Website

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

(513)886-6058

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

* Willing to postpone for job opportunities

January 2020 - May 2022 GPA 4.0/4.0

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

Signals and Systems **Embedded Hardware** Circuit Design **Embedded Programming** Prototyping and Testing Software Development

DSP, Frequency analysis, feedback control systems, PID controller, linear system theory 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 Analog and digital circuit design, analysis and simulation, Verilog HDL on FPGA Assembly for PIC on MPLAB, C for Atmel on Atmel Studio, FreeRTOS for ARM Cortex-M On-board and PCB prototyping, developing test fixture and procedure, troubleshooting

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 LED
- 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 prosedure and optimization methods