



BATTLE OF NEIGHBOURHOOD

COURSERA CAPSTONE PROJECT



VENUE RECOMMENDATION FOR UNITED STATES OF AMERICA VISITOR'S

INTRODUCTION

The intention on this project is to collect and provide a data driven recommendation that provides a alternative to statistical data. recommendations.



DATA DESCRIPTION

- • **Data Requirements for this project:**
 - • Neighborhood Information (i.e. name, coordinates, populations).
 - • Venue information (i.e. name, category, coordinates)
- • **Data Sources for this project:**
 - • Zillow Home
 - • Foursquare.com
- • **Data Processing for this project:**
 - • Data cleaning is required
 - • Data needs to be in a structured format



CO	Food Trucks	9	9
CA	Coffee Shops	9	9
As, FL	Italian Restaurants	9	9
ing, CA	Coffee Shops	9	9
ucson, AZ	Mexican Restaurants	9	9
age City, KS	Mexican Restaurants	8	8

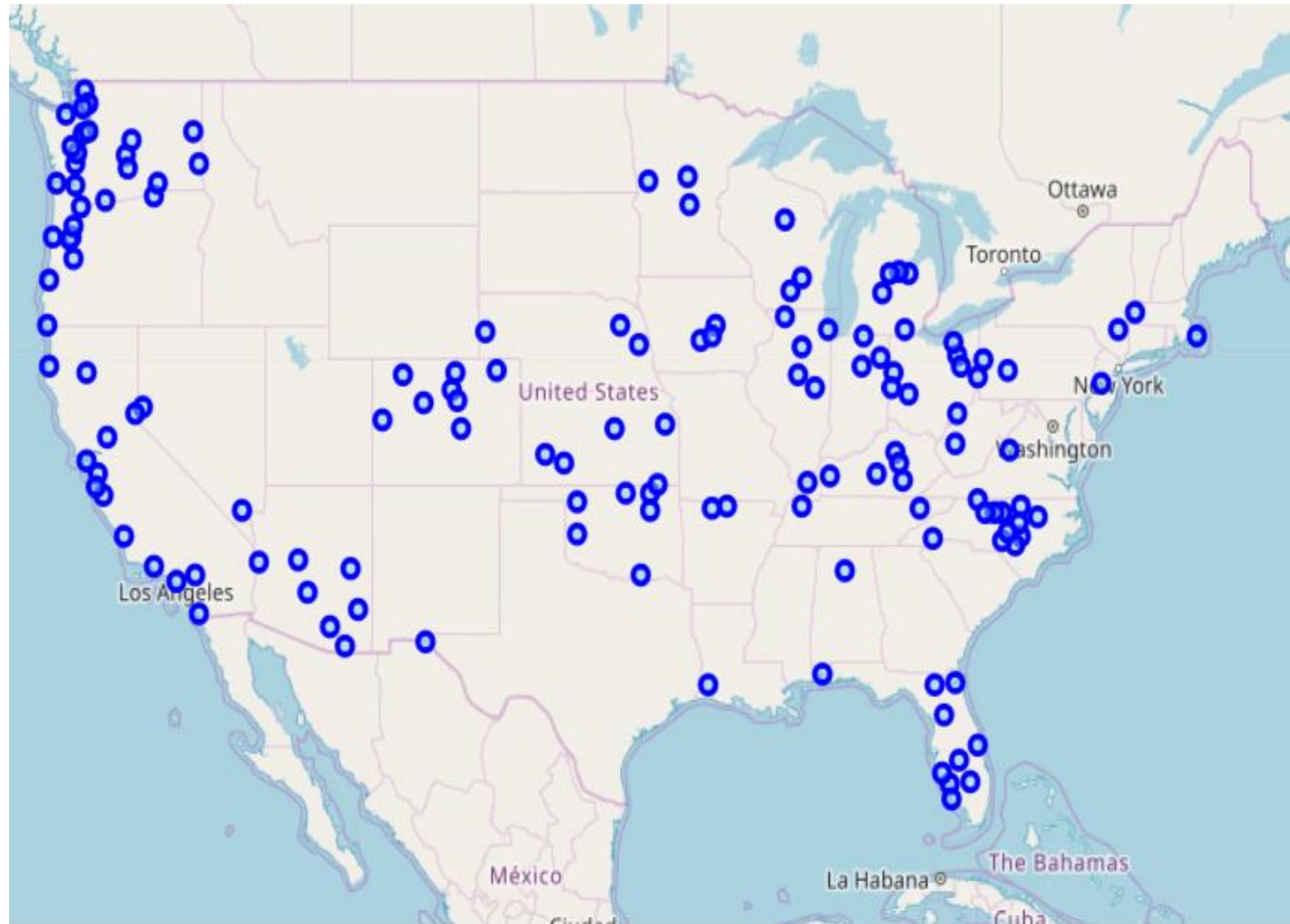
METHODOLOGY

Data Cleanup and re-grouping

- Drop/Ignore cells with missing data
- Use most current data
- Fix data types

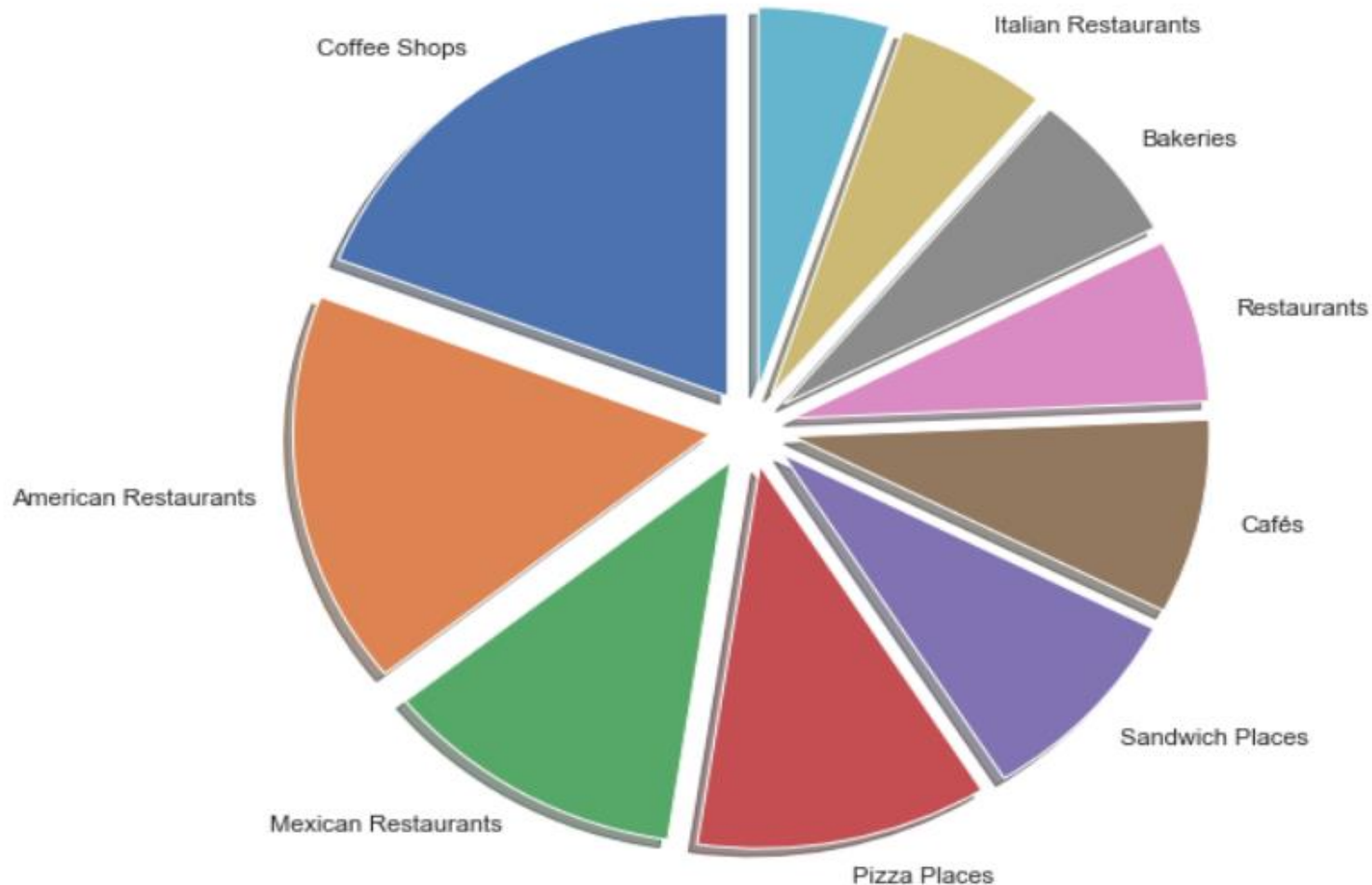
Segmenting and Clustering

- Using FourSquare to get nearby venues by different categories and
- Using K-means to cluster neighbour



