

MATTHEW TSAI

(310)-997-7106 — mtsail@berkeley.edu — linkedin.com/in/m-tsai/

EDUCATION

UC Berkeley

August 2019 - Present

- Bachelors in Computer Science and Statistics, Academic GPA: 3.857/4.0

SKILLS

Languages	Python	C	SQL	Frameworks/Tools	React.js	Git
	Java	Javascript	Assembly		Agile/Scrum	Adaptive Pedagogy
	Swift	HTML5	CSS			

PROJECTS

Conway's Game of Life

September 2020 - October 2020

- Implemented a program in **C** that processes a PPM3 file and generates frames representing the life cycle of each RGB cell. The frames are then compiled into a gif animating the life based on a given rule set.

Notify

July 2020 - September 2020

- Developed an application in **Swift** that is able to log tasks and send notifications. This project was inspired by Cortana always trying to help me.
- Incorporated a simple virtual assistant using Google's speech recognition library paired with custom made responses that was written in **Python**.
- I plan to continue to include an alarm using Spotify API as the one that exists does not fit my needs.

Gitlet

April 2020 - May 2020

- Wrote a version control system in **Java** completely from scratch that mimics the core functionalities of Git: branch, merge, commit, checkout etc.

WORK EXPERIENCE

Start-Up: Brew2You

February 2020 - July 2020

SDE Intern and Design Lead

- Designed a MVP for a Berkeley STEP VC Conference with **Adobe XD** demonstrating interactions with partners/clients and created a sample front-end using **HTML, CSS, and Javascript**.

TEACHING EXPERIENCE

Math and CS Tutor

September 2020 - Present

Volunteer

- Teaching in my local community and volunteering remotely to introduce computer science to those who might be underrepresented or facing educational difficulties during COVID.

UC Berkeley EECS Dept.

January 2020 - May 2020

Teaching Assistant

- Taught in weekly labs for CS 61A, an introductory course on Python Scheme, and SQL.
- Worked to best assist over 2,000 students by explaining concepts during office hours and lab sections.

Cal Archery Team

August 2019 - May 2020

Operations Coordinator, Course Instructor

- Taught instructional courses and orchestrated the operations for archery competitions.
- Competed in 2020 Fivics NorCal Indoor Archery Collegiate Championship.

RELEVANT COURSE WORK

Data Structures and Algorithms	Discrete Mathematics and Probability Theory
Machine Structures	Introduction to Artificial Intelligence