

HALEY GREEN

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151 Engineer's Way, Charlottesville, Virginia 22903, USA

EDUCATION

University of Virginia

Ph.D. in Computer Engineering

Charlottesville, Virginia

August 2020 - Present

- Advisor: Prof. Tariq Iqbal
- Dissertation Topic: Real-time trust evaluation in human-robot interactions.

Brown University

B.S. in Mechanical Engineering

Providence, Rhode Island

September 2016 - May 2020

- Member of Brown University Women's Basketball Team

RESEARCH AND WORK EXPERIENCE

Graduate Research Assistant

Collaborative Robotics Lab

Charlottesville, Virginia

August 2020 - Present

- Conducting research on trust calibration in human-robot teams
- Examining mitigation strategies for task failure in a human-robot interaction
- Showcasing projects and robots to the UVA and Charlottesville community

Graduate Student Member

Link Lab

Charlottesville, Virginia

August 2020 - Present

- Receiving hands-on, testbed-driven cyber-physical systems experience
- Attending in various recruitment and professional development events
- Engaging with student researchers in the multidisciplinary, cyber-physical systems research center

Undergraduate Teaching Assistant

Course: Advanced Fluid Mechanics

Providence, Rhode Island

January 2020 - May 2020

- Mentored a group on designing a self-propelled helical robot swimmer
- Organized weekly meetings to keep the project on track
- Served as a liaison between research group and faculty

Integer Holdings

Mechanical Engineering Intern

Salem, Virginia

June 2019 - August 2019

- Created SolidWorks CAD (computer-aided design) drawings and utilized 3D printer
- Collected and analyzed data for a variety of process improvement tests
- Collaborated with a small team on revitalizing safety standards for handling hydrofluoric acid

Klöckner Pentaplast

Mechanical Engineering Intern

Rural Retreat, Virginia

May 2018 - August 2018

- Generated AutoCAD designs for parts to improve manufacturing process
- Implemented a filtration system for the O.C.S. (Optical Controls Systems) cameras
- Experimented with various sensors on measuring roller gap to improve film thickness consistency

PUBLICATIONS

- [1] **H. Green**, M. M. Islam, S. Ali, and T. Iqbal, “iSpy a Humorous Robot: Evaluating the Perceptions of Humor Types in a Robot Partner,” *Proceedings of AAAI Spring Symposium on Putting AI in the Critical Loop: Assured Trust and Autonomy in Human-Machine Teams Symposium*, 2022.
- [2] **H. Green**, M. M. Islam, S. Ali, and T. Iqbal, “Who’s Laughing NAO? Examining Perceptions of Failure in a Humorous Robot Partner,” *ACM/IEEE International Conference on Human-Robot Interaction (HRI)*, 2022.

AWARDS AND SCHOLARSHIPS

- UVA Engineering Distinguished Fellowship *August 2020*
- National Science Foundation Research Traineeship (NRT) *August 2021*

GRADUATE COURSES

- Advanced Digital Design Laboratory: ASIC/FPGA
- Computer Engineering Perspectives
- Computer Architecture
- Communication, Test-Beds and Policy
- Formal Methods, Safety, and Security
- Human Error in Complex Systems
- Robotic Autonomy
- Robots and Humans
- Signal Processing, Machine Learning, and Control

SELECTED PROJECTS

Autonomous Ball Tracker

Course: Robotic Autonomy

Charlottesville, Virginia

January 2022 - May 2022

- Programmed a robot autonomously track a moving target.
- Used Recursive Bayesian Estimation (RBE) to predict the motion of the target under occlusion.

Guess Who?

Course: Robots and Humans

Charlottesville, Virginia

January 2021 - May 2021

- Created a playable game of Guess Who? between Nao and a human player.
- Explored the relationship between player enjoyment and relative game proficiency

An Optimal Real-Time Interaction Model of Robotic Pet

Course: Formal Methods, Safety, and Security

Charlottesville, Virginia

January 2021 - May 2021

- Designed a set of safety, security, improvement, and system requirements.
- Implemented a set of realistic and elevated behaviors.

Timeloop/Accelergy for Evaluating DNN Hardware Acceleration

Course: Computer Architecture

Charlottesville, Virginia

August 2020 - November 2020

- Used the tools Timeloop and Accelergy to analyze DNN accelerators for different deep learning tasks.
- Replicated the results of MIT’s Timeloop/Accelergy workshop.

LEADERSHIP

- President of the Link Lab Student Committee *May 2022 - Present*

- Member of the Link Lab Professional Development Committee
- Member of the Link Lab Student Committee
- Captain of the Brown University Women's Basketball Team

November 2021 - Present

August 2021 - Present

March 2019 - May 2020

SKILLS

Robotics:

- Choregraphe
- ROS

Computer Skills:

- Programming Languages: C, C++, Python, Java
- Statistical Analysis: IBM SPSS
- Other: Matlab, LaTeX, UNIX/Linux, Amazon Mechanical Turk

Computer-Aided Design:

- SolidWorks
- AutoCAD
- Quartus II
- ModelSim
- Photoshop
- Illustrator

PROFESSIONAL SERVICES

Presenter: AAAI 2022 Spring Symposium, HRI 2022, Link Lab 2022 Spring Flash Talk, Link Lab Year-Opening Poster Session, CURE Symposium

Reviewer: AI-HRI, IEEE RA-L, EngineerGirl, VSSEF

Tutor: Calculus, Programming

Mentor: University of Virginia, Brown University