# APPLIED DATA SCIENCE CAPSTONE THE BATTLE OF NEIGHBORHOOD

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#### **INTRODUCTION: Business Problem**

Austin is the capital city of the U.S. state of Texas and the seat of Travis County, with portions extending into Hays and Williamson counties. Austin, the southernmost state capital of the contiguous 48 states, is located in Central Texas. Austin is 146 miles (230 km) northwest of Houston,182 miles (290 km) south of Dallas and 74 miles (120 km) northeast of San Antonio.

In Austin, there are an incredible variety of international cuisines and some of the most talented chefs in the world. Austin's thriving economy, multicultural demographic, access to ingredients, and great seasonal produce makes it an ideal place for restaurants to flourish.

The objective of this project is to identify the list of Indian restaurants in Austin, TX area and visualize the data for understanding easily. There are variety of both north indian and south indian restaurants are available in Austin area.

#### **DATA**

The following data sources will be needed to extract/generate the required information: -

- a. Google maps
- b. Austin Eater(<a href="https://austin.eater.com/maps/best-indian-restaurants-austin-south-asian">https://austin.eater.com/maps/best-indian-restaurants-austin-south-asian</a>)
- c. Foursquare API(<a href="https://foursquare.com/top-places/austin/best-indian-restaurants">https://foursquare.com/top-places/austin/best-indian-restaurants</a>)

I this project, I have used Foursquare API to fetch and organize data

#### **METHODOLOGY:**

A list of all Indian Restaurants in Austin is obtained by scraping the corresponding webpage specified in the Data section. Using GeoPy Nominatim geolocator, the neighborhood coordinates are obtained. Also, folium map is created.

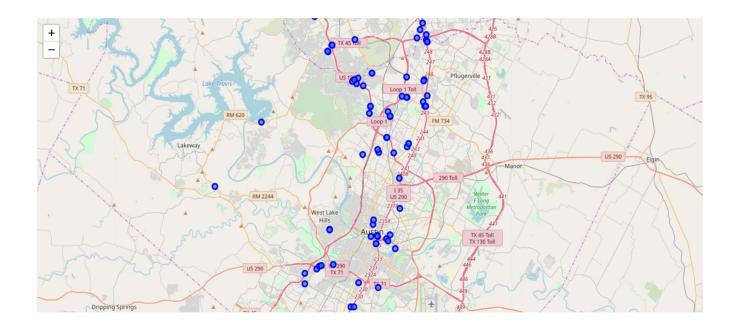
### **RESULTS:**

	ID	N	ame	Ca	ategory	Zip	Latitude	Longitude
0	4283ee00f964a520b8221fe3	The Cla	y Pit	Indian Res	staurant	78701	30.279001	-97.742453
1	4fba7fefe4b05dd0d72db3eb	Tarka Indian Kito	hen	Indian Res	staurant	78757	30.357091	-97.735322
2	4ab192a5f964a5200c6a20e3	Tarka Indian Kito	hen	Indian Res	staurant	78745	30.231031	-97.817509
3	4f1344c8e4b03856f23b5e8b	Asiana Indian Cui	sine	Indian Res	staurant	78745	30.190519	-97.772478
4	4b1219b8f964a5200e8923e3	G'Raj Mahal (	Cafe	Indian Res	staurant	78701	30.258324	-97.738793
5	51678475e4b033680b2b9c30	Teji's Indian Restau	ırant	Indian Res	staurant	78705	30.283947	-97.742057
6	5565fe94498e38737acbb7c4	Saffron Indian & Nepalese Cui	sine	Indian Res	staurant	78731	30.354800	-97.756009
7	49ce2f24f964a5201c5a1fe3	Bombay Exp	ress	Indian Res	staurant	78753	30.411125	-97.676020
8	440ec935f964a520a0301fe3	Star Of I	ndia	Indian Res	staurant	78757	30.359569	-97.736675
9	4b3bf6c6f964a5205a7f25e3	Teji's Indian Restau	ırant	Indian Res	staurant	78681	30.510775	-97.694479
10	4513f1adf964a520c9391fe3	Bombay Bistro - Research	Blvd	Indian Res	staurant	78759	30.398904	-97.747320
11	567ecc23498e44dfa1aabedb	Tarka Indian Kito	hen	Indian Res	staurant	78758	30.400802	-97.722877
78	57681095498e991e374da845	Evans BBQ - Indian & Pakistani	Indi	ian Restaurant				
79	5bbab304250cab002cb2f309	Jubilee Indo-Pak Restaurant	Indi	ian Restaurant	78259	29.636059	-98.452418	
80	5ad39eddc47cf95978575569	East Buffet	Indian Chine	ese Restaurant	78744	30.190350	-97.768070	
81	54387cc1498e918b44b83d7c	Nala's, The Culinary Expert	South Indi	ian Restaurant	78613	30.531939	-97.779939	
82		Puli-Ra		ian Restaurant				
83		Bollywood Indian Grill		ian Restaurant				
84		Indian Food Truck Thursdays		ian Restaurant				
85		Bawarchi Biriyani Point		ian Restaurant				
86		Sangam Chettinad Indian Cuisne		ian Restaurant				
87		Godavari		ian Restaurant				
88		Biryani-N-Grill		ian Restaurant				
89		Salt N Pepper		ian Restaurant				
90	5607532a498e3a95ff3efb5a	Bombay to Kathmandu Kitchen	Indian Chine	ese Restaurant	78753	30.366632	-97.695473	

From the data frames above, it is observed that Austin has 90 Indian Restaurants around that area.

## **DISCUSSION:**

As I stated above, using folium I created a map with the venues which is showing the Indian Restaurants in Austin area as shown below.



# **CONCLUSION:**

The analysis brought the list of Indian Restaurants in Austin area using Foursquare API.