

# MATTHEW TSAI

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## EDUCATION

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### UC Berkeley

*August 2019 - Present*

- Bachelors in Computer Science and Statistics, Academic GPA: WEBSITE RESUME

## SKILLS

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

## PROJECTS

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### 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

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### 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

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### 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

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