

**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](#))

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**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

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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 on Eclipse
<b>Prototyping and Testing</b>	On-board prototype and troubleshoot, PCB prototype in KiCAD, developing tests fixtures
<b>Software Development</b>	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*

- 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**

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
- 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)**

Jan - August 2018

Jergens Inc.

*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

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**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