






LILY SAI

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education

University of California, Berkeley
Computer Science, B.A.

AUG 2018 - MAY 2022

GPA: 3.692; Technical GPA: 3.614

Relevant Coursework

- ▶ Data Structures
- ▶ Efficient Algorithms and Intractable Problems
- ▶ Introduction to Artificial Intelligence
- ▶ Structure and Interpretation of Computer Programs
- ▶ Great Ideas in Computer Architecture (Machine Structures)
- ▶ Designing Information Devices and Systems I & II
- ▶ Principles & Techniques of Data Science
- ▶ Web Design Decal

San Mateo High School

AUG 2014 - MAY 2018

W GPA: 4.434; UW GPA: 3.981

skills

Programming:

- ▶ Java
- ▶ Python
- ▶ Scheme
- ▶ SQL
- ▶ C
- ▶ RISC-V

Web:

- ▶ HTML
- ▶ CSS
- ▶ JavaScript
- ▶ jQuery
- ▶ React
- ▶ Bootstrap

Design:

- ▶ Photoshop
- ▶ Illustrator
- ▶ InDesign
- ▶ Adobe XD

Languages:

- ▶ Chinese
- ▶ French

honors

- ▶ **CS Scholars**
AUG 2018 - PRESENT
- ▶ **National Merit Pfizer Inc. Scholarship**
MAY 2018 - MAY 2022
- ▶ **California Scholarship Federation Life Member**
MAY 2018
- ▶ **SafeAmerica Credit Union Scholarship**
APR 2018
- ▶ **National Merit Finalist**
FEB 2018
- ▶ **San Mateo County High School Artist Hall of Fame**
NOV 2016
- ▶ **Speak and Lead With Pride**
JAN 2016 - MAR 2016

projects

SWE Team Tech

Team Member

AUG 2019 - PRESENT

- ▶ Apply software, hardware, and research skills with a team of engineering students, advisors, and Beckman Coulter, a Danaher company, to develop a scalable cloud-based electronic and on system and a test fixture for a plunging device
- ▶ Work on memory game “mini-projects” to improve engineering skills, including designing, prototyping, building circuits, and programming an arduino

Fill Your Plate

JULY 2019 - SEPT 2019

- ▶ Designed a web application that randomly chooses restaurants based on location and rating for indecisive eaters using Yelp API and Python

Trick-or-Treat: THE GAME

MAY 2019

- ▶ Created an interactive, 2D tile-based, pseudo-randomly generated world exploration game in Java rendered with the StdDraw Library and controlled with the keyboard
- ▶ Introduced mechanics to win the game through implementation of “mini-games” against NPC characters and collectable items

Bear Maps

APR 2019

- ▶ Coded a similar application to Google Maps that allows for map rastering based on coordinates and web browser size, finding the shortest path between given points, and location name autocomplete when searching

High School Course Scheduler

NOV 2018

Developed for CalHacks 5.0

- ▶ Developed a scheduling program to optimize the creation of high school student and teacher course schedules using Google Forms, Google Apps Script, Python, and csv files
- ▶ Wrote algorithms to improve student & teacher course placement to help high school counselors expedite course scheduling

additional experience & leadership

Web Design Decal

AUG 2019 - PRESENT

Teaching Assistant

- ▶ Lead a cohort of 15+ students of varying web development skills and guide them through hands-on activities
- ▶ Update curriculum handbook and write and design new lab and homework assignments
- ▶ Hold 1.5 hours of Office Hours each week to answer any additional questions and provide help and resources to students

Society of Women Engineers

AUG 2018 - PRESENT

Web: Webmaster (2020 - PRESENT); Committee Member

AUG 2019 - PRESENT

- ▶ Update and maintain UC Berkeley’s SWE website, working mostly with HTML, CSS, and Bootstrap
- ▶ Create a stronger and more personable online presence and identity for the club through blog posts and videos

Evening with Industry: Graphic Designer

AUG 2019 - DEC 2019

- ▶ Create promotional material, such as Facebook event covers and flyers, to market 200 attendee dinner and networking event, including around 150 students and 50 engineers and recruiters

Public Relations: Committee Member

AUG 2019 - DEC 2019

- ▶ Design stickers and Facebook banners to publicize the club and its events using Illustrator

CS Kickstart Curriculum Committee

AUG 2018 - PRESENT

Website Head

JAN 2020 - PRESENT

- ▶ Finish and maintain the CS Kickstart website, updating it with new profiles and sponsors
- ▶ Improve current features and design

Curriculum Committee: Web Curriculum Developer

AUG 2018 - MAY 2019

- ▶ Design and update curriculum for future CS Kickstart participants (around 50-60 incoming freshman girls) through creation of guides, presentations, and demos
- ▶ Work on the web development sub-committee to create a sample website that will be used to illustrate the possibilities of web
- ▶ Write foundational web design curriculum and tutorials (HTML/CSS)