

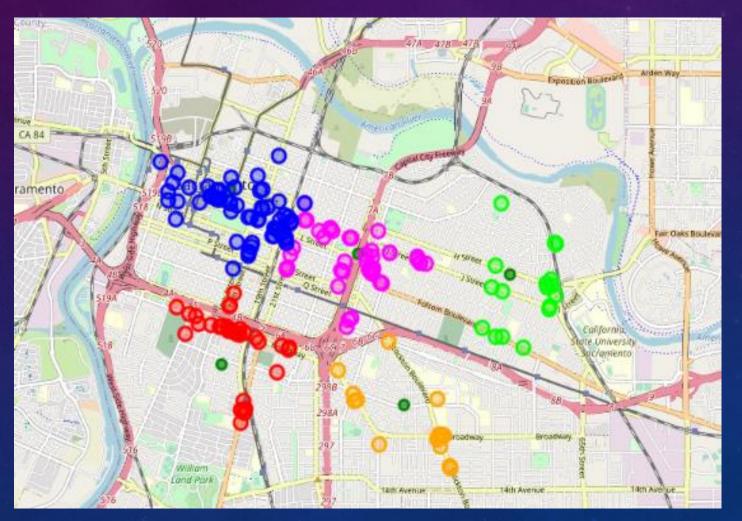
# QUESTIONS WE WANT TO SOLVE

- What are the most common types of restaurants?
- What areas have more restaurants in them?
- What are proven good areas to have Mexican restaurants?

## DATA ACQUISITION AND CLEANING

Zip Code Data from (<a href="https://public.opendatasoft.com/explore/dataset/us-zip-code-latitude-and-longitude/table/">https://public.opendatasoft.com/explore/dataset/us-zip-code-latitude-and-longitude/table/</a>)

## FOURSQUARE API RESTAURANT DATA AROUND ZIPCODES

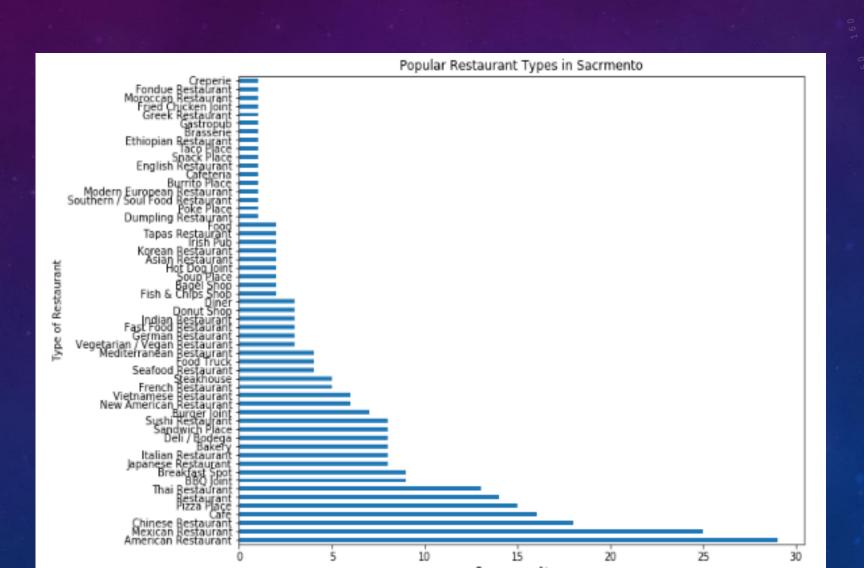


- Green dots are each zip code
- Colored dots around each green dot are the restaurants

