



Capstone Project The Battle of Neighborhoods



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Background & Problem Description



- ▶ New York City is one of the most diverse and populated cities in the world. It is a melting pot of different cultures and cuisines from around the world. It is also considering a foodie heaven because there are so many options. That means that there are a lot of options to choose from and that selecting the best place can be tough. It should be important to know which places are the best depending upon the neighborhood you are in. This project will help to understand the diversity of a neighborhood by leveraging venue data from Four square's 'Place API' and 'k-means' clustering machine learning algorithm. The audience would be anyone that is interested to use this analysis to understand the distribution of different cultures and cuisines in New York City.

Data Preparation

These are the Data Sources Used for this Analysis:

- ▶ **New York Data Set:** https://geo.nyu.edu/catalog/nyu_2451_34572

The data set will be our base neighborhood data set to cross reference against the Foursquare API venue data

- ▶ **Foursquare API:** to get the most common venues of given Borough of New York City and to get the venues' record of given venues of New York City.
- ▶ **Geophy** Library in Python: this will help us get the Lat and Long of the NYC data set