

Seeking for Full-Time/Internship Position Starting July 2021
Interested in Electrical & Computer Engineering Positions

Citizenship: F1 student with 3-year-long Optional Practical Training (no need for sponsorship, see [detail from USCIS](#))

EDUCATION

B.S. Electrical Engineering, University of Cincinnati, USA
Mathematics and Embedded Systems minor, University Honors Program

August 2016 - May 2021
GPA 3.9/4.0

SKILLS

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|--------------------------------|---|
| Signals and Systems | DSP, Frequency analysis, feedback control systems, PID controller, linear system theory |
| Embedded Hardware | System design with MCU, interface with sensors, actuators, serial and wireless communications |
| Circuit Design | Analog and digital circuit design, analysis and simulation, Verilog HDL on FPGA |
| Embedded Programming | Assembly for PIC on MPLAB, C for Atmel on Atmel Studio, FreeRTOS for ARM Cortex-M |
| Prototyping and Testing | On-board prototype and troubleshoot, PCB prototype in KiCAD, developing tests fixtures |
| Software Development | Git, Linux, C/C++, C#, Java, Python, MATLAB, SQLite database |

INDUSTRY EXPERIENCE

Electrical Engineer (R&D Co-op)
Ethicon Endo-Surgery Inc.

June - August 2019
Blue Ash, OH

- Designed, assembled, troubleshooted and tested a PCB for a prototype product
- Designed a hardware-robust circuit to switch high-voltage lines for a medical surgery generator
- Developed testing code in C to verify NFC sensor functionality with microcontrollers
- Documented implementation methods, testing procedure and test results
- Presented projects and improvements to managers and peer Co-op students

Engineering Teaching Assistant for Bio-Robotic Class
Biology Department, University of Cincinnati

October 2019 - April 2020
Cincinnati, OH

- *Sensing in Animals and Robots* is an NSF funded program that teaches animal sensing by robotic implementations
- Helped with the development of custom PCB for sonar, light and flex sensors
- Documented the development process as well as the usage of the circuits

Automatic Assembly System Engineer (Co-op)
Jergens Inc.

Jan - August 2018
Cleveland, OH

- Designed and managed installation a grinder safety system with B&R Automation System (PLC)
- Documented project by writing manuals for operators, electrical diagrams to technicians, and programming doc to engineers

PROJECT EXPERIENCE

Modular Garden Monitoring System

Senior Design (Capstone) Project

- An embedded system that autonomously manages garden environment with friendly UI, modular design and wireless communication
- Designed and prototyped circuit for air & soil temperature/humidity sensors
- Designed circuit for solar panel and its power management module
- Troubleshooted circuit design with lab equipment, and improved design accordingly

OPL2 Chiptune Music Player

Final Project for Japanese Music Class

- An embedded system that plays chiptune (8-bit) music with OPL2 chip that was used in Commodore 64
- Designed, prototyped and troubleshooted a PCB as implementation