

**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](#))

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**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 August 2016 - May 2021  
Mathematics and Embedded Systems minor, University Honors Program GPA 3.9/4.0

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**SKILLS**

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

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**INDUSTRY EXPERIENCE**

**Electrical Engineer (R&D Co-op)** June - August 2019  
Ethicon Endo-Surgery Inc. *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)** Jan - August 2018  
Jergens Inc. *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** October 2019 - April 2020  
Biology Department, University of Cincinnati *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

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**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