HENRY ZHU

hyzhu@stanford.edu ◇ ryzhu.github.io

EDUCATION

Stanford University *2020 - Present*
Ph.D, Computer Science (Expected 2025)
Advisors: Stefan Wager, Emma Brunskill

University of California, Berkeley *2016 - 2020*
B.S., Electrical Engineering and Computer Science (Highest Honors)
Minor, Mechanical Engineering

University of Cambridge, Pembroke College *Summer 2017*
Concentration in Philosophy

EXPERIENCE

Graduate Research Assistant, Stanford University *2020 - Present*
Developing and using causal inference, sequential decision making, and machine learning tools for various application areas currently including public policy, climate resilience and sustainability, healthcare, and education. Currently affiliated with the AI for Human Impact Lab, the Statistical Machine Learning Group, and the Causal Inference Group.

Undergraduate Research Assistant, Robotics and AI Lab, UC Berkeley *2018-2020*
Worked on deep reinforcement learning (deep RL) for robotic control under the supervision of Profs. Sergey Levine and Abhishek Gupta, with a particular emphasis on studying challenges of deploying deep RL in the real world.

Undergraduate Research Assistant, Hadley Lab, UCSF *2017-2018*
Worked on automating the processing of clinical databases into datasets suitable for machine learning.

Undergraduate Research Assistant, Berkeley Institute of Design, UC Berkeley *2017-2018*
Analyzed selection patterns of formal design methodologies among student designers.

PUBLICATIONS

Henry Zhu, Justin Yu, Abhishek Gupta, Dhruv Shah, Avi Singh, Vikash Kumar, Sergey Levine. "Ingredients of Real World Robotic Reinforcement Learning". Spotlight paper in *International Conference on Learning Representations (ICLR)*, 2020.

Michael Ahn, **Henry Zhu**, Kristian Hartikainen, Hugo Ponte, Abhishek Gupta, Sergey Levine, Vikash Kumar. "Low-Cost Robotic Benchmarks for Learning". In *Conference on Robotic Learning (CoRL)*, 2019.

Tuomas Haarnoja, Aurick Zhou, Kristian Hartikainen, George Tucker, Sehoon Ha, Jie Tan, Vikash Kumar, **Henry Zhu**, Abhishek Gupta, Pieter Abbeel, Sergey Levine. "Applications of Soft Actor-Critic Algorithms". *arXiv:1812.05905*, 2019.

Henry Zhu*, Abhishek Gupta*, Aravind Rajeswaran, Sergey Levine, Vikash Kumar. "Dexterous Manipulation with Deep Reinforcement Learning". In *International Conference on Robotics and Automation (ICRA)*, 2019.

TEACHING

Intro to Artificial Intelligence (CS 188) *Spring 2019*
Probability for Data Science (STAT 140) *Spring 2018*
Intro to Data Science (CS/STAT C8) *Fall 2017, Spring 2018*

SELECTED HONORS

National Science Foundation, Graduate Research Fellowship *2020*

Phi Beta Kappa, UC Berkeley *2020*
Letters and Sciences Honor Society. Awarded for high GPA to students with sufficient breadth units.

Eta Kappa Nu, UC Berkeley *2017*
Electrical Engineering and Computer Sciences Honor Society.

Tau Beta Pi, UC Berkeley *2017*
Engineering Honor Society.

University of California Regents and Chancellors Scholarship *2016*
Awarded to 200 entering undergraduates.

Mary C. and William G. Drake Scholarship *2016*
Full ride scholarship given to six incoming mechanical engineering undergraduates.

ACADEMIC SERVICE

Reviewer

International Conference on Robotics and Automation (ICRA 2020)

SELECTED GRADUATE COURSEWORK

EE 376A: Convex Optimization
STATS 300A: Theory of Statistics I
STATS 300B: Theory of Statistics II
STATS 310A: Theory of Probability I
STATS 311: Information Theory
STATS 361: Causal Inference

SELECTED UNDERGRADUATE COURSEWORK

CS 162: Operating Systems and System Programming
CS 170: Efficient Algorithms and Intractable Problems
CS 184: Computer Graphics and Imaging
CS 188: Artificial Intelligence
CS 189: Machine Learning
CS 285: Deep Reinforcement Learning
EE 120: Signals and Systems
MATH 104: Introduction to Analysis
MATH 110: Linear Algebra
ME 104: Engineering Mechanics

ME 106: Fluid Mechanics

ME C115: Molecular Biomechanics and Mechanobiology of the Cell

ME 132: Dynamic Systems and Feedback

ME 154: Statistical Thermophysics

ME 190L: Practical Control System Design: A Systematic Loopshaping Approach

PHIL 103S: A Good Life or a Moral Life?

PHIL 104S: Aesthetics and Emotion

PHIL 117S: Truth

PHYS 137A: Quantum Mechanics

PSYCH 166AC: Cultural Psychology

STAT 140: Probability for Data Science

STAT 150: Stochastic Processes

STAT 210A: Theoretical Statistics