

Data Science Capstone

Yohanes Kurniawan 1/4/2021

### OUTLINE



- Executive Summary
- Introduction
- Methodology
- Results
  - Visualization Charts
  - Dashboard
- Discussion
  - Findings & Implications
- Conclusion
- Appendix

### EXECUTIVE SUMMARY



- Possible Destination:
  - New York, NY
  - Los Angeles, CA
  - Chicago, IL
  - Houston, TX
  - Phoenix, AZ
- We conclude for a traveler to enjoy the most Asian restaurants that New York is the best place to visit. Also, we would recommend that our traveler book a hotel close to the mean coordinate.

#### INTRODUCTION



- Let's say you were planning a road trip around the United States and want to get the best Asian foods. You would plan to visit the places with the highest density of Asian restaurants.
- The problem we want to solve is to analyze Asian restaurants locations in the major cities and find the best place to enjoy Asian foods. Our target audiences are people who love Asian foods and are planning a trip around it.

### Data Section



• I will be using the FourSquare API to collect data about Asian Restaurants in 5 major US cities: New York, Los Angeles, Chicago, Houston, Phoenix. These are large and diverse cities, and I hope that they would also have the best Asian restaurants in United States.

### METHODOLOGY



- My main target here is to asses which city would have the highest Asian restaurant density.
- I used the Four Square API through the venues channel. I used the near query to get venues in the cities.
- Also, I use the CategoryID to set it to show only Asian restaurant. Asian Restaurant CaregoryID:
  4bf58dd8d48988d142941735

### METHODOLOGY



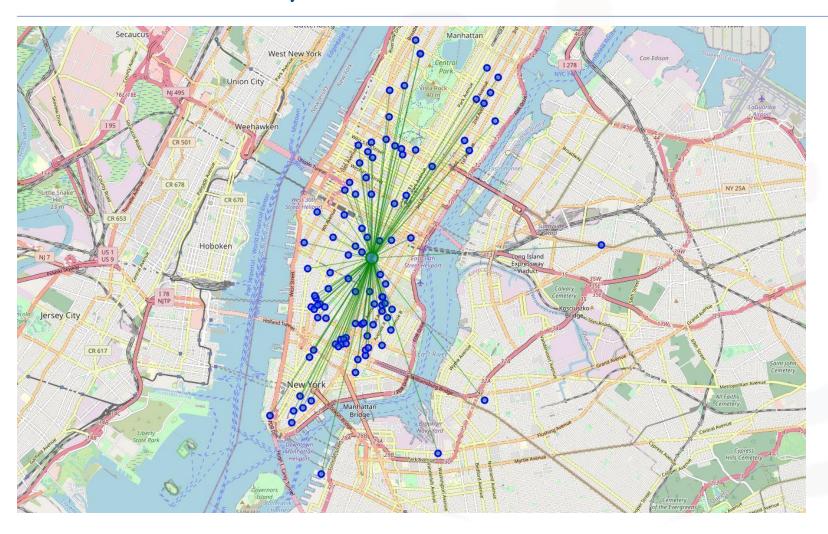
- I repeated this request for the 5 studied cities and got their top 100 venues. I saved the name and coordinate data only from the result and plotted them on the map for visual inspection.
- Next, to get an indicator of the density of Asian Restaurants, I calculated a center coordinate of the venues to get the mean longitude and latitude values.
- Then I calculated the mean of the Euclidean distance from each venue to the mean coordinates. That was my indicator; mean distance to the mean coordinate.

### Results

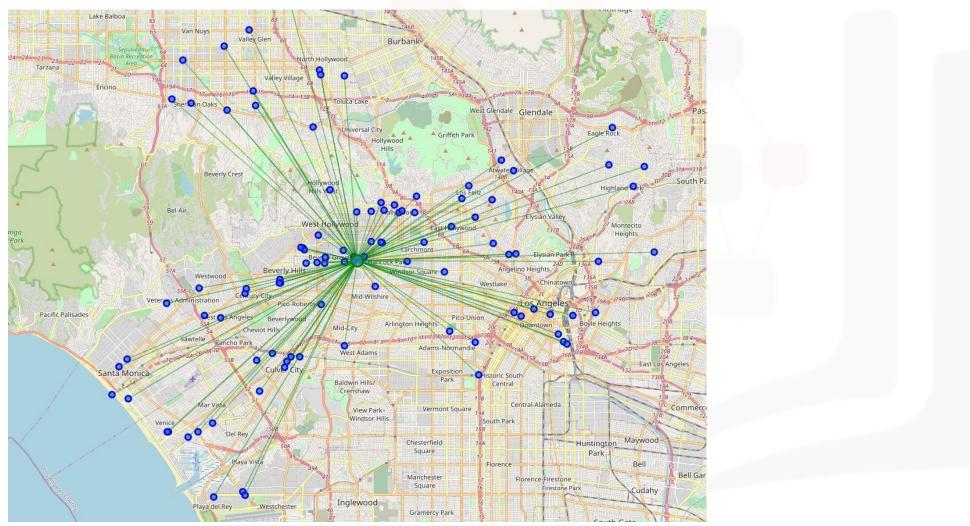


- Total number of Asian Restaurant in New York, NY = 277
- Total number of Asian Restaurant in Los Angeles, CA = 237
- Total number of Asian Restaurant in Chicago, IL = 217
- Total number of Asian Restaurant in Houston, TX = 197
- Total number of Asian Restaurant in Phoenix, AZ = 182

