

# Team Spring Break

SoCal R Hackathon 2022



- ***Bijean Ghafouri***
- ***Chung-En Chueh (Sammi)***
- ***Gavin Hernandez***
- ***Hari Haran Arulmozhi***
- ***Vicky Rao***



## Problem Statement

*Identify best cities in California to raise a family based on specific preferences*



## Data Sources

- US Census data
- School Digger
- Google Public Datasets
- City-Data.Com
- FBI.Gov



## Algorithms Used

*K-Means Clustering*



## Solution Approach

1

- Feature identification
- Data Collection & Preparation ( City level )



2

*Cluster the data based on features of interest*



3

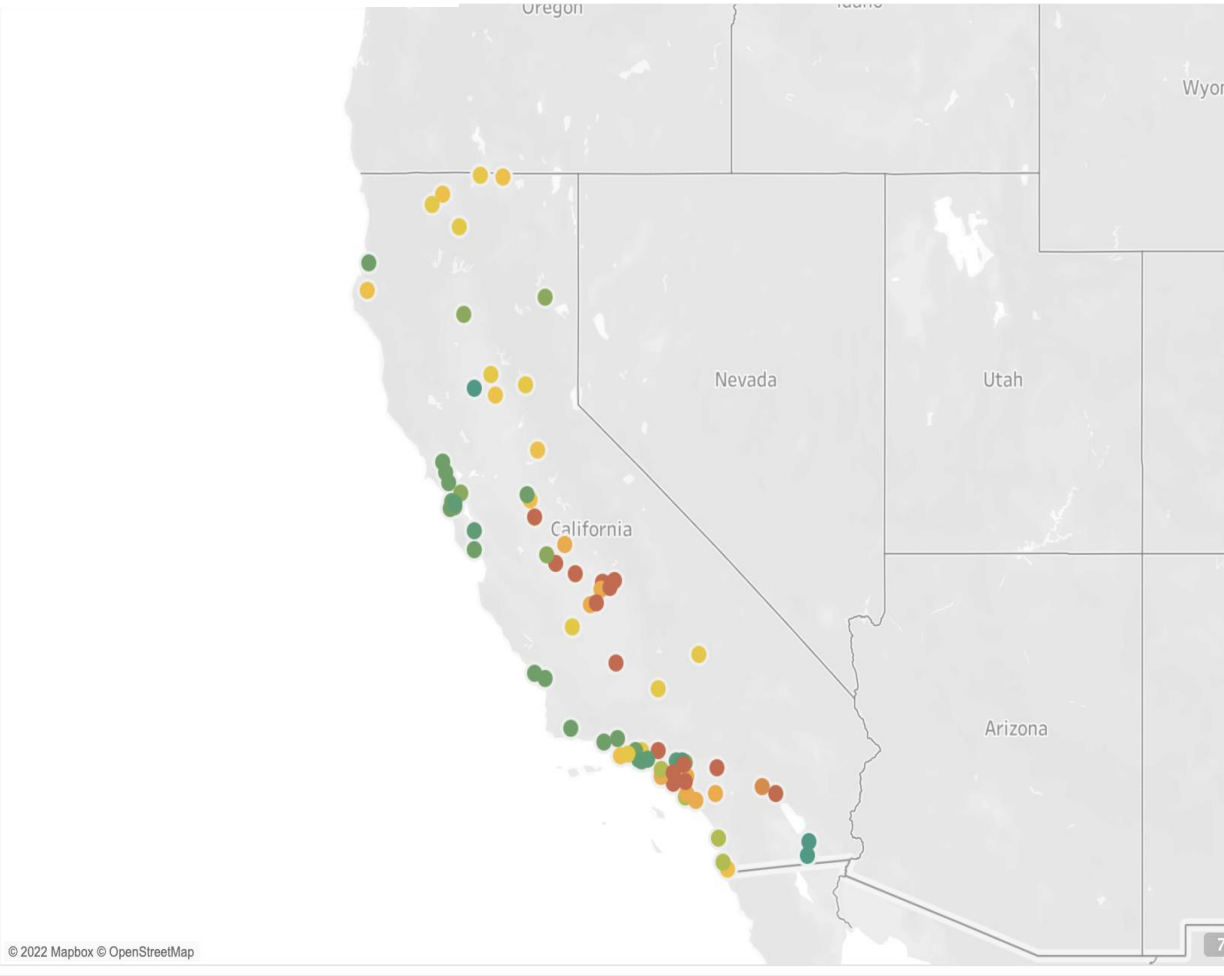
*Identify and analyze clusters*



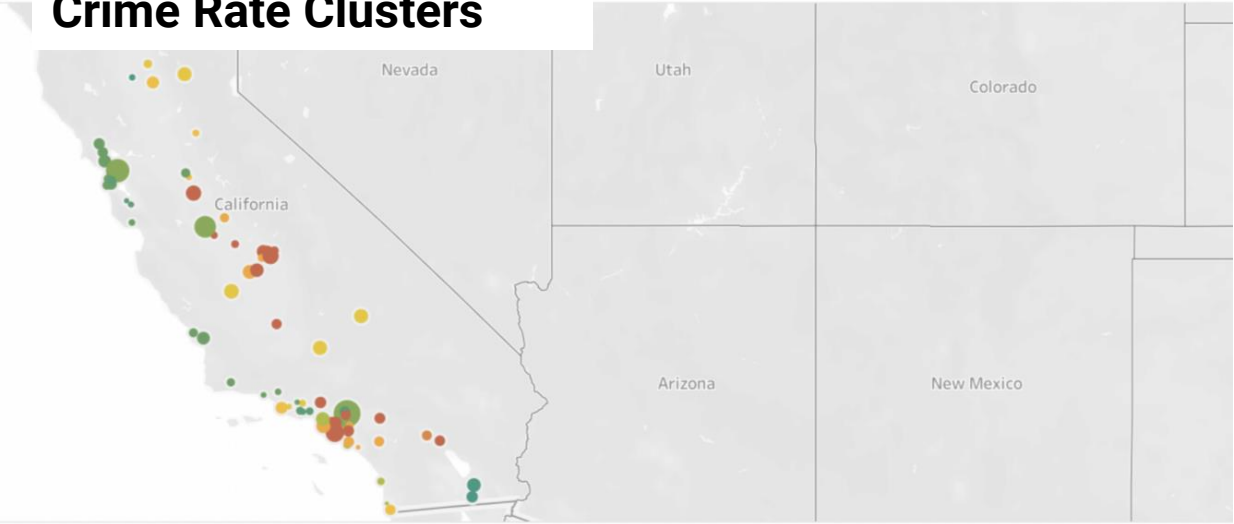
4

*Associate clusters based on preference of a persona*

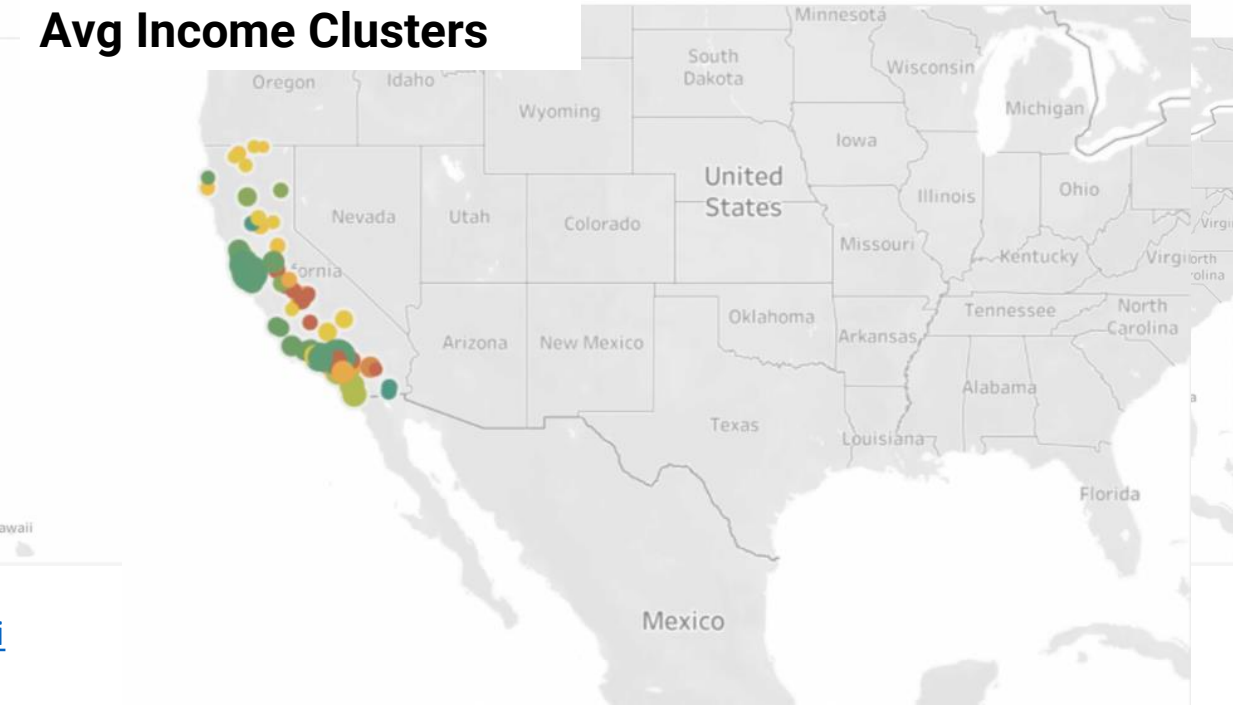
# Cluster Distribution



# Crime Rate Clusters



# Avg Income Clusters



# Dashboard Live Link

<https://public.tableau.com/app/profile/sammi.chueh/viz/BestCitiesinCAtoRemainFamily/Dashboard3?publish=yes>

