(619) 851 - 3835
cchsieh@ucdavis.edu
https://linkedin.com/in/cchsieh
https://cathy86224.github.io/Portfolio/

Cathy C. Hsieh

Fullstack Software Engineer

EDUCATION

2015 - 20 **University of California, Davis** | *Bachelor's Degree in Computer Science and Engineering*

RELEVANT EXPERIENCE

Oct. 2020 | Present **Computer Science Learning Associate** | *e3 Civic High, San Diego, CA*
- Virtually co-teaching/tutoring students on a one-on-one basis or in small group sessions on Zoom.
- Tutoring computer science classes including Python, Java, JavaScript, cybersecurity, and HTML/CSS
- Answer questions on course content and assist in the comprehension of course material.
- Motivate and encourage students to improve their academic performance. Students reported their grades improved after tutoring.

Jul. 2019 | Oct. 2020 **Fullstack Web Developer Intern** | *University of California - Energy Conservation Office, Davis, CA*
- Contributed and created new features to Campus Energy Education Dashboard (CEED) *(https://ceed.ucdavis.edu/)* and TherMOOstat *(https://thermoostat.ucdavis.edu/).*
- Defined software requirements to implement new features. New features merged/rebased onto a master branch after peer code reviews. Some requirements included cross-platform compatibility (phone web browser to computer web browsers, and different operating systems), as well as responsive user interaction and user experience (UI/UX).
- Implemented Savings Calculator tools for the CEED website.
- Designed and implemented the frontend components for the Carbon Neutrality Initiative Dashboard (CNI) from the ground up. CNI provides progress indicators for UC's path to carbon neutrality to increase transparency and accountability for all stakeholders and engage UC campus communities.
- Worked on a team of developers with the Agile software development methodology (Jira).
- Utilized frameworks, languages, and toolkits such as React ES6, Redux, HTML, CSS, Node.js, and MongoDB to create inviting, feature-rich web applications to support campus initiatives.

PROJECTS

Jan. 2020 | Mar. 2020 **Embedded System Projects** | *Davis, CA*
- Built an embedded toaster system on the TI CC3200 LaunchPad interface. On trigger, the system turns on the conveyor belt which then dispenses a slice of bread into the toaster.
- Developed a mini Pac-Man that uses a BMA222 accelerometer to control its movement. Constructed an I2C connection with the accelerometer and display it on the OLED interface using Serial Peripheral Interface (SPI).
- Developed a handheld controller utilizing Dual-Tone Multi-Frequency to control a robot's movements.
- Used oscilloscope and logical analyzer to debug hardware problems.
- Project website link: *https://cchsieh2.wixsite.com/eec172/*

Jan. 2019 | Jul. 2019 **Interactive Educational App for Clinical Ophthalmology** | *Davis, CA*
- Developed an educational iOS app for medical students studying for the clinical Ophthalmology exam.
- Designed a flashcard/PowerPoint-style application to make learning more efficient, simple, and interactive.
- Implemented spaced repetition algorithm to optimize efficiency and performance on the exams.
- Implemented search feature and table of contents to easily navigate through relevant topics to study.

SKILLS

Software JavaScript, React/Redux, HTML, CSS/SASS, Bitbucket, GitHub, Node.js, GraphQL, Jira, C, C++, Python, MongoDB, Swift, MatLab, QML, R

Hardware 3D Printing, Drill Press, Laser Cutter/Engraver, Soldering

Languages Fluent in Chinese Mandarin and Taiwanese

AWARD

Mar. 2020 **Honorable Mention in Embedded System Course Project - Smart Toaster** | *Davis, CA*