Wyatt McAllister

wyattsmcall1@me.com | 512.638.3717

EDUCATION

UNIVERSITY OF ILLINOIS

MS in Electrical Engineering
Expected May 2018 |
Champaign-Urbana, IL
Conc. in Increased Autonomy and Learning-Based Control
College of Engineering
Dean's List (All Semesters)
Curr. Cum. GPA: 4.0 / 4.0

BS in Electrical Engineering
May 2016 | Champaign-Urbana, IL
Conc. in Control Systems
College of Engineering
Dean's List (All Semesters)
Cum. GPA: 3.94 / 4.0

BARD COLLEGE AT SIMON'S ROCK

May 2014 | Great Barrington, MA
Cum. GPA: 3.95 / 4.0

LINKS

LinkedIn: https://wyattsmcall1.github.io

COURSEWORK

GRADUATE

Autonomous Decision Making, Random Processes, Stochastic Control, State Space Control

UNDERGRADUATE

Computing Systems and Programming, Analog and Digital Signal Processing, Probability with Engineering Applications, Fields and Waves, Intro to Power Electronics, Semiconductor Devices, Microelectronic Circuits, Digital Systems Laboratory, Intro to Robotics, Intro to Control Systems ***(Research Asst. & Teaching Asst.)***

SKILLS

SOFTWARE

C++ • C • Java • MatLab • Mathematica
Python • LaTeX • Photoshop

HARDWARE

ROS • System Verilog • OpenCV •
EagleCAD PCB Design • Control Design

LANGUAGE

Spanish: Full Professional Proficiency

PROFESSIONAL EXPERIENCE

MICROSOFT SURFACE HUB |Summer Hardware Intern

May–August 2015 | Portland, OR

- Modeled the vision system used in the manufacturing process and improved its accuracy recursively using capabilities studies
- Built a custom testing fixture for the incoming quality control of power supplies
- Created custom pattern generator for the testing of incoming raw LCD displays before manufacturing

VIEW RAY INCORPORATED | Summer Hardware Intern

May-August 2014 | Oakwood Village, OH

- Worked on a system for MRI targeted radiation therapy to prevent the irradiation of healthy tissues
- Created a fiber optic cable testing box used to efficiently test data flow through parts of system
- Fabricated and documented various components for product distribution

RESEARCH

DISTRIBUTED AUTONOMOUS SYSTEMS LAB | Graduate Researcher

May 2017–Present | Champaign-Urbana, IL

• Working with **Denis Osipychev** and **Prof Girish Chowdhary**.
• Examined the roll of semantic learning in the ability of humans to outperform reinforcement learning agents for intuitive tasks using a gridworld simulation
• Designed a multi-agent reinforcement learning simulation for robotic weed killing

ADVANCED CONTROLS RESEARCH LAB | Graduate Researcher

August 2016–May 2017 | Champaign-Urbana, IL

•Worked with **Thiago Marinho** and **Prof Girish Chowdhary** to create a learning-based parameter estimation framework for quad rotors with interchangeable blades
• Worked with **Sebastian Rodriguez** and **Prof Alex Kirlik** to create a ROS implementation of the software interface for the Automation Supporting Prolonged Independent Residence for the Elderly (ASPIRE) program
• Worked with **Bilal Mehdi** and **Prof Naira Hovakimyan** to help create a hardware implementation of a Bézeir Curve collision avoidance algorithm for cooperative mission planning between quad rotors.

BRETL GROUP | Undergraduate Researcher

August-December 2015 | Champaign-Urbana, IL

• Worked with **Andy Borum** and **Prof Timothy Bretl** to design a testing fixture for experiments toward extending the one-dimensional model for the control of a deformable rod to a model for two dimensional objects with planar deformation

AWARDS

2016	top 1/2500	John Bardeen Merit Scholarship in ECE
2014-2016	top 20%ile	Dean's List
2016	GPA: >3.8/4.0	High Honors

SOCIETIES

2016	top 12%ile	Tau Beta Pi Engineering Honor Society
2015	top 25%ile	Etta Kappa Nu IEEE Honor Society