

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
College of Engineering
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
College of Engineering
Cum. GPA: 4.0 / 4.0

UNIVERSITY OF ILLINOIS

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. Osipych, 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.

TEACHING

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 12th Percentile
2015	Etta Kappa Nu IEEE Honor Society	Top 25th Percentile