Preferences

Cities to Consider

Cities Not Recommended



Safety



- 1. Saratoga
- 2. Los Altos
- 3. Cupertino

- 1. Stockton
- 2. Susanville
- 3. Barstow



Hospital Beds



- 1. Sonora
- 2. Rancho Mirage

- 1. Yuba City
- 2. Concord
- 3. Oxnard



Schooling



- 1. Cupertino
- 2. Foster City
- 3. Los Altos

- 1. Baldwin Park
- 2. Inglewood
- 3. South Gate



Outdoor Activities  
(Parks, beach access and air quality)



- 1. Roseville
- 2. South San
- 3. Daly City

- 1. Hesperia
- 2. Lone
- 3. Elk Grove



Safety, Hospital Beds,  
Schooling , Outdoor



- 1. Newport Beach
- 2. Walnut Creek
- 3. Encinitas

- 1. Stockton
- 2. Susanville
- 3. Barstow

# Interesting Observations



High Income Group



- ✓ *Low Crime Rate*
- ✓ *Good School Ratings*



High Outdoor Access



- ✓ *Good Air Quality*



High Crime Rate



- ✓ *Low Household Income*
- ✓ *Bad School Ratings*



**Thank You All !!**  
**We Had a Great Time.**

- *Bijean Ghafouri*
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- *Vicky Rao*