ENOCH CHAU

Irvine, CA
enoch965@gmail.com
ec965.github.io

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

UC Irvine Exp. Grad. June 2020
B.S. Electrical Engineering
Electronic Circuit Design 3.43 GPA

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 for ABET certification
- Determine appropriate referrals for students to specific campus resources
- Create workshops for Engineering career pathways & study abroad.

Hardware Engineering Intern – In Service **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 BeagleBoneBlack
- Implemented MQTT protocol between device and Android Application

Buddy Series *Research* **Apr '19 – Current**

- Implemented freeRTOS task scheduling for ESP32 firmware
- Assist in device assembly including soldering and SMD rework
- Debug hardware issues by creating custom test cases and tracing circuits

Scale Up *SD Hacks* **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 and humidity probe
- Develop Arduino Library to interface with Rotronics HC2
- Develop IoT network including LoRa, WiFi, and Email