Wyatt McAllister

wyattsmcall1@me.com | 512.638.3717

EDUCATION

UNIVERSITY OF ILLINOIS

MS in Electrical Engineering
Exp. May 2018 | Champaign-Urbana, IL
Conc. in Control and Data Science
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: 3.92 / 4.0

SIMON'S ROCK COLLEGE

May 2014 | Great Barrington, MA
Cum. GPA: 3.94 / 4.0

LINKS

LinkedIn: https://wyattsmcall1.github.io

COURSEWORK

GRADUATE

Autonomous Decision Making, Random Processes, Stochastic Control, Statistical Learning Theory, Nonlinear Control, State Space Control *(Research Asst.)*

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

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 using capability 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 | Researcher

May 2017–Present | Champaign-Urbana, IL

• Working with **Prof Girish Chowdhary** to design a multi-agent planning algorithm for robotic weed killing, with an associated simulation framework including a realistic weed growth model

ADVANCED CONTROLS RESEARCH LAB | Researcher

August 2016–May 2017 | Champaign-Urbana, IL

•Worked with **Prof. Girish Chowdhary** to create a learning-based parameter estimation framework for quad rotors with interchangeable blades
• Worked with **Prof. Alex Kirlik** to create a software interface for the Automation Supporting Prolonged Independent Residence for the Elderly (ASPIRE) program using the Robot Operating System (ROS)
• Worked with **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 **Prof Timothy Bretl** to design a testing fixture for experiments toward extending a one-dimensional model for the control of deformable rods to a model for two dimensional objects with planar deformation

AWARDS

2018	Top 1/503	Shun Lien Chuang Memorial Award
2016	GPA: >3.8/4.0	Highest Honors
2016	Top 1/2500	John Bardeen Award in ECE
2014-2016	Top 20%ile	Dean's List

SOCIETIES

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