

# The Battle of Neighborhoods

- INITIAL REPORT – June 2020

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## 1. Introduction

This project aims to utilize all Data Science Concepts learned in the IBM Data Science Professional Course. We define a Business Problem, the data that will be utilized, and using that data, we can analyze it using Machine Learning tools.

This final project explores the best locations for Chinese restaurants throughout the city of New York. New York is a major metropolitan area with more than 8.4 million (Quick Facts, 2018) people living within city limits.

Chinese immigration in the United States has a long and fraught history. Throughout the first half of the 19th century, Chinese manual laborers (predominately men) migrated to the West Coast, where they found employment in agriculture, mining, railroad construction, and other low-skilled jobs. The number of immigrants from China residing in the United States nearly doubled from 1980 to 1990, and again by 2000. Since then the population continued growing but at a slower pace.

The Chinese American population of the New York City metropolitan area was an estimated 893,697 as of 2017. New York City itself contains by far the highest ethnic Chinese population of any individual city outside Asia, estimated at 628,763 as of 2017 [ [United States Census Bureau](#) ].

This report explores which neighborhoods and boroughs of New York City have the most as well as the best Chinese restaurants.

## 2. Problem Statement

- What is / are the best location(s) for Chinese cuisine in New York City?
- In what Neighborhood and/or borough should I open a Chinese restaurant to have the best chance of being successful?
- Where would I go in New York City to have the best Chinese food?

### 3. Data

In order to answer the above questions, data on New York City neighborhoods, boroughs to include boundaries, latitude, longitude, restaurants, and restaurant ratings and tips are required.

For this project the Foursquare API will be used. All data related to locations and quality of Chinese restaurants will be obtained via the FourSquare API

New York City data containing the neighborhoods and boroughs, latitudes, and longitudes will be obtained from the data source: [https://cocl.us/new\\_york\\_dataset](https://cocl.us/new_york_dataset)

New York City data containing neighborhood boundaries will be obtained from the data source: <https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tqmj-i8zm>