

## A. Introduction

### A.1. Description & Discussion of the Background

Santa Clara County, officially the County of Santa Clara, is California's 6th most populous county, with a population of 1,781,642, as of the 2010 census.[3] The county seat and largest city is San Jose, the 10th most populous city in the United States, California's 3rd most populous city and the most populous city in the San Francisco Bay Area.

Home to Silicon Valley, Santa Clara County is an economic center for high technology and has the third highest GDP per capita in the world (after Zurich, Switzerland and Oslo, Norway), according to the Brookings Institution. The county's concentration of wealth, primarily due to the tech industry, has made it the most affluent county on the West Coast of the United States and one of the most affluent places in America.

Santa Clara County is part of the San Jose-Sunnyvale-Santa Clara, CA Metropolitan Statistical Area as well as the San Jose-San Francisco-Oakland, CA Combined Statistical Area. Located on the southern coast of San Francisco Bay, the urbanized Santa Clara Valley within Santa Clara County is also known as Silicon Valley. Santa Clara is the most populous county in the San Francisco Bay Area and in Northern California.

Santa Clara is a city in Santa Clara County, California. The city's population was 116,468 as of the 2010 United States Census, making it the ninth-most populous city in the San Francisco Bay Area. Located on the southern coast of San Francisco Bay immediately west of San Jose and 45 miles (72 km) southeast of San Francisco, the city was founded in 1777 with the establishment of Mission Santa Clara de Asís, the eighth of 21 California missions. The city was later incorporated in 1852. The mission, the city, and the county are all named for Saint Clare of Assisi.

Santa Clara is located in the center of Silicon Valley and is home to the headquarters of several high-tech companies such as Intel. It is also home to Santa Clara University, the oldest institution of higher learning in the state of California, which was built around Mission Santa Clara de Asís.[10] Levi's Stadium, the home of the National Football League's San Francisco 49ers, is located in the city. Santa Clara is bordered by San Jose on all sides, except for Sunnyvale to the west, and Cupertino to the west.

As you can see from the figures, Santa Clara is a city with high population in a region which is hub to a thriving economy. Being such a popular city with businesses and companies has led to high housing rental prices. The real estate cost is very steep and living near the office comes at a big hit on the paycheck.

As my office is situated in Santa Clara, I chose the city as one of the center and will compare its offerings of restaurants and nightlife with other cities in the San Jose

County area such as San Jose, Sunnyvale, Cupertino, Palo Alto to see which other areas offer similar services and can be alternative to Santa Clara.

When we consider the problem of alternate housing location, we can create a map and information chart where the real estate index is placed on Santa Clara County and each city is clustered according to the venue density.

## **A.2. Data Description**

To consider the problem we can list the datas as below:

- I found the Spatial data from Open Data Portal of County of Santa Clara. The geojson file has coordinates of the cities in the county. I will clean the data and reproduce it.
- I will use **Forsquare API** to get the most common venues of selected Boroughs.
- I found the Average Rent in Santa Clara, Santa Clara County, CA By Neighborhood from RentCafe.com which rent trends for US cities.