

The Battle of Neighborhoods (Week 1)

Recommend a Neighborhood to Open an Indian Restaurant in San Jose, CA

Business Context and The Problem

San Jose is a large city surrounded by rolling hills and the largest city in Northern California. It is a multicultural and very diverse due to a large population of migrants from various parts of world. This has resulted in the establishment of various authentic ethnic restaurants in the city, ranging from Indian, Korean, Mexican, and Chinese, to Ethiopian.

In this project we will try to find an optimal neighborhood to open a restaurant in San Jose. Specifically, this report will be targeted to stakeholders interested in opening an **Indian restaurant in San Jose, CA**. Since there are lots of restaurants in San Jose, we will try to find **locations with less Indian cuisines**. We are also particularly interested in **neighborhoods known for restaurants but not with many Indian cuisines in vicinity**. We would also check the selected neighborhoods for any related Indian activities like Indian grocery shops, temples etc which probably help the Indian cuisine to do more business.

Data

The following data sources will be used in this project to do the relevant analysis:

1. Neighborhoods in San Jose
Wikipedia: https://en.wikipedia.org/wiki/Category:Neighborhoods_in_San_Jose,_California
2. Geocoder – Geocoder library and Nominatim API to determine the latitude and longitude for each of the neighborhoods
3. Location Data - Foursquare API will be leveraged to get the list of current restaurants and other most popular venues for each of those neighborhoods

Neighborhood Data

Fortunately, all the neighborhoods are listed in the Wikipedia in the link given in data section and we will directly take this list into python and create a dataframe for these neighborhoods.

Neighborhoods in San Jose, CA

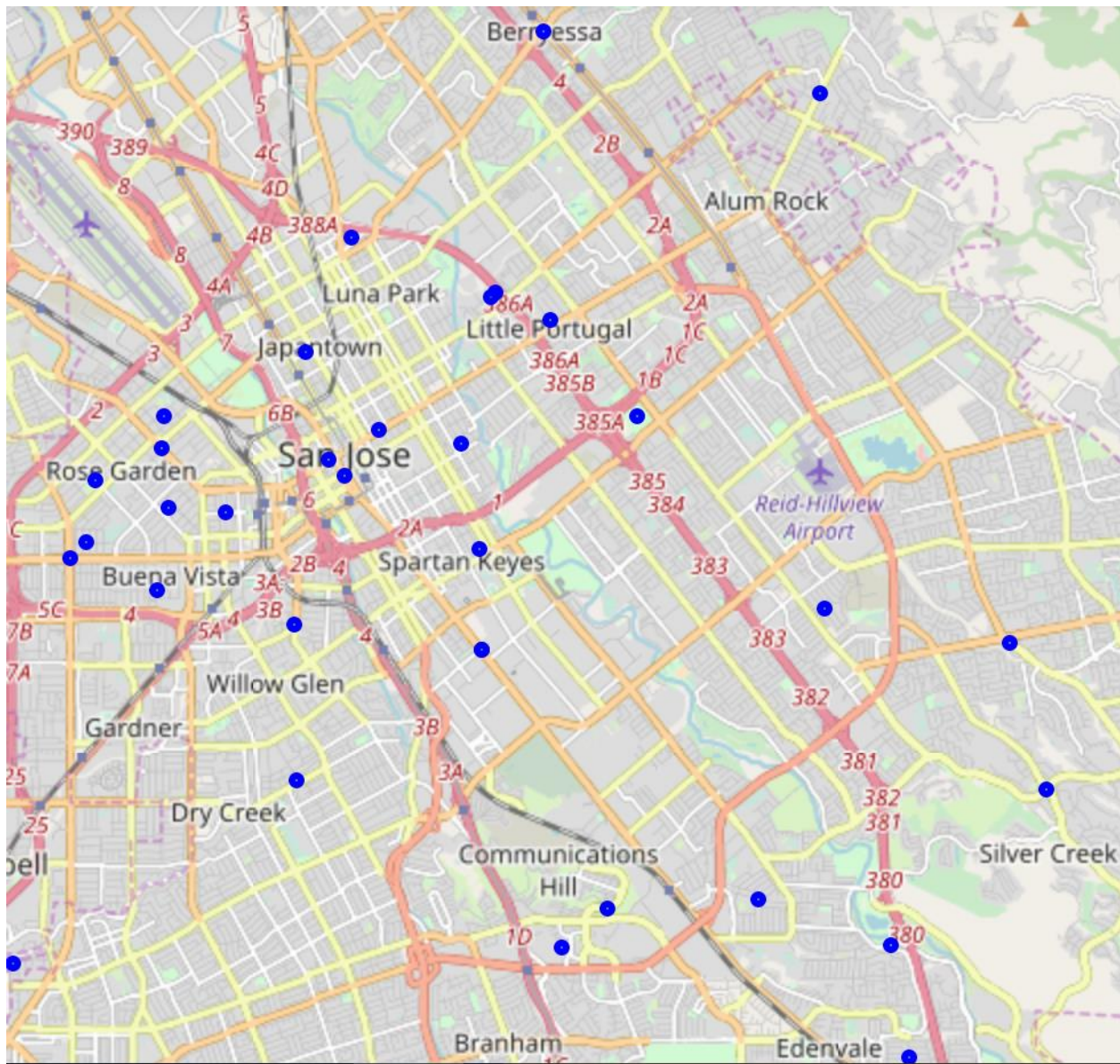
The Alameda	East San Jose	San Pedro Square
Almaden Valley	Edenvale	Santa Teresa
Alum Rock	Evergreen	Santana Row
Alviso	Japantown	Seven Trees
Berryessa	King and Story	College Park
Blossom Valley	Little Portugal	Shasta Hanchett Park
Buena Vista	Luna Park	Silver Creek Valley
Burbank	Meadowfair	SoFA District
Cambrian Park	Midtown San Jose	South San Jose
Chinatown	Naglee Park	Spartan Keyes

