

Seeking for Full-Time/Internship Position Starting July 2021
Interested in Electrical Engineer 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 and PCB prototyping, developing test fixture and procedure, troubleshooting |
| 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

- Developed driver programs in Assembly for module controllers to communicate with the main system controller over serial bus
- Developed testing code in C to verify NFC sensor functionality with microcontrollers
- Documented testing procedure and desired test results
- Presented projects and improvements to managers and peer Co-op students

Automatic Assembly System Engineer (Co-op)

Jergens Inc.

Jan - August 2018

Cleveland, OH

- Designed and managed installation a customized grinder safety system with B&R Automation System (PLC)
- Designed and implemented the GUI and finite-state machine control for the industrial system in C-based language
- Documented project by writing manuals for operators, electrical diagrams to technicians, and programming doc to engineers

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
- Developed firmware for sensors and actuators and simple front-end methods to students
- Helped the robot development, class organization and helped students understand the engineering portion of the class

PROJECT EXPERIENCE**Servo Driving and Mirroring with FPGA**

Final Project for Embedded System Class

- Designed a servo motor driver that reads in an analog voltage from one motor and writes out PWM signal to another motor accordingly
- Implemented the design in System Verilog with mixed structural/behavioral models
- Designed and implemented a post-processing control unit for the embedded ADC on Basys 3 board

RTL Design for a Custom Control Unit

Final Project for Computer Organization & Architecture Class

- Designed a 16-bit single-bus paradigm finite-state control unit with basic instruction set, with a non-pipelined and a pipelined version
- Presented and simulated design in Logisim-Evolution software
- Documented design procedure and optimization methods