

## Seeking for Full-Time Position Starting May 2021

### Interested in Electrical Engineer Positions

Citizenship: international student with 3-year working time in USA (and possible 6 more years with working visa)

#### EDUCATION

<b>M.S. Electrical Engineering</b> , University of Cincinnati, USA Intelligent Systems track, ACCEND Program	Graduating May 2022 GPA 4.0/4.0
<b>B.S. Electrical Engineering</b> , University of Cincinnati, USA Mathematics and Embedded Systems minor, University Honors Program	Graduating May 2021 GPA 3.9/4.0

#### 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 and PCB prototyping, developing test fixture and procedure, troubleshooting
<b>Software Development</b>	C/C++, C#, Java, Python, MATLAB, SQLite database

#### INDUSTRY EXPERIENCE

<b>Electrical Engineer (R&amp;D Co-op)</b> Ethicon Endo-Surgery Inc.	June - August 2019 <i>Blue Ash, OH</i>
<ul style="list-style-type: none"> <li>Designed, assembled, troubleshooted and tested a PCB for a prototype product</li> <li>Designed a hardware-robust circuit to switch high-voltage lines for a medical surgery generator</li> <li>Developed testing code in C to verify NFC sensor functionality with microcontrollers</li> <li>Documented implementation methods, testing procedure and test results</li> <li>Presented projects and improvements to managers and peer Co-op students</li> </ul>	
<b>Engineering Teaching Assistant for Bio-Robotic Class</b> Biology Department, University of Cincinnati	October 2019 - April 2020 <i>Cincinnati, OH</i>
<ul style="list-style-type: none"> <li><i>Sensing in Animals and Robots</i> is an NSF funded program that teaches animal sensing by robotic implementations</li> <li>Helped with the development of custom PCB for sonar, light and flex sensors</li> <li>Documented the development process as well as the usage of the circuits</li> </ul>	
<b>Automatic Assembly System Engineer (Co-op)</b> Jergens Inc.	Jan - August 2018 <i>Cleveland, OH</i>
<ul style="list-style-type: none"> <li>Designed and managed installation a grinder safety system with B&amp;R Automation System (PLC)</li> <li>Documented project by writing manuals for operators, electrical diagrams to technicians, and programming doc to engineers</li> </ul>	

#### 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