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

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

SKILLS

Signals and Systems	DSP, Frequency analysis, feedback control systems, PID controller, linear system theory
Embedded Hardware	System design with MCU, circuit/firmware driver for sensors, actuators and robots
Communication Interface	I2C, SPI, UART, Bluetooth, Zigbee, USB, Ethernet, CAN, in signal and application layer
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

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
- Built test fixtures for NFC sensors using microcontrollers
- Documented implementation methods, testing procedure and 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
- Applied project management skills to maintain progress and ensure delivery
- 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

PROJECTS

Brain Computer Interface Research Decomposed EEG signal to identify patterns in human motor imagery experiment

Modular Garden Monitoring System An embedded system that autonomously manages garden environment with friendly UI, modular design and wireless communication (Senior Capstone Project)

Not-A-Boring Competition Designed the control system for an autonomous tunnel boring machine (TBM) with an international team. Team's design proposal selected with 11 other finalists among 390 competitors (ongoing)

UC Robotics Developed computer vision system for sensor fusion and decision making algorithms. Maintainer of the GitHub repository while in the team.

Hyperloop Competition Participated in the engineering of the levitation pod for the carrier vehicle. The system uses PID controller designed in Python and implemented with C into FreeRTOS.