

Trip-A-Wiser

A wise trip planner

Pushkarini Agharkar

Trip-a-Wiser: a tourist day planner

For San Francisco

Enter Home/Hotel Address

Hours available

shopping outdoor activities theatre **views** tours art

adventure and games parks museums culture wellness

architecture science beaches food and drink **history**

Slides

Trip-a-Wiser: a tourist day planner

For San Francisco

Your Itinerary

Based on your interest in views, history, this is our recommended itinerary for you.

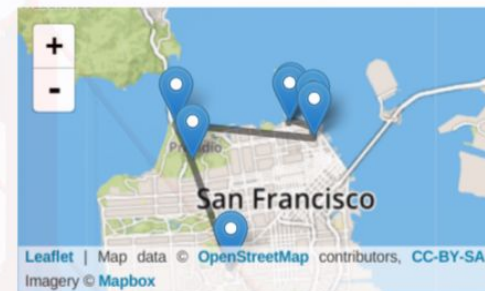
Stop 1 - 09:05 AM - USS Pampanito (45 minutes)

This attraction is listed in the Specialty Museums Military Museums Ships Sights and Landmarks Museums categories in San Francisco



Stop 2 - 10:00 AM - Alcatraz (165 minutes)

Park rangers conduct tours by recounting the prisons thrilling history along with intriguing anecdotes about Al Capone and other legendary figures that made a "home" here.



Directions on Google Maps

Data from Tripadvisor



Cable Cars 

#12 of 480 things to do in San Francisco

 8,434 reviews

"Think Fast!" 02/06/2016


"Must do while in S.F." 02/06/2016

 **Certificate of Excellence**




Trams


Address: Bay Street and Embarcadero, Pier 33 Alcatraz Landing, San Francisco, CA 94133

Recommended length of visit: 2-3 hours





Melanie217
Lethbridge, Canada
Level 3 Contributor

 23 reviews
 8 attraction reviews
 4 helpful votes

"Informative!"
 Reviewed yesterday

Thoroughly enjoyed the tour, it is well done and very informative. You can spend 1.5 - 3 hours here easily. Seriously, it is a steep hike up the hill, and our knees suffered, so if you have stiff joints or mobility issues, TAKE THE TRAM! Why suffer. We highly recommend this tour, the history behind this rock is incredible.

Helpful?  **Thank Melanie217**

 Report

← **500 Attractions**

← **170 Categories**

How should we
plan our day ?



Two Core Challenges

What attractions are desirable?

- ★ Features to choose from



art



history

- ★ Feature distribution

What is a good itinerary?

- ★ Time is a hard constraint - how to make most of it?



How to Find Features for Attractions ?

Topic modeling (LDA) to identify broad topics

San Francisco Fishing Charter

Whale Watching Tours

City Running Tours

San Francisco Kayak

outdoor activities

Japanese Tea Garden

Golden Gate Park

Stow Lake

Conservatory of Flowers

parks

California Academy of Sciences

The Exploratorium

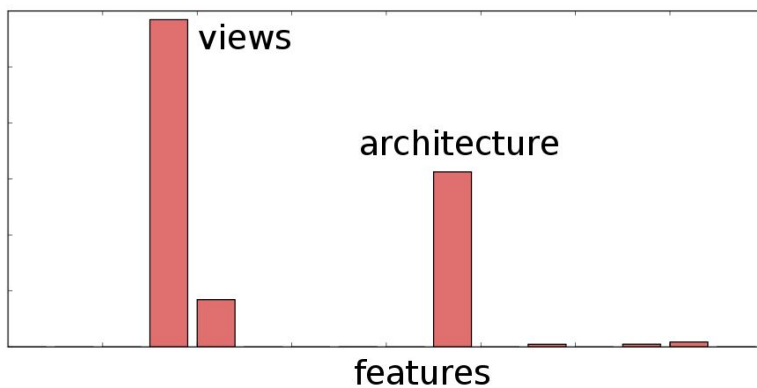
Aquarium of the Bay

San Francisco Zoo

science

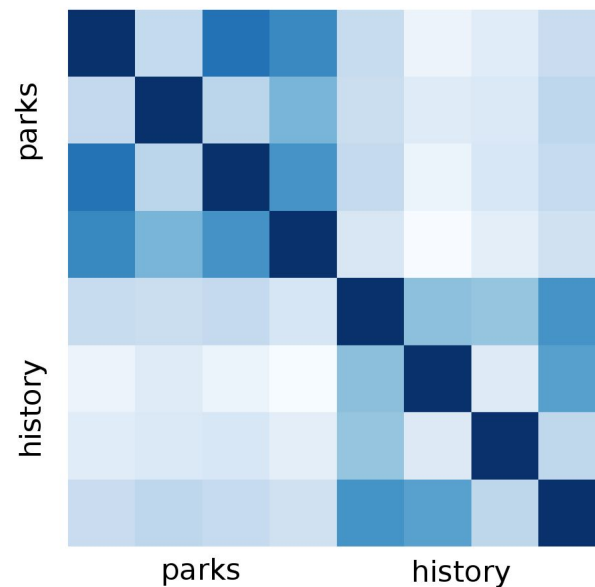
and more ..

