

# BILL ZHANG

San Jose, CA · jzhang71@usc.edu · 4085858267 · <https://art3m1s.me/>

## EDUCATION

### University of California, Santa Cruz

Bachelor of Science in Computer Science *GPA: 3.64*

Santa Cruz, CA

Sep 2020 - Mar 2023

### University of Southern California

Master of Science in Computer Science - Artificial Intelligence

Los Angeles, CA

Expected Aug 2023 - Expected Aug 2025

## WORK EXPERIENCE

### X-Camp Academy

*Teaching Assistant*

San Jose, CA

Jul 2022 - Present

- Instructed key algorithms and data structures to 20-30 students, resulting in a 90% class average on the final exam. Hosted weekly tutoring sessions to address individual student concerns.
- Collaborated with the lead instructor to create engaging lesson plans and activities, boosting student engagement by 25%. Initiated a peer review system to encourage collaboration and idea sharing among students.
- Evaluated assignments and exams for 50+ students per semester, offering constructive feedback that contributed to a 15% improvement in test scores. Detected common misconceptions and addressed these during class discussions.
- Bridged communication between faculty and parents by organizing regular meetings and progress updates, leading to a 30% increase in in-class participation and 50% rise in homework completion.

## SKILLS

|                        |  |
|------------------------|--|
| Programming Languages: | C, C++, Java, Python, Dart, Javascript, Typescript, Haskell        |
| Frameworks:            | React, NextJs, Gatsby, ExpressJS, Flask, FastAPI, Vite, Vue        |
| Libraries:             | Material UI, Tailwind CSS, Socket.io, Axios, React Testing Library |
| Databases:             | Firebase, PostgreSQL   |
| Other:                 | Agile, OPENApi, RESTful Api, Github, Cloud Computing, UX Design    |

## PROJECTS

### Slug Loop *React, Material UI, ExpressJS, C, Azure*

<https://www.slugloop.tech>

Coordinated with a team, professors, and transport officials to develop a real-time UCSC loop bus tracker, utilizing Radio Transmitters, Raspberry Pis, and C programming, increasing route efficiency and serving 50 daily users.

### Assistance *Gatsby, FastAPI, Material UI, Nginx*

<https://assistance.art3m1s.me/>

Teamed up with a group to develop Assistance, a web app enabling users to simultaneously engage with 4 or more LLMs, enhancing choice while minimizing context-switching costs.

### Paddy Plant Prognosis *Tensorflow, Vite, Flask, TailwindCSS*

<https://www.paddyplantprognosis.tech>

Collaborated in a cross-functional team to create an app for farmers to identify paddy crop diseases using computer vision, achieving 97% accuracy through Mobile Net Transfer Learning.

### Sink or Swim *NextJS, Flask, Tensorflow, TailwindCSS, OpenAI*

<https://sos.art3m1s.me/>

Spearheaded a group project to build a web app predicting Titanic survival chances and generating narratives, employing a custom RNN with 84% accuracy and engaging over 500 users.

### Pool Party *React, Express, Hop.io*

<https://mypoolparty.tech>

Collaborated with a team to develop a real-time carpool coordination web app, reducing users' carbon footprint by 50% on average and fostering sustainable habits.

### MakeMeLunch *Firebase, NextJs, RapidApi, Axios, Javascript*

<https://makemelunch.xyz>

Partnered with a diverse team to build a web app recommending recipes based on available ingredients, reducing food waste and helping users save on groceries.

### Insite *React, Flask, D3, Charts.js, Firebase, Socket.io*

<https://insite.art3m1s.me>

Engaged closely with a team to conceptualize and develop a node-based data visualization tool, enhancing data analysis efficiency for clients.

## RELEVANT COURSEWORK

### Full-Stack Web Development, Database Systems