Where to start an Indian Restaurant in Silicon Valley, California.

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Introduction

- As every computer engineer dream land Silicon Valley, let's explore where to start an Indian restaurant by analyzing Indian population and Indian restaurants in the dream land.
- Major Silicon Valley cities are multi-cultural, we are going to analyze the situation in the following cities San Jose, Sunnyvale, Santa Clara, Mountain View, Palo Alto and Cupertino.
- There are 4 million people in Silicon Valley out of which around 6% people are Immigrants from India.

Introduction (Contd.)

- They are living far away from their native there is a high chance for them to miss their authentic native food.
- Let's think of it by investor, they expect to prefer a place where the Indians are more and Indian restaurants is less.
- When we consider all these problems, we can create a map and information chart where the Indian restaurants is less with respective to Indian population.

Target People

- Entrepreneurs who want to start a new business in Silicon Valley
- Established vendors who want to open a new chain of their Indian restaurant in Silicon Valley

Data Description

- To solve the above problem, we retrieved data from the source as listed below:
 - **geopy API** is used in this project to get the latitude and longitude coordinates of the respected cities.
 - Forsquare API is used to get the Indian restaurant venues around Silicon Valley.
 - Google Map, 'Search Nearby' option is used to get the center coordinates of each restaurants.
 - California population data is retrieved from zipatlas.com.

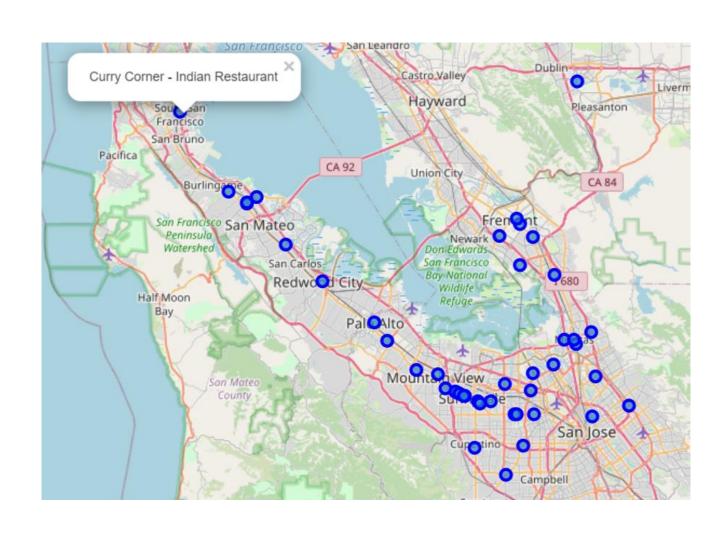
Methodology

- Restaurant data preparation Foursquare API
- Population data preparation Atlas.com
- Analyzing and Merging Restaurant and Population data
- Exploring and Clustering the Indian restaurants in Silicon Valley

