Wyatt McAllister

wyattsmcall1@me.com | 512.638.3717

EDUCATION

UNIVERSITY OF ILLINOIS
Ph.D. in Electrical Engineering
May 2020 | Urbana-Champaign, IL
Conc. in Control and Data Science
Cur. Cum. GPA: 4.0 / 4.0

UNIVERSITY OF ILLINOIS
MS in Electrical Engineering
May 2018 | Urbana-Champaign, IL
Conc. in Control and Data Science
Cum. GPA: 4.0 / 4.0

BS in Electrical Engineering
May 2016 | Urbana-Champaign, IL
Conc. in Control Systems
College of Engineering
Cum. GPA: 3.92 / 4.0

LINKS

https://wyattsmcall1.github.io

COURSEWORK

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

UNDERGRADUATE
Control Systems, Intro to Robotics, Digital Systems Laboratory, Fields and Waves, Microelectronic Circuits, Semiconductor Devices, Intro to Power Electronics, Probability with Engineering Applications, Analog and Digital Signal Processing, Intro to Computing Systems

SKILLS

SOFTWARE
C++ • C • Java • MatLab • Python
Mathematica • 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
• Used capabilities studies to improve accuracy of vision system used in the manufacturing process
• Designed a custom testing fixture for the incoming quality control of power supplies

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 to efficiently measure data flow in the system

RESEARCH

DISTRIBUTED AUTONOMOUS SYSTEMS LAB | Researcher
May 2017–Present | Champaign-Urbana, IL
• Designed 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
• Created a ROS software interface for the Automation Supporting Prolonged Independent Residence for the Elderly (ASPIRE) program

BRETL GROUP | Undergraduate Researcher
August-December 2015 | Champaign-Urbana, IL
• Designed a testing fixture for experiments for extending the one-dimensional model for a deformable rod to a model of two dimensional objects with planar deformation

PUBLICATIONS

[1] W. McAllister, D. Osipychev, G. Chowdhary, and A. Davis. Multi-agent planning for coordinated robotic weed killing. In *Intelligent Robots and Systems (IROS), 2018 IEEE/RSJ International Conference on*. IEEE, 2018.

UNIVERSITY OF ILLINOIS | Graduate Teaching Assistant
August 2016 - May 2018 | Champaign-Urbana, IL
• Fields and Waves I (ECE329) with Dr. Lynford Goddard
• Principles of Experimental Research (ECE446) with Dr. Lynford Goddard
• Introduction to Digital Signal Processing (ECE310) with Dr. Yoram Bresler and Dr. Stephen Levinson

AWARDS

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

SOCIETIES

2016	Tau Beta Pi Engineering Honor Society	Top 12the Percentile
2015	Etta Kappa Nu IEEE Honor Society	Top 25th Percentile