**Where to Go When You Want to Eat Chinese ?**

*Data Science Capstone - IBM Data Science Professional Certificate on Coursera – Battle of the Neighborhoods – Week 1*

**Introduction**

I am a fan of Chinese food, in my country unfortunately we only had experience in Taiwanese cuisine, so I want to have a cuisine tourism, focused on mainly on the east coast. The reason of my selection is that on the west coast the influx of Chinese immigrants made impossible to me to visit venues on that area (cities like Los Angeles are terribly busy for my taste!!). So, let us say you have never been to the US and you want to visit as many Chinese venues on that coast while I am there. So I want to go to a place with a high density of Chinese places around you. The problem we aim to solve is to analyze the Chinese stores’ locations in the major US cities and find the best place for myself and my family. My main goal is having tourism in those big cities while enjoying h a taste of Chinese American cuisine.

**Data section**

I will use the FourSquare API to collect data about locations of Chinese stores in 4 major US cities which are:

* New York,NY
* New Jersey City, NJ
* Boston, MA and
* Chicago,IL.

These are one of the most populated US cities and I am hopeful that they will contain the best Pizza places in the US.

**Methodology**

My main objective here is to assess which city would have the highest Chinese store density. I used the FourSquare API through the venues channel. I used the near query to get venues in the cities. Chinese Restaurants ID 4bf58dd8d48988d145941735

Also, I use the CategoryID to set it to show only Chinese Places. An Example of my requests:

https://api.foursquare.com/v2/venues/explore?&client\_id=&client\_secret=&v=20201111&New York, NY&limit=100&categoryId=4bf58dd8d48988d145941735

That 4bf58dd8d48988d145941735 is the Id of the Chinese Place Category. Also, Foursquare limits us to maximum of 100 venues per query.

Moreover, 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 Chinese Places, 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.