

IBM Applied Data Science Capstone Project

Opening a new Chinese food restaurant in the Los Angeles metropolitan area

Lin Zhu

10/28/2020

Introduction

The Los Angeles metropolitan area is the second-largest metropolitan area in the United States and is known for its ethnic diversity. Ethnic diversity also brings food diversity, especially for Chinese food. No matter American Chinese cuisine, or fast Chinese food like Panda Express, or different types of Chinese cuisine, Chinese restaurants have sprung up in this city. Chinese restaurants are mainly concentrated in areas where Chinese people gather. They are very popular with locals and tourists. Investors are also taking advantage of this trend to open more Chinese restaurants to cater to the demand.

Business problem

Now seems like the market is almost saturated. Consider the population is scattered in different parts of the Los Angeles metropolitan area. The main objective is to find a suitable location for opening a Chinese restaurant in the Los Angeles metropolitan area. There are many varieties of Chinese cuisine, such as Cantonese cuisine is sweeter, Sichuan cuisine is spicy. People who live in different areas will have different preferences. So we can take advantage of this to find possible opportunities. This project will take advantage of Foursquare data, to answer the question that, can we find an ideal spot and also recommend types of Chinese cuisine that could maximize profits to Chinese restaurant investor?

Data

The data I will use in this project include:

- List of cities in the Los Angeles metropolitan area. This define the scope of this project which is confined to the Los Angeles metropolitan area. The link to this information is: https://en.wikipedia.org/wiki/Los_Angeles_metropolitan_area#Urban_areas_of_the_region
- Geographic information of those city (latitude and longitude)
- Venue data from Foursquare. Those data will be used to perform clustering and find the ideal spot for the new Chinese restaurant

