

Finding an Outdoor Oasis in Santa Monica, CA

Coursera Capstone Project
November 2020

Introduction

- Meditation has significant utility for stress reduction
- Many people home and under significant stress due to coronavirus
- Outdoor activities, at a distance are still considered safe
- Objective: identify possible locations for an outdoor meditation center in Santa Monica

Data

Foursquare (find venues):

<https://foursquare.com/>

Google Maps (find neighborhoods):

<https://maps.google.com>

Santa Monica Tree Database (trees!):

<https://data.smgov.net/Public-Assets/Trees-Inventory/w8ue-6cnd/data>

Methodology

- Identify relevant Santa Monica neighborhoods with Wikipedia and Google Maps
- Search neighborhoods for nearby venues with Foursquare
- Conduct k-means clustering on nearby venues
- Look at the trees!
- When are the Tall Mexican Fan Palm trees?

Results-Clusters 0 and 2

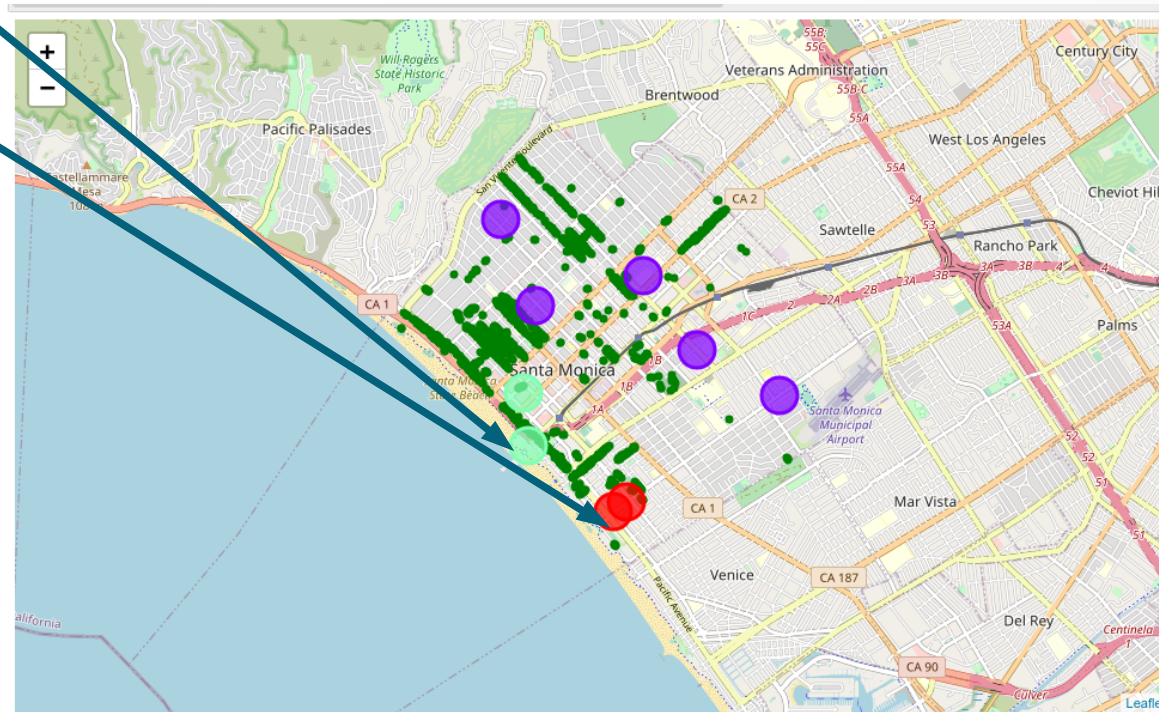
- Cluster 0 (top) has more healthy/hippie options than Cluster 2 (bottom). Neither boasts an outdoor meditation center.

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
1	Main Street	Beach	Café	Seafood Restaurant	Coffee Shop	American Restaurant	Sushi Restaurant	Italian Restaurant	Hotel	Park	Arts & Crafts Store
4	Ocean Park	Beach	Café	Coffee Shop	Seafood Restaurant	Park	Mexican Restaurant	Italian Restaurant	American Restaurant	Hotel	Sushi Restaurant

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Downtown	Clothing Store	American Restaurant	Coffee Shop	Hotel	Yoga Studio	Burger Joint	Mediterranean Restaurant	Gym	Mexican Restaurant	Sporting Goods Shop
6	Santa Monica Pier	American Restaurant	Seafood Restaurant	Clothing Store	Hotel	Burger Joint	Steakhouse	Theme Park Ride / Attraction	Italian Restaurant	Beach	Sushi Restaurant

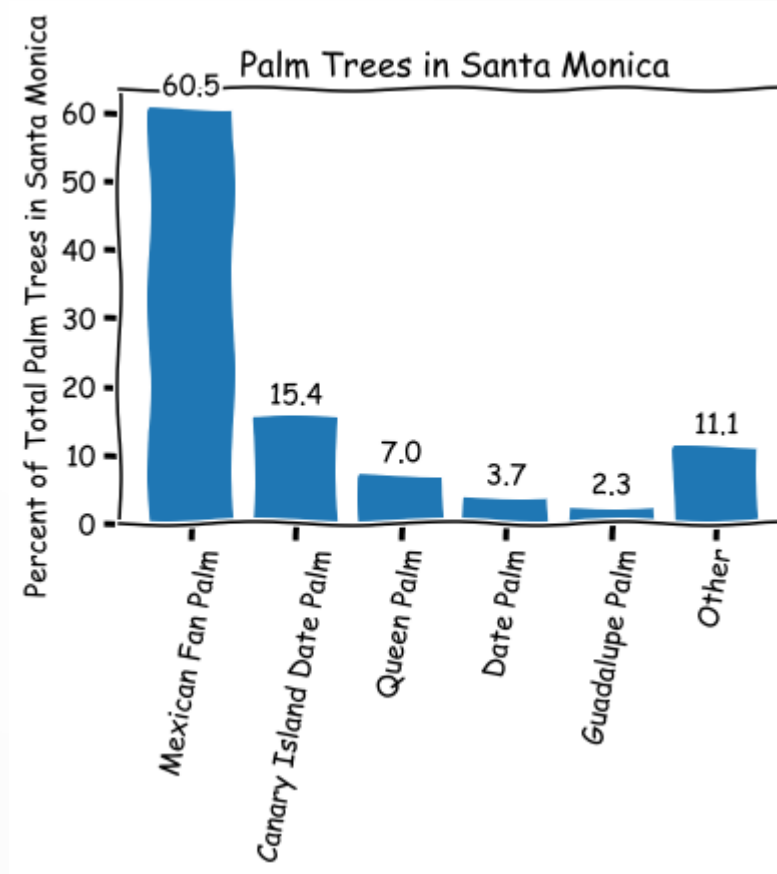
Results-best location

- Santa Monica Pier closer to the trees, foot traffic
- Ocean Park has more relevant venues nearby



Let's look at the palm trees

- Most of the beautiful palm trees in the city are Mexican Fan Palm trees. These are the trees I want to be near!



Conclusion

- Tools from Data Science are helpful in identifying possible locations for an outdoor meditation center
- May need to compromise between desired neighborhood characteristics and proximity to trees