# VERTICAL BAR CHART OF THE NUMBER OF RESTAURANTS PER ZIP CODE



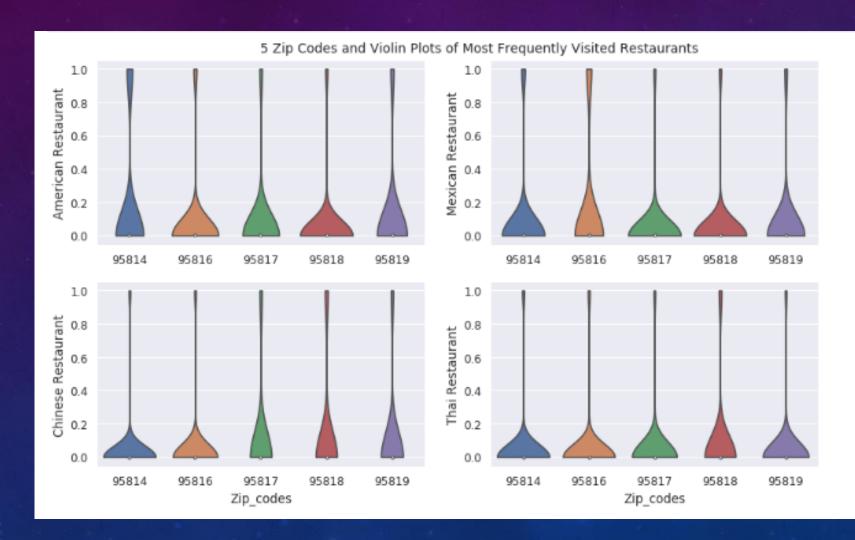
#### POPULAR RESTAURANTS IN SACRAMENTO



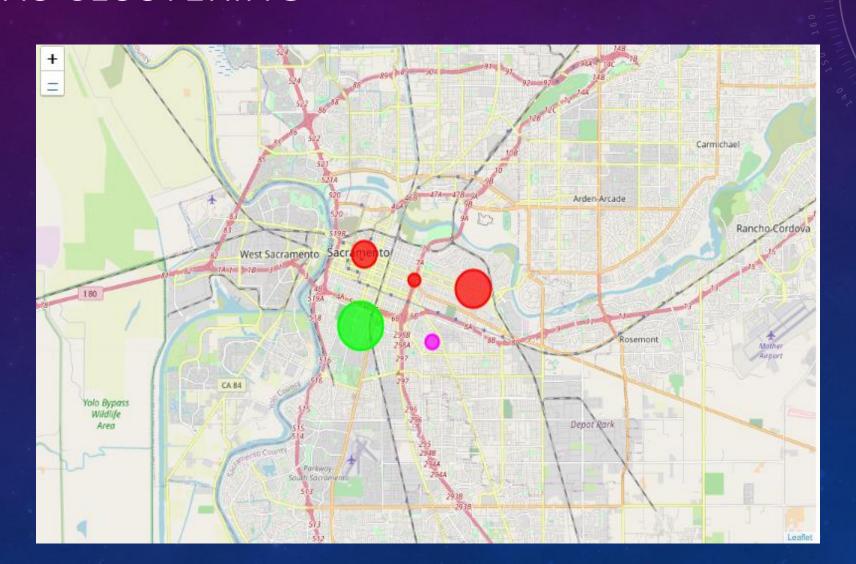
## THE TOP 10 MOST COMMON VENUES FOR EACH ZIP CODE

Zip_codes		1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
1	95814	American Restaurant	Mexican Restaurant	Café	Deli / Bodega	Italian Restaurant	Thai Restaurant	Pizza Place	BBQ Joint	Sushi Restaurant	Steakhouse
2	95816	Mexican Restaurant	American Restaurant	Breakfast Spot	Café	Sandwich Place	Pizza Place	Thai Restaurant	BBQ Joint	Burger Joint	Chinese Restaurant
3	95817	Chinese Restaurant	Restaurant	Steakhouse	Vegetarian / Vegan Restaurant	Food Truck	American Restaurant	Bakery	BBQ Joint	Cafeteria	Café
4	95818	Chinese Restaurant	Restaurant	Thai Restaurant	Pizza Place	Vietnamese Restaurant	Breakfast Spot	Asian Restaurant	Bakery	Japanese Restaurant	Mexican Restaurant
5	95819	American Restaurant	Pizza Place	Chinese Restaurant	Café	Restaurant	Mexican Restaurant	Taco Place	Fish & Chips Shop	Food Truck	French Restaurant

## VIOLIN PLOTS OF CERTAIN TYPES OF RESTAURANTS



# K-MEANS CLUSTERING



## CONCLUSION

- Built useful models to predict whether and how much a player will improve.
- Accuracy of the models has room for improvement.
- Foursquare improving type of restaurant data