

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

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

### EDUCATION

**M.S. Electrical Engineering**, University of Cincinnati, USA  
Intelligent Systems track, ACCEND Program  
Graduating May 2022  
GPA 4.0/4.0

**B.S. Electrical Engineering**, 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, 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 design, ongoing)

**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)