

ENoch CHAU



San Bruno, CA
enoch965@gmail.com
ec965.github.io

Programming

- C
- C++
- Python
- JavaScript
- HTML
- CSS
- Bootstrap
- freeRTOS
- Bash

Programs

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

Lab Tools

- Oscilloscope
- Soldering

Course Work

- IC Design
- Power Electronics
- Semiconductors

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

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

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

Workout Timer (Personal)

April '20

- Created interval training timer web app using JavaScript
- Prototyped by making Python GUI and command line versions

GPS Sound Sensor (UCI Senior Design)

Sep '19 – March '20

- Created firmware for Embedded Linux system (BeagleBoneBlack)
- Develop UART connection between GPS and device
- Implemented MQTT protocol between device and Android Application

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