ENOCH CHAU

Irvine, CA
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Programming
- C
- C++
- Python
- Bash
- HTML

Programs
- Linux
- freeRTOS
- Git
- Cadence Virtuoso
- PSpice
- Arduino
- Mathematica

Lab Tools
- Oscilloscope
- Soldering
- Smith Chart
- Thermotron
- ESD test equipment

Human Language
- Chinese: *heritage speaker, some reading and writing*

EDUCATION

B.S. Electrical Engineering: Electronic Circuit Design
UC Irvine: 3.43 GPA — Exp. Grad Jun '20

EXPERIENCE

Research Assistant — Apr '19 - Current
California Plug Load Research Center, UC Irvine
- Develop firmware for IoT applications using MQTT and freeRTOS
- Debug hardware by creating tests for I2C, SPI, and serial components
- Electronics assembly: PCB population, soldering, & SMD rework

Peer Academic Advisor — Mar '18 - Current
Engineering Undergraduate Student Affairs, UC Irvine
- Advise engineering students in curriculum planning
- Determine appropriate student referrals for specific campus resources
- Create workshops for Engineering career pathways & study abroad.

Hardware Engineering Intern — Jun '19 – Aug '19
Panasonic Avionics Corporation, Lake Forest, CA
- Investigate hardware issues in Line-replaceable Units (LRU)
- Resolve component obsolescence in LRUs
- Complete FAA regulated ESD, thermal, and power cycle tests

PROJECTS

GPS Sound Sensor (UCI Senior Design) — Sep '19 – Current
- Created firmware for Embedded Linux system (BeagleBoneBlack)
- Develop UART connection between GPS and device
- Implemented MQTT protocol between device and Android Application

Buddy Series (Calplug) — Apr '19 – Current
- Implemented freeRTOS task scheduling for ESP32 firmware
- Assist in device assembly including soldering and SMD rework
- Debug hardware issues by creating test cases and tracing circuits

Scale Up (SD Hacks Hackathon) — Oct '19
- Created threaded Python firmware
- Interfaced load cell and LCD with Raspberry Pi
- Used Google Cloud Vision with Pi Camera to capture food types

HC2: IoT Environment Sensor (Consulting) — Aug '19 – Jan '20
- Develop Python API for Rotronics HC2 temperature probe
- Develop Arduino Library to interface with HC2
- Develop IoT network including LoRa, WiFi, and Email