Enoch Y. Chau

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Education

B.S. Electrical Engineering: Electronic Circuit Design | UC Irvine, CA

Sep 2016 - Jun 2020

GPA: 3.48/4

Experience

Hardware Engineering Intern | Panasonic Avionics Corporation, Lake Forest, CA

Jun 2019 – Aug 2019

- Investigated hardware issues in airplane entertainment systems
- Resolved component obsolescence by evaluating replacement parts
- Completed ESD, thermal, and power cycle tests per FAA regulations

Research Assistant | California Plug Load Research Center, UC Irvine, CA

Apr 2019 – Jun 2020

- Created RTOS firmware with Arduino to interface sensors (I2C, SPI, UART)
- Implement IoT using Wi-Fi connected ESP32 microcontrollers
- Manage and on-board new members by dividing work in specific tasks
- Perform hardware troubleshooting, PCB population, and SMD rework

Peer Academic Advisor | School of Engineering, UC Irvine, CA

Mar 2018 - Jun 2020

- Organize and present workshops addressing Engineering career pathways and study abroad
- Advise engineering students in curriculum planning and degree progress checks for ABET certification

Projects

Boulder Field (personal)

Jul 2020 – Aug 2020

- Suggests climbing routes by pulling data from the Mountain Project API
- Designed an intuitive UI using React

GPS Sound Sensor (UCI Senior Design)

Sep 2019 – Mar 2020

- Worked with a team of four to create a sound-based location sensor
- Wirelessly connected Android application UI with location sensor
- Developed Embedded Linux firmware to interface with a GPS module

Buddy Projects (California Plug Load Research Center)

Apr 2019 – Jun 2020

- Worked with a team to update the design of energy saving IoT devices.
- Updated and refactored firmware to streamline design process.
- Performed board debugging by using lab tools and writing test firmware.

Scale Up (SD Hacks Hackathon)

October 2019

- Used machine vision and a food scale to track calories of simple foods
- Created Python code to interface Raspberry Pi with camera, food scale, vision API, and nutrition API

HC2: IoT Environment Sensor

Aug 2019 – Jan 2020

- Developed drivers in C++ and Python to interface with Rotronics HC2 temperature sensor
- Created a simple sensor network using LoRa and Wi-Fi

Skills

Programming: C, C++, SystemC, Python, JavaScript

Firmware: freeRTOS, AVR (Arduino), ESP32/ESP8266, Raspberry Pi

Software: Git, KiCAD, Excel VBA OS: Linux, Windows

Lab Tools: Oscilloscope, Soldering Web Dev: React.js, HTML, CSS

Language: Conversational Mandarin Chinese with some reading and writing