The Battle of Neighborhoods (Week 1)

Communications Hill	North San Jose	St. Leo
Coyote Valley	North San Jose Innovation District	West San Carlos
Downtown San Jose	Palm Haven	West San Jose
East Foothills	Rose Garden	Willow Glen

Geocoder Data

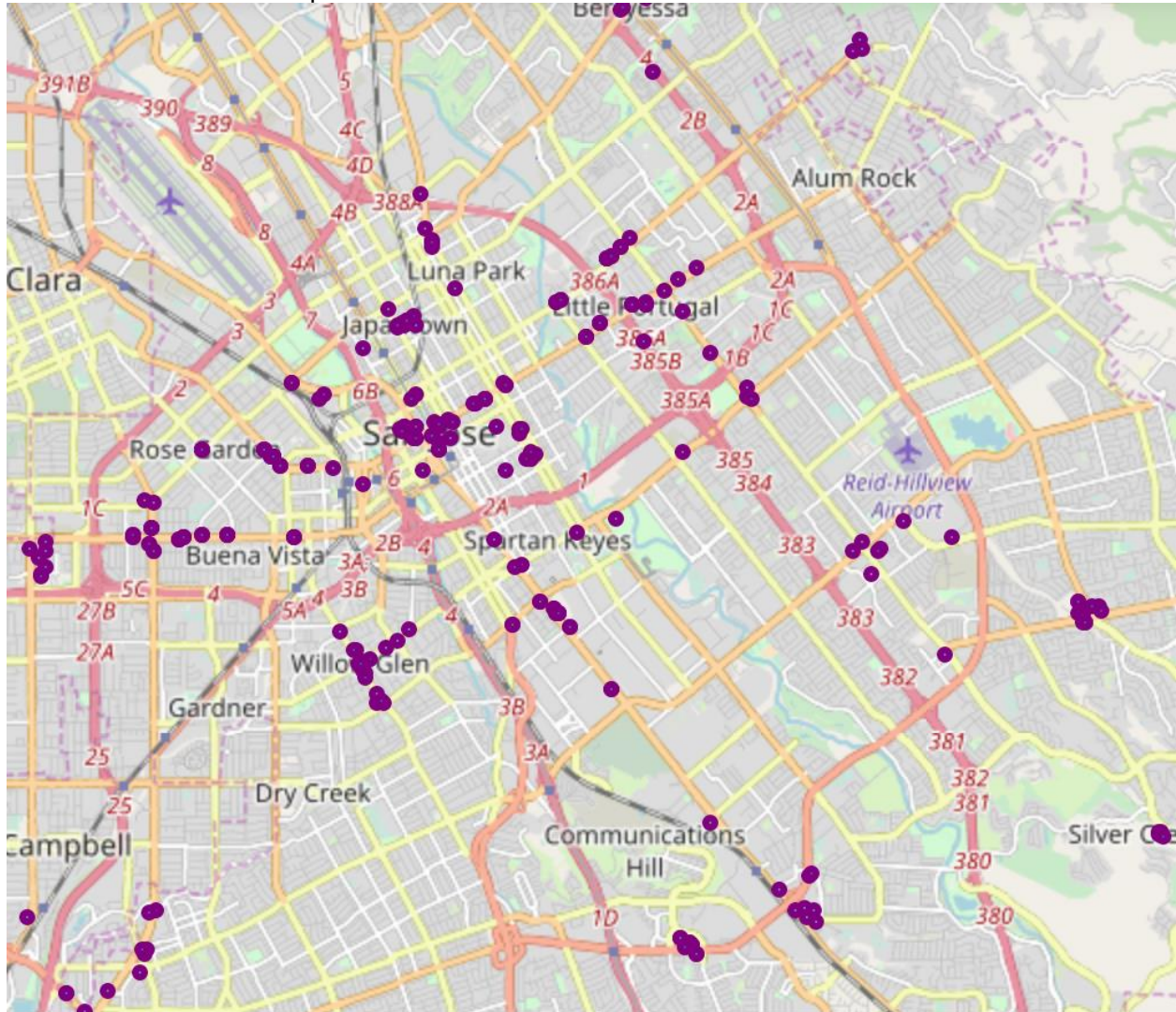
Geocoder library and Nominatim api will be leveraged to get the Geocoding data for each of the neighborhoods that will be analyzed in this project. Below is the map of neighborhood data after retrieving the latitude and longitudes.



The Battle of Neighborhoods (Week 1)

Location Data

A list of all restaurants and top venues along with their categories for each of these neighborhoods will be retrieved through the Foursquare API <https://api.foursquare.com>. For e.g, below is the restaurant data retrieved from Foursquare API:



Analysis

Once the data containing the list of restaurants and top venues and their categories retrieved, we will do the following activities:

- Perform Data Wrangling to cleanup and reformat the data
- Select **neighborhoods known for restaurants**
- Find **neighborhoods with not many Indian cuisines in vicinity**
- Pick a neighborhood that has the least ratio of Indian restaurants to overall restaurants
- Recommend a best neighborhood to the Stakeholder for opening their new Indian restaurant