

JUSTIN WASSERMAN

Homepage: jbwasse2.github.io ♦ Email: justinbwasserman@gmail.com

Interests: Robotics, Embodied Agents, Computer Vision

EDUCATION

University of Illinois at Urbana-Champaign

August 2019 - Present

Ph.D. in Electrical and Computer Engineering

· Advisor: [Girish Chowdhary](#)

University of Illinois at Urbana-Champaign

August 2014 - May 2019

Bachelor of Sciences (B.S) in Computer Engineering

· Advisor: [Steven LaValle](#)

RESEARCH EXPERIENCE

Skild AI

November 2023 - Present

Research Scientist

Pittsburgh, PA

· Mentors: [Abhinav Gupta](#), [Deepak Pathak](#)

Carnegie Mellon University

March 2023 - November 2023

Research Assistant

Pittsburgh, PA

· Mentors: [Unnat Jain](#), [Abhinav Gupta](#)

PUBLICATIONS GOOGLE SCHOLAR

3D Vision-Guided Autonomous Manipulation of Hybrid Robots in Cluttered, Unstructured Environment
S.K.Kamtikar, K. Koe, **J. Wasserman**, S. Marri, B. Walt, N. Uppalapati, G. Krishnan, G. Chowdhary
Under Review

Legolas: Deep Leg-Inertial Odometry

J. Wasserman, A. Agarwal, R. Jangir, G. Chowdhary, D. Pathak, A. Gupta

Conference on Robot Learning (CoRL), 2024

[\[project\]](#)

Exploitation-Guided Exploration for Semantic Embodied Navigation

J. Wasserman, G. Chowdhary, A. Gupta, U. Jain

IEEE International Conference on Robotics and Automation (ICRA), 2024

[\[project\]](#) [\[pdf\]](#)

Best Paper at NeurIPS 2023 Robot Learning Workshop (oral)

Under-Canopy Dataset for Advancing Simultaneous Localization and Mapping in Agricultural Robotics

J. Cuaran, A. Velasquez, M. Gasparino, N. Uppalapati, A. Sivakumar, **J. Wasserman**, M. Huzaifa, S. Adve, G. Chowdhary

International Journal of Robotics Research (IJRR), 2023

[\[project\]](#)

Last-Mile Embodied Visual Navigation

J. Wasserman, K. Yadav, G. Chowdhary, A. Gupta, U. Jain.

Conference on Robot Learning (CoRL), 2022

[\[project\]](#) [\[pdf\]](#)

A Hardware and Software Testbed for Underactuated Self-Assembling Robots

A. Nilles, **J. Wasserman**, A. Born, C. Horn, J. Born, S. LaValle.

IEEE International Symposium on Multi-Robot and Multi-Agent Systems (MRS), 2019

[\[pdf\]](#)

TALKS AND AWARDS

CMU Robot Learning Retreat <i>Exploitation-Guided Exploration for Semantic Embodied Navigation</i>	2023
EAI Seminar, Facebook AI Research Labs (FAIR) <i>Last-Mile Embodied Visual Navigation</i>	2022 [slides]
Undergraduate Research Symposium, UIUC <i>Controlling, Modeling, and Scaling Underactuated, Non-deterministic Robot Structures</i>	2019
Leung Student Venture Fund Award · Awarded \$1000 to support research in robotics for undergraduate thesis.	2019

SERVICE

Reviewer

- IROS, ICRA, RA-L, CoRL, NeurIPS, ICLR, ICML, CVPR
- RoboAdapt Workshop CoRL 2022 [\[webpage\]](#), Robot Learning Workshop NeurIPS 2023 [\[webpage\]](#)

Academic Services

- CSL Student Conference 2021 Robotics Chair [\[webpage\]](#)
- CSL Student Conference 2020 Reception Chair [\[webpage\]](#)

Mentoring

- [Shivani Kamtikar](#) (PhD at UIUC : Publication in submission.)
- [Ruben Dorian Serrano](#) (BS at UIUC → Amazon)
- [FIRST Robotics](#) : Mentored many undergraduates, high schoolers, and middle schoolers in competitive robotics.
- Various work supporting the women of Afghanistan.

INDUSTRY EXPERIENCE

EarthSense <i>Deep Learning Intern</i> · Applied deep learning techniques to agriculture data to assist the TerraSentia robot in localization and analysis of data.	May 2019 - August 2019 <i>Champaign, IL</i>
Arity <i>Software Engineering Intern</i> · Translated high-level motion data from a car to movement on a testbed robot to create a platform to demonstrate the captured motion data.	January 2018 - May 2018 <i>Chicago, IL</i>
Yaskawa America Inc. <i>Applications Engineering Co-Op</i> · Built software library for motion applications for gantries, Cartesian robots, robotic arms, and other robotics applications.	May 2016 - January 2017 <i>Waukegan, IL</i>

TECHNICAL STRENGTHS

Computer Languages	Python, Shell Scripting, C++, C, IEC 61131-3
Computing	Pytorch, ROS, Linux, Git, Vim, \LaTeX

TEACHING

ECE 110 <i>Teaching Assistant</i> · Led and supervised four 20-student lab sections.	Spring 2022 <i>Urbana-Champaign, IL</i>
ENG 298 LRM <i>Teaching Assistant</i>	Fall 2015, Fall 2017 <i>Urbana-Champaign, IL</i>

- Taught collegiate students how to mentor middle school-aged students in Lego robotics and First Tech Competition.
- Communicated with local teams, coaches, and students to organize mentorships.