
Seeking for Electrical & Computer Engineering Summer Internship/Co-op

Citizenship: F1 with CPT (1 year) and OPT (1 year + 2 year STEM Extension)

EDUCATION**M.S. Electrical Engineering**, Bradley University, USA
Specialized in Robotics and MechatronicsAugust 2023 - Now
GPA 4.0/4.0**B.S. Electrical Engineering**, University of Cincinnati, USA
Mathematics and Embedded Systems minor, University Honors ProgramAugust 2016 - May 2021
GPA 3.9/4.0

SKILLS

Embedded Hardware	System design with MCU, circuit/firmware driver for sensors, actuators and robots
Embedded Programming	HAL and RTOS programming on platforms including PIC, AVR, STM32
Communication Interface	I2C, SPI, UART, Bluetooth, Zigbee, USB, Ethernet, CAN in signal and application layer
Circuit Design	Analog and digital circuit design, simulation, FPGA synthesis with VHDL and Verilog
Prototyping and Testing	On-board and PCB prototyping, developing test fixture and test automation scripts
Software Development	C/C++, Python, Git, Linux, Bash scripting, Qt & GTK GUI framework

EXPERIENCE**Embedded Software Engineer**
L&T TechnologiesAugust 2021 - July 2023
Peoria, IL

- Maintain and troubleshoot embedded C firmware for Caterpillar transmission Electronic Control Module (ECM)
- Maintain and develop automated testing framework for ECM firmware in a virtual simulated environment
- Develop feature-oriented test strategies and automation scripts for ECM firmware

Brain Computer Interface (BCI) Research Assistant
UC HCI LabAugust 2019 - May 2021
Cincinnati, OH

- Apply data analysis methods to spatio-temporal electroencephalographic (EEG) data for classification problem
- Apply machine learning methods to detect human motor imagery intentions using post-processed data
- Assist on a multi-disciplinary robotic project that implements BCI, SLAM and NLP

Electrical Engineer (R&D Co-op)
Ethicon Endo-Surgery Inc.June - August 2019
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

Electrical Engineer Team Member

August 2019 - August 2021

rLoop - a global, crowdsourced engineering organization

- *Not-A-Boring-Competition* is run by the Boring Company that aims to build a novel tunnel boring system
- Designed a modified leader-follower control scheme with pure-pursuit algorithm for the proposed final design draft
- Design proposal selected with 11 other finalists among 390 competitors

PROJECTS**Collaborative Robots for Human-Robot Interaction** Design, implement and validate control and navigation systems of Cobots from simulation to real environments (thesis, ongoing)**Pulmonary Acoustic Sensor Array** An IoT device capable of synchronously multiple channels of lung acoustics and remotely diagnosing with machine learning (OSF joint project, ongoing)**Modular Garden Monitoring System** An embedded system that autonomously manages garden environment with friendly UI, modular design and wireless communication (Senior Capstone Project)**Hyperloop Competition** Participated in the development of the levitation pod for the carrier vehicle using PID controller designed and simulated with Python and implemented with C