

Elaine Chao

elaine.iy.chao@gmail.com | chaoelaine.com | github.com/elaine-ch

Education

University of California, San Diego

expected Dec 2024

Bachelor of Science in Computer Science, Minor in Linguistics

GPA: 3.87/4.00

Relevant Coursework: Operating Systems, Computer Graphics, Algorithms, Software Engineering

Experience

Undergraduate Tutor, UC San Diego – La Jolla, CA

2024 – Present

- Held weekly office hours and lab hours for a class of 180 students, reviewing and answering their questions about software engineering concepts
- Developed Android Studio guides with the professor and a team of 5 other staff members
- Prepared students to successfully complete multiple iteration long team projects in Android Studio

Extracurricular Activities

Triton Solar Car | Auxiliary Lead

2021 – Present

- Designed the CAN bus system for the solar car, allowing the team to collect and analyze data while battery, motor and solar array systems are active
- Led a team of 4 with little embedded systems experience in implementing the design using Arduino and ESP32 modules
- Onboarded new members in the relevant technologies, assigned tasks and held weekly meetings
- Collaborated members of other subteams to interface between systems in the car

TritonHacks | Starter Kit Lead, Website Developer

2021 – 2023

- Led a team of 3 in designing an Alice-based hackathon starter kit for high school participants at the beginner level
- Maintained the React website

Projects

OMR MuseScore Transposer Plugin

- Used an open source optical music recognition to scan physical music scores and convert them into digital formats
- Filtered the notes of the MusicXML file to transpose them into different keys
- Interfaced with the score editing program MuseScore using their API to make the plugin publicly accessible

Social Compass Android App

- Used Agile development methods to coordinate with a team of six and deliver the product by the deadline, despite unclear instructions and changing requirements for the app
- Implemented HTTP protocol and MVP architecture concepts to communicate with a remote server and display user location data in real time
- Wrote Java unit tests and performed end-to-end testing with Robolectric and Espresso in Android Studio

Skills

Languages: Java, C++, JavaScript, SystemVerilog

Frameworks: React, Node.js

Developer Tools: Git, Android Studio