RESULT

Top 10 Recommended Venue in Food Category Type
Ice Cream Shops



CLUSTERING AND SEGMENTING

Clustering Similar Neighbourhoods

Grouping Based on common venues

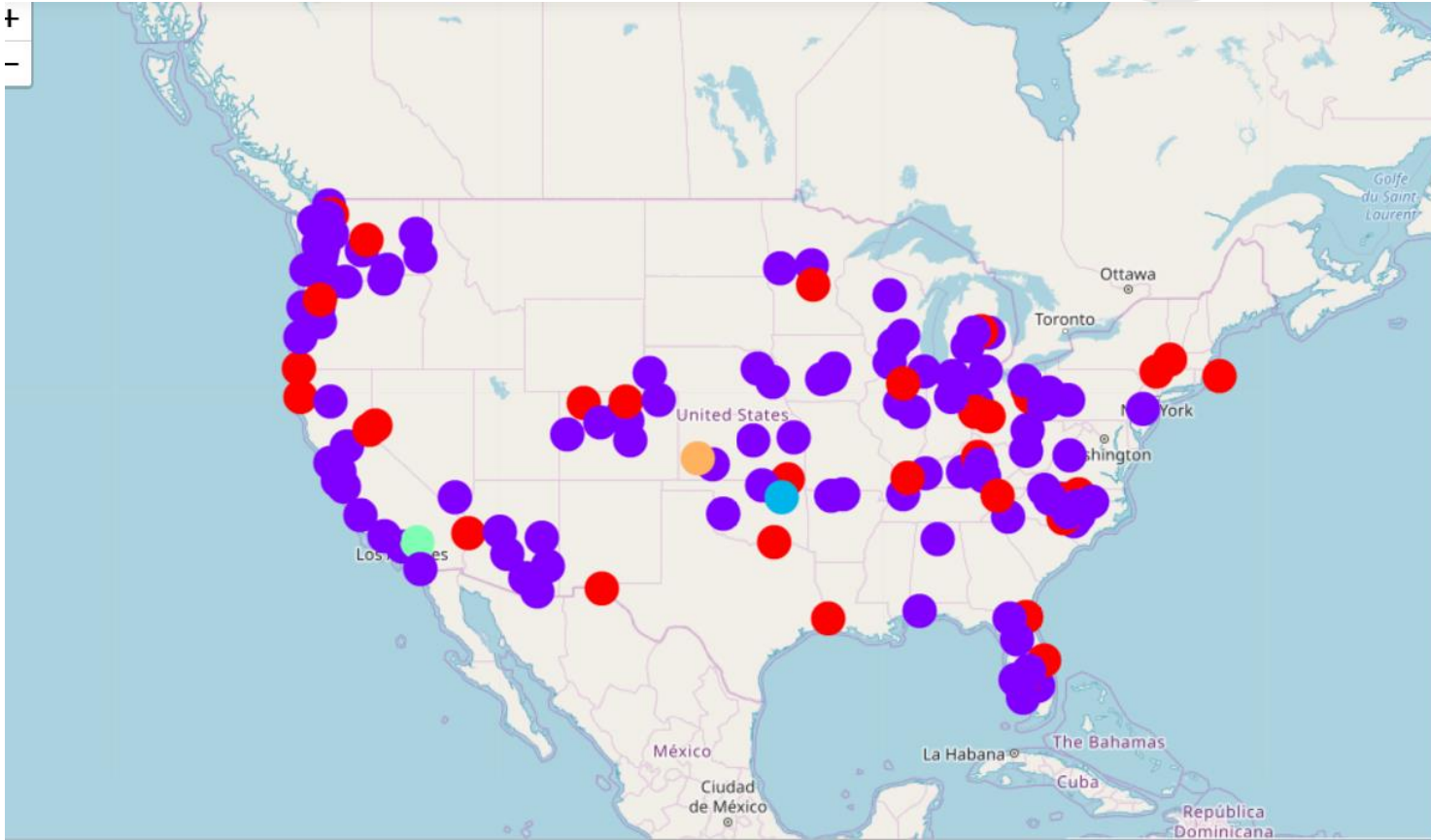
Grouping based on food venues

Grouping based on Outdoors and Recreation

GROUPING CITY AND FOOD VENUE BASED ON SCORE

Out[74]:

		Town Latitude	Town Longitude	VenueID	VenueName	score	catID	latitude	longitude
Town	category								
Portland, OR	Coffee Shops	16	16	16	16	16	16	16	16
Seattle, WA	Coffee Shops	15	15	15	15	15	15	15	15
Salinas, CA	Mexican Restaurants	10	10	10	10	10	10	10	10
El Paso, TX	Mexican Restaurants	10	10	10	10	10	10	10	10
Las Vegas, NV	American Restaurants	9	9	9	9	9	9	9	9
Edwards, CO	American Restaurants	9	9	9	9	9	9	9	9
Fort Collins, CO	Food Trucks	9	9	9	9	9	9	9	9
Santa Cruz, CA	Coffee Shops	9	9	9	9	9	9	9	9
Naples, FL	Italian Restaurants	9	9	9	9	9	9	9	9
Redding, CA	Coffee Shops	9	9	9	9	9	9	9	9
Tucson, AZ	Mexican Restaurants	9	9	9	9	9	9	9	9
Dodge City, KS	Mexican Restaurants	8	8	8	8	8	8	8	8
Tulsa, OK	American Restaurants	8	8	8	8	8	8	8	8
Des Moines, IA	Coffee Shops	8	8	8	8	8	8	8	8
		-	-	-	-	-	-	-	-



DISCUSSION

- Portland and Seattle Coffee shops have higher ratings and are most frequently visited compared to major cities
- Most common Food Venues are Coffee Shops, Mexican Restaurant and Pizza places
- Pizza places, American Restaurants and Italian Restaurants are most frequently visited



THANK YOU

