YOUHUI (JEFFREY) WANG

(607)-216-2616 · jeffrey_wang@college.harvard.edu

https://jeffreywang060303.github.io/

RESEARCH INTERESTS

Robotics Learning, Perception, and Control; Embodied AI; System Optimization

EDUCATION

Harvard University — Cambridge, MA 2025 - 2026
Visiting Undergraduate Student, Cross-Registration at M.I.T.
GPA: 3.8

Cornell University — Ithaca, NY 2023 - Present
Bachelor of Science in Information Science, Minor in Robotics and AI
GPA: 3.881

RESEARCH EXPERIENCE

Stanford Vision and Learning Lab (SVL) — Stanford, CA 2025 – Present
Research Assistant Advisors: Raven Huang, Jiajun Wu, Fei-Fei Li

Developed Sim2RealGen, a video-based sim-to-real learning framework that synthesizes task-relevant RGB–depth scene variations offline, improving real-world robotic manipulation without physical trial-and-error

Harvard Edge Computing Lab — Cambridge, MA 2025 – Present
Research Assistant Advisors: Jason Jabbour, Vijay Reddi

Developed GLUSTICK, a post-pruning recovery method for VLA models that restores robotic performance without retraining by integrating model compression, SVD-based correction, and efficient deployment on edge hardware

Harvard Microrobotics Lab — Cambridge, MA 2025 – Present
Research Assistant Advisors: Elio Challita, Robert Wood

Designed and controlled a bio-inspired aerial microrobot using ROS-based control pipelines, integrating feedback control and state estimation to maintain stable flight under strong upward airflow and aerodynamic disturbances

Tsinghua Institute for AI Industry Research (AIR) — Beijing, China 2025
Research Intern Advisors: Peng Cheng, Xianyuan Zhan

Developed an offline reinforcement learning model combining feasibility-guided safety constraints and latent state stitching to enable safe learning and optimize national data-center cooling under limited, low-quality data

Organic Robotics Laboratory — Ithaca, NY 2024 – 2025
Research Assistant Advisors: Ofek Peretz, Robert Shepherd

Developed energy-aware control for a bio-inspired robotic fish, coupling wave-energy harvesting with closed-loop locomotion optimization to significantly extend autonomous operation time in deep water

Reid's Research Laboratory — Ithaca, NY 2024 – 2025
Research Assistant Advisors: Matthew Reid

Built a Markovian controlled rainstorm bioreactor using state-transition modeling and real-time sensing

Charles' Research Group — Ithaca, NY 2023 – Present
Research Assistant Advisors: Michael Charles

Applied AI-driven network modeling to simulate ecological and technological systems, leveraging representation-learning–inspired dimensionality reduction and objective analysis to optimize system performance and design

PROJECT EXPERIENCE

MIT 6.4212 Robotic Manipulation Final Project — Cambridge, MA 2025
Advisor: Tomás Lozano-Pérez
Vision-Guided Robotic Folding of Deformable Garments Using Model-Based Planning and Control

Engineers Without Borders (EWB) Cornell Project Team — Ithaca, NY 2024 – 2025
Research Team Member Advisor: Peter Hess
Built embodied aerial and ground robotic systems by integrating GPS, NDVI sensing, and learned perception

AguaClara Cornell Project Team — Ithaca, NY 2024 – 2025
Research Team Member Advisor: : James Hwang
Designed a physical water-treatment system using fluid mechanics and control-oriented system optimization.

PUBLICATIONS

2026 **Don't Run with Scissors: Pruning Breaks VLA Models but They Can Be Recovered**
Jason Jabbour, Dong-Ki Kim, Max Smith, Jay Patrikar, Radhika Ghosal, Youhui Wang, Ali Agha, Vijay Janapa Reddi, Shayegan Omidshafiei
ICML 2026 (Under Review)

AWARDS, HONORS, AND CERTIFICATES

2025 In DEEP Prize by U.S. Department of Energy

2024 Cornell Engineering Office of Inclusive Excellence Student Grants (Top 5%)

2024 Deep Learning Specialization (Certified by DeepLearning.AI & Stanford University)

2023 Machine Learning Specialization (Certified by DeepLearning.AI & Stanford University)

2023 Python for Data Science, AI & Development (Certified by IBM)

TEACHING EXPERIENCE

INFO 1260 / CS 1340: Choices and Consequences in Computing Spring 2025

CS 1112: Introduction to Computing: An Engineering and Science Perspective Fall 2024

MATH 1910: Single Variable Calculus for Engineers Spring 2024

SERVICES

College of Engineering Student Organization — Ithaca, NY 2024 – 2025
Executive Board Member
Managed student mentorship programs, organized large-scale events, and founded a faculty research panel.

Sciencenter — Ithaca, NY 2024 – 2025
Volunteer
Led hands-on science activities for children and contributed to interactive exhibit design on climate and energy.

SKILLS

Programming Languages	Python, Java, MATLAB, C/C++, R, Julia, SQL, HTML, CSS, JavaScript
Software & Frameworks	PyTorch, Tensorflow, ROS2, NumPy, Pandas, PyDrake, SOLIDWORKS, Arduino
Languages	English (work proficiency), Mandarin (native)