ENOCH CHAU

Irvine, CA ● enoch965@gmail.com ● https://ec965.github.io/

EDUCATION

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

EMPLOYMENT

Research Assistant Apr '19 - Current
California Plug Load Research Center, UC Irvine

- Develop firmware for ESP32 Microcontroller using Arduino IDE
- Assist in electronics assembly including soldering and SMD rework

Peer Academic Advisor Mar '18 - Current
Engineering Undergraduate Student Affairs, UC Irvine

- Create and present workshops on Engineering Student topics
- Advise a wide range of Engineering and prospective students
- Streamline office work by editing transcripts and scheduling appointments

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

Scale Up *SD Hacks, group* Oct '19

- Created threaded Python firmware to interface load cell and LCD with Raspberry Pi
- Used Google Cloud Vision with Pi Camera to capture food types

HC2: IoT Environment Sensor *Consulting, Individual* Aug '19 – Current

- Develop Arduino Library for Rotronics HC2 temperature and humidity probe
- Develop Python scripting API for Rotronics HC2
- Develop IoT network including LoRa, WiFi, SMS, and Email

Projector Buddy *Research, Group* April '19 – June '19

- A device that can reduce power consumption of projectors.
- Created a custom board with ESP32 microcontroller interfacing with I2C, SPI, and GPIO sensors
- Configured power circuit, Updated firmware, Assisted in device assembly

Three Phase Watt-meter *Research, Group* April '19 – June '19

- A custom 3-phase wattmeter board using ADE9078 to detect faults in 3 phase devices
- Developed Waveform Buffer functions and Fast Fourier transform of data for ADE9078
- Created Data processing visualization of Fast Fourier transform of data

SKILLS

Programming: C, C++, Python, Bash, HTML

Programs: Linux, Git, Cadence, PSpice, Arduino, Processing 3, Mathematica, FL Studio

Lab Tools: Digital Multi-meter, Oscilloscope, Soldering, SMD rework, Smith Chart, Thermotron, ESD test equipment

Languages: Mandarin: *heritage speaker, some reading & writing*