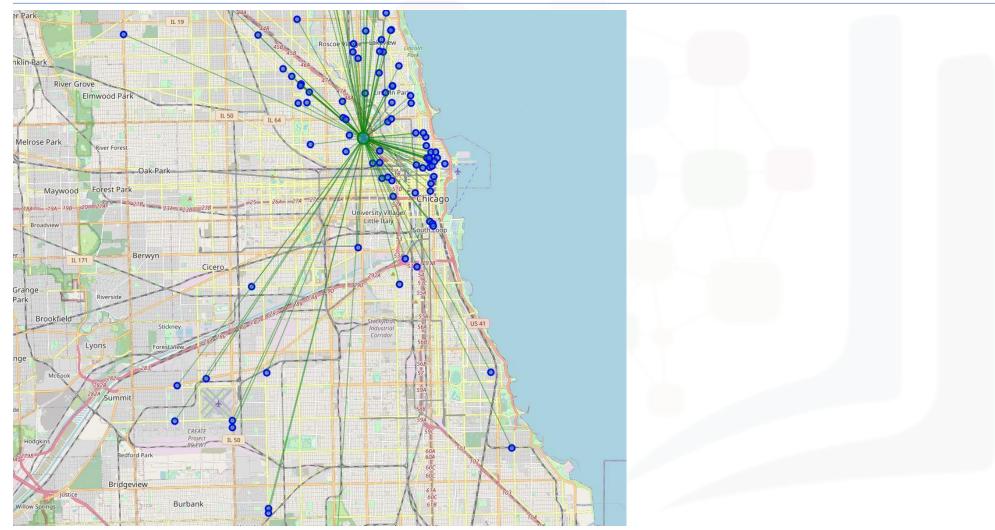
## New York, NY



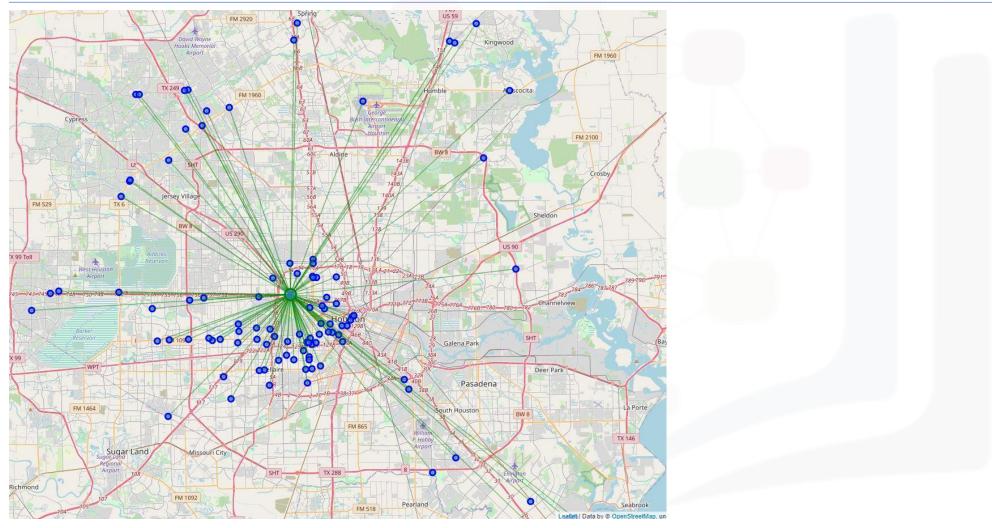
## Los Angeles, CA



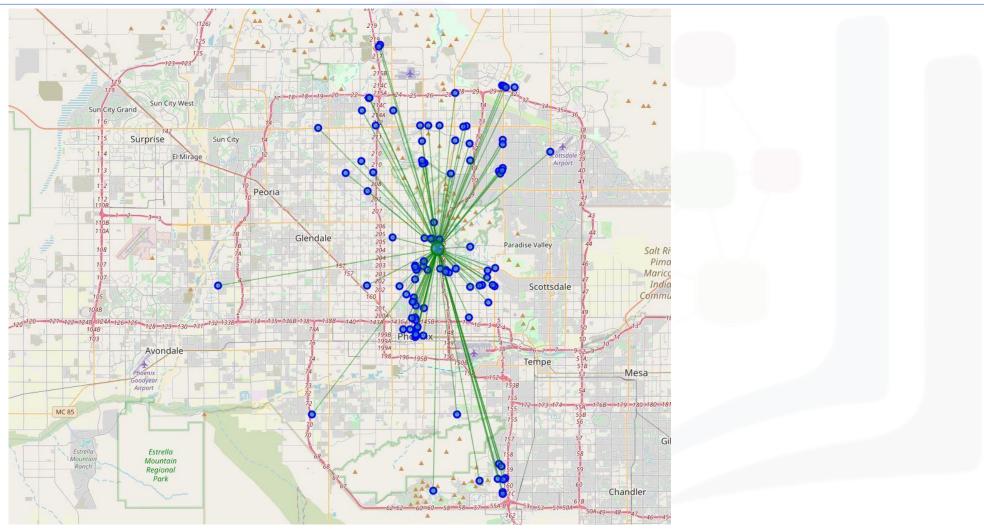
# Chicago, IL



### Houston, TX



## Phoenix, AZ



#### DISCUSSION



• Looking at the results of the analysis, New York came out first in terms of the numbers and Density of Asian Restaurants in United States. This makes sense considering its population and diversity.

#### CONCLUSION



• We conclude for a traveler to enjoy the most Asian restaurants that New York is the best place to visit. Also, we would recommend that our traveler book a hotel close to the mean coordinate.