Week 1

**Introduction**

With on-going COVID-19 shutdowns and people increasingly working from home, there is significantly less demand for downtown restaurants now than before the pandemic. Restauranteurs are increasingly looking to start food trucks or move their restaurants to new locations.

The goal of this capstone project is to identify suburbs around Pittsburgh, PA that are the best choice to move restaurants to (or set up food trucks at). The best suburbs will include those with top venues being other restaurants, showing high demand in that area. The best suburbs will be clustered together to give a list of target areas to restauranteurs.

This will be a case study for a Chinese restaurant where they will want the number of restaurants in a neighborhood to be high (as a signal for demand), but with Chinese restaurants outside the top 10 business in that neighborhood in order to avoid an oversaturated market.

**Data**

Two data sources will be used for this project. The first will be pulling a list of zip codes in Allegheny County (where Pittsburgh resides), likely from zipdatamaps.com/allegheny-pa-county-zipcodes. This data will be scrubbed to remove zip codes with “Pittsburgh” in the name to refine the list of new restaurant locations to the suburbs.

The other data source will be Foursquare API data to determine top businesses and neighborhood similarities. This data will be analyzed to make clusters that have high restaurant volumes (signaling demand) and will be further analyzed to ensure recommended suburbs do not already have a high volume of Chinese restaurants.

Week 2

**Methodology**

[represents the main component of the report where you discuss and describe any exploratory data analysis that you did, any inferential statistical testing that you performed, if any, and what machine learnings were used and why]

**Results**

[discuss the results]

**Discussion**

[discuss any observations you noted and any recommendations you can make based on the results

**Conclusion**

[conclude the report]