Feature Distribution



Validation

cosine similarity within topics



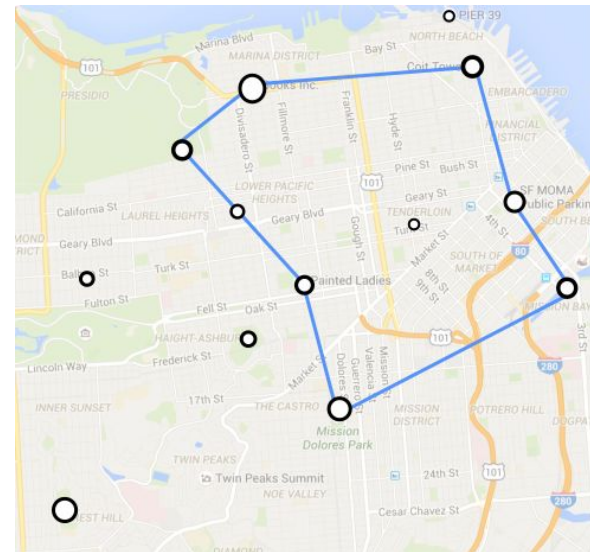
How to find a good itinerary ?

- ★ Developed a '**Prize collecting version**' of **Traveling Salesman Problem (TSP)**

prize = $\text{sqrt}(\text{attraction reviews})$

× (attraction rating)

× (attraction feature alignment score)

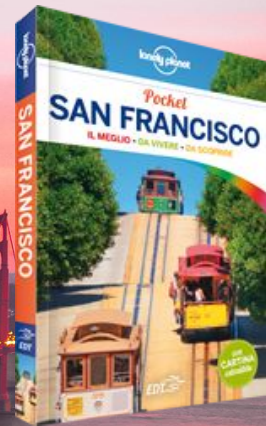
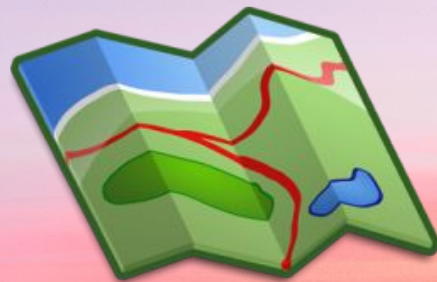


- ★ Use **Dynamic Programming implementation** to make it faster

tripawiser.xyz

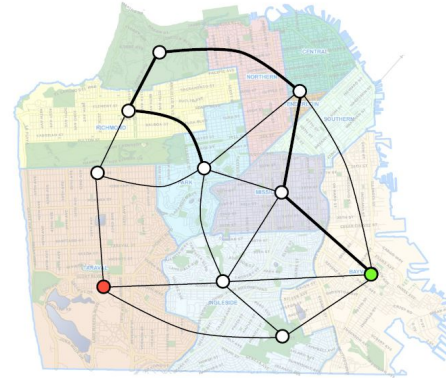
Explore,
Things you like ...
In the time you have !

<https://github.com/smargs/touristdayplanner>



Indian Institute of
Technology Madras

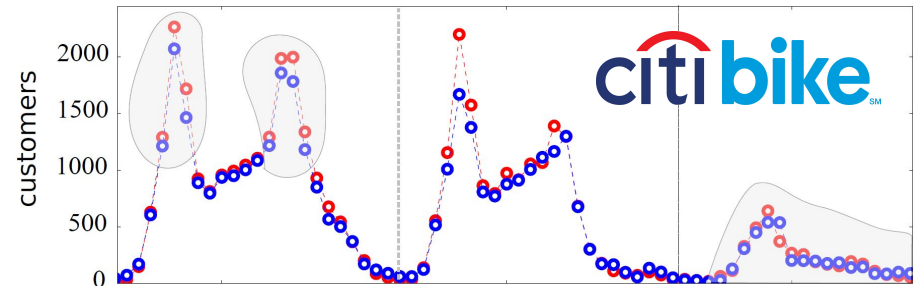
University of California
Santa Barbara



Aerospace engineering
Control theory

Algorithms for robotic
applications

Markov chains and their
optimization



Thank You

Extra Slides

Topic modeling (LDA) to identify broad topics

'Golden Gate Park',
'Japanese Tea Garden',
'San Francisco Botanical Garden',
'Conservatory of Flowers',
'Stow Lake',
'Yerba Buena Gardens',
'Mission Dolores Park',
'Mission Dolores',
'Washington Square']

gardens and parks

'Tastebud Tours San Francisco - Food To
'Sidewalk Food Tours of San Francisco',
'Local Tastes of the City Tours',
'Avital Food Tours',

food tours

'City Running Tours',
'San Francisco Fishing Charter',
'Electric Tour Company Segway Tours',
'City Segway Tours San Francisco',
'San Francisco Segway Tours',
'Urban Hiker SF- Day Tours',
'Bay Voyager',
'Sports Basement Outdoors - Day Tours',
'San Francisco Movie Tours',
'San Francisco Whale Tours',
'Bay City Bike Rentals and Tours',
'Streets of San Francisco Bike Tours',
'SF Bay Whale Watching',
'GoCar GPS Guided Tours',
'Red and White Fleet']

outdoor activities

'The Embarcadero',
'Haight-Ashbury',
'Little Italy',
'Hayes Valley',
'Chinatown',
'Japantown',
'Union Street',
'North Beach',
'The Castro',

neighbourhoods

Topic modeling (LDA) to identify broad topics

'The San Francisco Dungeon',
'Palace Games',
'EscapeSF',
'PanIQ Room San Francisco',
'7D-Experience',
'Ripley s Believe It or Not! San I
"Magowan's Infinite Mirror Maze",
'Hiking Yoga',

adventure and games

'Marrakech Magic Theater',
"Cobb's Comedy Club",
'Punch Line',
'San Francisco Playhouse',
'Beach Blanket Babylon',
'Biscuits and Blues',
'Warfield Theater',

theater

'Ferry Building Marketplace',
"Ferry Plaza Farmer's Market",
'Treasure Island Flea Market',
'Westfield San Francisco Centre',
'Ghirardelli Square',
'Embarcadero Center',

shopping

'California Academy of Sciences',
'Steinhart Aquarium',
'The Exploratorium',
'Aquarium of the Bay',
'San Francisco Zoo']

science