CINDY ZHANG

COMPUTER SCIENCE, B.A.

EDUCATION

University of California, Berkeley
2018-2022 | GPA: 4.0
Relevant Courses:
- Efficient Algorithms and Intractable Programs (CS 170)
- Artificial Intelligence (CS 188)
- Data Structures (CS 61B)
- Machine Structures (CS 61C)
- Discrete Math and Probability (CS 70)
- Linear Algebra and Differential Equations (Math 54)

Fall 2020: Operating Systems (CS 162), Database Systems (CS 186), Principles and Techniques of Data Science (Data 100)

SKILLS

Fluent:
- Python, Java, C
- React, HTML, CSS, JavaScript
- Java Servlet
- Technical writing, communication, git

Developing:
- MERN Stack:
  - MongoDB, Express, React, Node.js
- Pandas
- Datastore
- PyCATSHOO

✉ cindyxzhang@berkeley.edu

📞 (408) 207-6413

in linkedin.com/in/cindy-x-zhang

🌐 cindyzhang977.github.io/cxz

EXPERIENCE

Google
May 2020 - August 2020
STEP Intern
- Designed, built, and deployed a web application that helps users explore what to do in a new city and create a concrete day plan
- Integrated Google Maps Places API to query nearby attractions and display their images, once an image is selected the location is pinned on a map
- Executed 2-approximate algorithm for Traveling Salesman to optimize a route throughout all user-selected locations; route displayed with Maps Embed API

CUBES - Berkeley SDID
March 2020 - Present
System Design and Integration Division Researcher
- Developed object oriented models to simulate and optimize a biologically-driven Mars exploration mission; used PyCATSHOO to model hybrid systems
- Integrated five different systems that compose the reference mission

Triton
November 2019 - February 2020
Front End Intern
- Redesigned and revamped Triton's website using React and Redux
- Implemented the front end interface for customers to sign up or to request a demo, which automatically sends a slackbot notification to Triton

Dolby Laboratories
May 2019 - August 2019
Platform QA Intern
- Scripted in Python to generate output from research binaries and configuration files to verify Dolby Vision's video compression algorithm
- Integrated pytest in testing scripts to automate the process

UC Berkeley EECS Department
August 2019 - May 2020
Data Structures (CS 61B) Tutor
- Taught a group of CS61B students 2x/week and conducted office hours 1x/week
- Assisted students with projects, homework, and labs

PROJECTS

Minimum Dominating Network Approximation
Python
- Designed approximation algorithm with team of 3 for NP-Hard problem of finding a dominating network tree with minimized pairwise vertex distance
- Greedily constructed a tree whose vertices are a dominating set, then used simulated annealing to improve upon minimizing pariwise distance

Blackjack Bot
Python
- Built bots that hit/stayed according to different Blackjack strategies
- Generated data from simulated games to visualize win rates dependent on strategy and starting cards

Musique
MERN: MongoDB, Express, React, Node.js
- Built a web application that allows individuals to add songs to a shared queue
- Integrated Spotify Web API to retrieve user information and allow easy access to saved songs in their account

Expense
React, CSS
- Designed a web application to help users with budgeting
- Included features like logging transactions, managing spending limits, and setting saving goals

2D Maze Game
Java
- Used Weighted Quick Union data structure and Prim's Algorithm to instantly create a 2D world with connected rooms and hallways
- Included a keyboard-controlled avatar whose objective is to travel to a randomly generated target

AWARDS / HONORS

- Upsilon Pi Epsilon, Nu Chapter - Berkeley CS Honor Society (2020)
- UC Berkeley Kraft Award (2019)
- Cal Leadership Award (2018)