
| 7 | Tai Po | 4e89b10d6c25bf8636514f83 | China House (家傳滬曉) | 4.0 | 6.2 | 5.0 | 22.45007, 114.16877 | 22.45007 | 114.16877 |
| 8 | Tai Po | 4bf0eb5fb315c9b6c97f93ff | Kwan Kee (群記清湯腩) | 7.0 | 6.1 | 11.0 | 22.45007, 114.16877 | 22.45007 | 114.16877 |
| 9 | Yung Shue Wan | 4bc307e84cdfc9b613be9621 | Lung Kong Restaurant (龍江川粵菜館) | 6.0 | 5.8 | 10.0 | 22.22623, 114.11241 | 22.22623 | 114.11241 |
| 10 | Yung Shue Wan | 4d4007211bd2a143b884ee7c | 蔡記小食 | 4.0 | 5.8 | 5.0 | 22.22623, 114.11241 | 22.22623 | 114.11241 |
| 11 | Ngong Ping | 4c1b0402eac020a1f74744c2 | Ngong Ping Garden Restaurant (昂坪膳坊) | 22.0 | 5.9 | 8.0 | 22.25556, 113.90391 | 22.25556 | 113.90391 |
| 12 | Tai O | 4cba94d4f50e224b6fecf4fb | Fook Moon Lam Restaurant 福滿林酒樓 | 4.0 | 5.8 | 2.0 | 22.25515, 113.86309 | 22.25515 | 113.86309 |

Figure 4. The merged table in Python with the information of geographical coordinates and information of restaurants from Foursquares.

The blue dots are the districts with the average rating label. The users can easily check out the rating of different districts if they would like to visit specific districts.
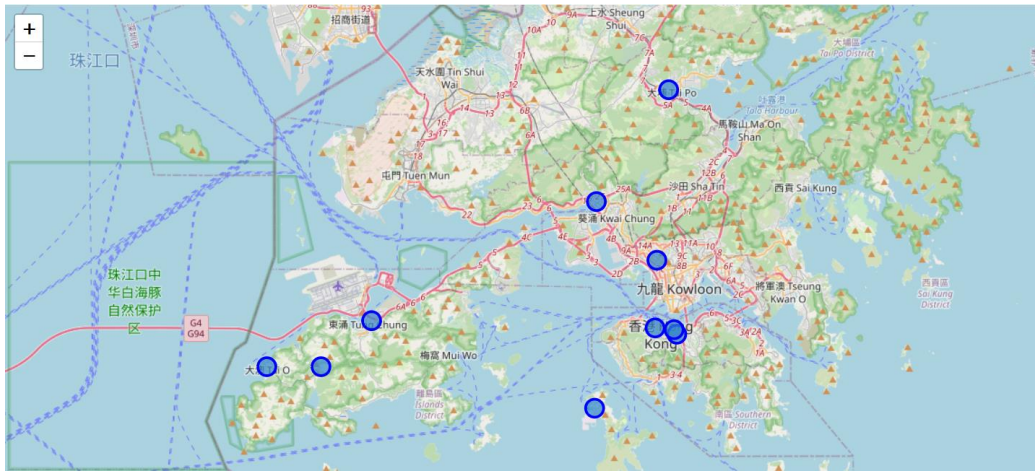
Figure 5. The interactive map with the dots showing the name and average rating of Chinese restaurants in Hong Kong districts.

## 4. Discussion and Limitation

### 4.1 Discussion

In Hong Kong, Central and Wan Chai has relative high rate chinese restaurants in average. Duddell's (都爹利會館) and One Harbour Road (港灣壹號) obtains the highest number of likes and rating among the restaurants in Hong Kong, according to the database of Foursquares.

To summarize, it would be great to have a visit to Central and Wanchai for good Chinese restaurants.

As an investor, it would be a bit risky and competitive to start a Chinese restaurants in Central and Wan Chai without any experience. To have the best shot of success, it is suggested to open a Chinese restaurant in Tsuen Wan or Sham Shui Po. These districts have neighborhoods with average ratings exceeding 6.0 and less chinese restaurants than Central and Wanchai, making competition easier.

### 4.2 Limitation

The above analysis is based on the limited resources and data from Foursquares, which is not fully explaining the distribution and performance of restaurants in Hong Kong. The accuracy of data from Foursquares would determine the value of this analysis. It is recommended to have a comprehensive research and analysis with more data from external databases.

## 5. Conclusion

In this project, we have studied the geographical coordinates of Hong Kong districts and link them up with the venue details supported by Foursquares. It is suggested that Central and Wan Chai are the two districts with highest average rating Chinese restaurants in Hong Kong. According to the fundamental analysis, it is recommended to start a Chinese restaurant in Tsuen Wan or Sham Shui Po if the investor would like to have the less competitors and relative fine rating restaurants in the certain districts. More information should be explored and investigated before making any judgement. And this report doesn't suggest anyone to make investment based on the analysis above.