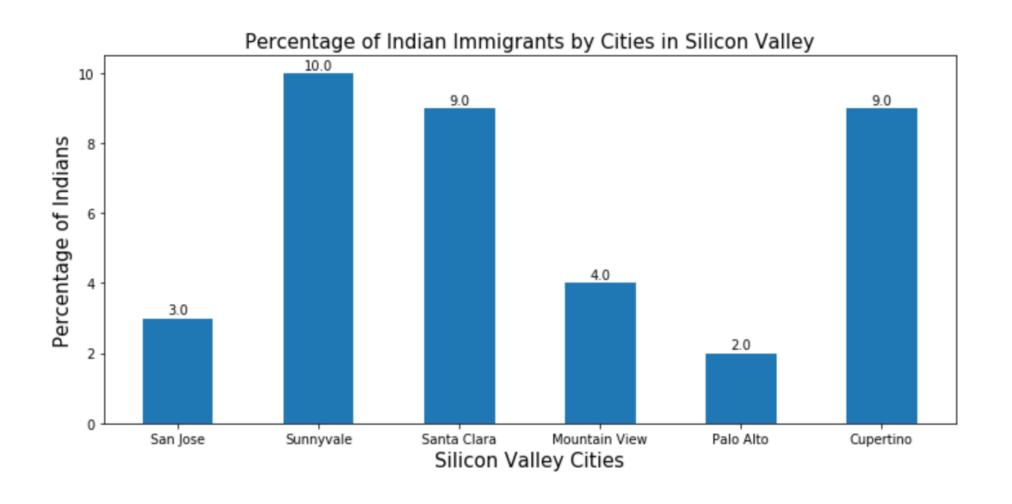
Restaurant Data

	name	categories	city	lat	Ing
0	Ettan	Indian Restaurant	Palo Alto	37.445351	-122.161423
1	Dosa Hut	Indian Restaurant	Fremont	37.544289	-121.975863
2	Puranpoli	Indian Restaurant	Santa Clara	37.376860	-121.961360
3	Avachi Biryani House	Indian Restaurant	Cupertino	37.319220	-122.033050
4	Coconut Hill Indian Foods	Indian Restaurant	Fremont	37.492994	-121.931690
5	Kasa Indian Eatery	Indian Restaurant	Redwood City	37.486640	-122.227670
6	Vishnuji Ki Rasoi	Indian Restaurant	Sunnyvale	37.365801	-122.028654
7	Palamuru Grill	South Indian Restaurant	Santa Clara	37.352790	-121.957810
8	Red Hot Chilli Pepper	Indian Chinese Restaurant	Fremont	37.503264	-121.976208
9	Urban Momos	Indian Chinese Restaurant	San Mateo	37.565662	-122.322770
10	Naan & Curry	North Indian Restaurant	San Jose	37.321388	-121.971973

Restaurant Data (Contd.)

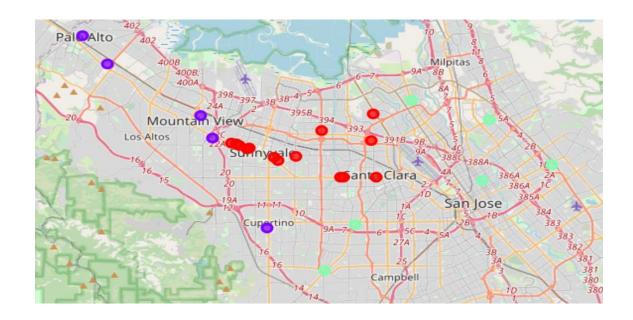


Population Data

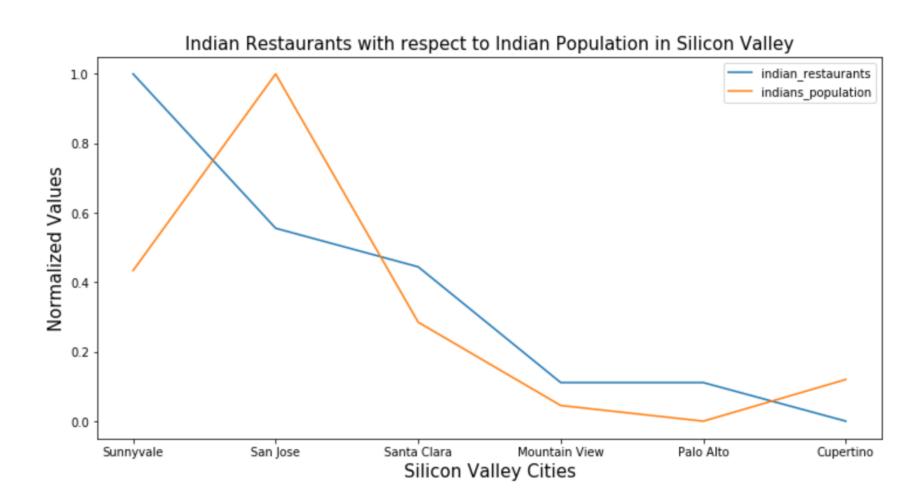


Clustered Dataset

 K-Means unsupervised learning is used to cluster the restaurant based on its type



Results



Discussion

Cities	#Restaurants	#Population	Ratio of Restaurant to Population
Sunnyvale	10	13102	1:1310
San Jose	6	27906	1:4651
Santa Clara	5	9209	1:1841
Mountain View	2	2937	1:1468
Palo Alto	2	1757	1:878
Cupertino	1	4897	1:4897

- San Jose or Cupertino will give better results as the ratio of population with respect to restaurants is very high.
- In future studies this project can be extended in two ways as follows,
 - In Silicon Valley, we can analyze the data for some other restaurants (Says Asian, Italian...)
 - We can pick another location (Says London, Canada) and find out the possibility of opening an Indian restaurant.

Conclusion

- As a result, people are turning to big cities to start a business or work.
 For this reason, people can achieve better outcomes through their access to the platforms where such information is provided.
- As already discussed, people love towards food will never fade away, they are always interested in trying out new varieties.
- Not only for Entrepreneurs and Established Vendors but also for People who are reading this report will come to know about some idea of Indian Restaurants in Silicon Valley.