

**Seeking for Full-Time Position/Internship Starting July 2021**  
**Interested in Intelligent System, Robotics & AI Engineering Positions**

Citizenship: F1 student with 3-year-long Optional Practical Training (no need for sponsorship, see [detail from USCIS](#))

## 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

## SKILLS

|                                  |  |
|----------------------------------|--|
| <b>Signals and Systems</b>       | DSP, signal transformation methods, control system theory, linear system theory  |
| <b>Intelligent Data Analysis</b> | Classification, clustering, anomaly detection and methods, association analysis  |
| <b>Machine Learning</b>          | Image processing, natural language processing and reinforcement learning         |
| <b>AI Implementations</b>        | Tensorflow, Scikit-Learn, OpenCV, Pandas, MATLAB                                 |
| <b>Robotic Engineering</b>       | Robotic controls, motion planning, simulation, sensor fusion and computer vision |
| <b>Software Development</b>      | C/C++, C#, Java, Python, MATLAB, SQLite database                                 |

## EXPERIENCE

**Brain Computer Interface (BCI) Research**  
 UC HCI Lab

August 2019 - now  
*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 and implemented a dynamic feed-back control system for NFC sensors
- 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**

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
- Implemented sensor fusion and computer vision algorithms requested by students, and gave lectures on simple algorithms
- Helped the professors organize the class and helped students understand the engineering portion of the class

**Electrical Engineer Team Member**

rLoop - a global, crowdsourced engineering organization

August 2019 - now

- *Not-A-Boring-Competition* is run by the Boring Company that aims to build a novel tunnel boring system
- Participated as electrical engineer, in charge of the design and implementation of control system and navigation software
- 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

**Neuromorphic Computing Research** Developed an analog circuit system to simulate spiking neural signal

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

**Gas Tracking and Prediction App** Used web crawler that collects gas prices, SQL to maintain database and developed early-stage data analysis methods for price prediction

**Mask Detection Robot** Developing an autonomous system that detects and suggests face masks on a person by a neural network algorithm (ongoing)