# Seeking for Full-Time/Internship Position (Available Now) Interested in Electrical & Computer Engineering Positions

(513)886-6058

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

### **EDUCATION**

M.S. Electrical Engineering, University of Cincinnati, USA

January 2020 - May 2022

\* Willing to postpone for job opportunities

GPA 4.0/4.0

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

Signals and Systems Embedded Hardware Communication Interface Circuit Design **Embedded Programming** Prototyping and Testing Software Development

DSP, Frequency analysis, feedback control systems, PID controller, linear system theory System design with MCU, circuit/firmware driver for sensors, actuators and robots I2C, SPI, UART, Bluetooth, Zigbee, USB, Ethernet, CAN, in signal and application layer Analog and digital circuit design, analysis and simulation, Verilog HDL on FPGA Assembly for PIC on MPLAB, C for Atmel on Atmel Studio, FreeRTOS for ARM Cortex-M On-board prototype and troubleshoot, PCB prototype in KiCAD, developing tests fixtures Git, Linux, C/C++, C#, Java, Python, MATLAB, SQLite database

#### INDUCTRY 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