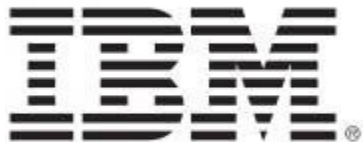# PRESENTATION on
Exploring & Profiling Adjacent Neighborhoods

Coursera Capstone Project for

IBM Data Science Specialization

BANU PRATHAP S N

PRESENTATION _ EXECUTIVE SUMMARY

Problem Overview
Use data from Google and Foursquare to feed and clustering algorithm which will reveal the profile and outline of an area around a point of interest.

Data Overview
From the Google Geocode API we will get the coordinate of the points on the virtual grid, and from the Foursquare API we will retrieve all the venues with their types in these places.

Methodology Overview
Find the coordinate of the central point, generate the grid of the surrounding areas, ask Foursquare to get the venues, convert the counters into percentages for each neighborhood and use a clustering algorithm to group together the similar areas.

Results
The clustering algorithm grouped together the majority of the neighborhoods and separated 4 single neighborhoods which seemed to be substantially different from the common ones.

Discussion
The methodology might need some amendments to adjust to specific setups. The parameters that can be manipulated are the central point, the size of the grid, the distance between the points and the number of clusters.

Conclusion
The clustering algorithm seems to provide some useful insights and helps in understanding the profile of the neighborhoods around the central point.