PATRICK YIN

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EDUCATION

University of Washington 2023–
Ph.D. Computer Science & Engineering
Awards: NSF Graduate Research Fellow, $\sim 7\%$ selection rate

University of California, Berkeley 2019–2023
B.A. Computer Science, GPA: 4.0/4.0
Awards: Regents' and Chancellor's Scholar, top $< 2\%$ incoming class; National Merit Scholar

PUBLICATIONS

Rapidly Adapting Policies to the Real-World via Simulation-Guided Fine-Tuning
Patrick Yin*, Tyler Westenbroek*, Simran Bagaria, Kevin Huang, Ching-An Cheng, Andrey Kolobov, Abhishek Gupta (* indicates equal contribution)
International Conference on Learning Representations (ICLR), 2025

DROID: A Large-Scale In-the-Wild Robot Manipulation Dataset
Alexander Khazatsky*, Karl Pertsch*, ..., **Patrick Yin**, ..., Sergey Levine, Chelsea Finn
Robotics: Science and Systems (RSS), 2024

ASID: Active Exploration for System Identification and Reconstruction in Robotic Manipulation
Marius Memmel, Chuning Zhu, Andrew Wagenmaker, **Patrick Yin**, Dieter Fox, Abhishek Gupta
International Conference on Learning Representations (ICLR), 2024 (Oral Presentation)

Stabilizing Contrastive RL: Techniques for Robotic Goal Reaching from Offline Data
Chongyi Zheng, Benjamin Eysenbach, Homer Walke, **Patrick Yin**, Kuan Fang, Ruslan Salakhutdinov, Sergey Levine
International Conference on Learning Representations (ICLR), 2024 (Spotlight Talk)

Open X-Embodiment: Robotic Learning Datasets and RT-X Models
Open X-Embodiment Collaboration, ..., **Patrick Yin**, ...
IEEE International Conference on Robotics and Automation (ICRA), 2024 (Best Paper)

Generalization with Lossy Affordances: Leveraging Broad Offline Data for Learning Visuomotor Tasks
Kuan Fang, **Patrick Yin**, Ashvin Nair, Homer Walke, Gengchen Yan, Sergey Levine
Conference on Robot Learning (CoRL), 2022 (Oral Presentation)

Planning to Practice: Efficient Online Fine-Tuning by Composing Goals in Latent Space
Kuan Fang*, **Patrick Yin***, Ashvin Nair, Sergey Levine (* indicates equal contribution)
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2022

Bisimulation Makes Analogies in Goal-Conditioned Reinforcement Learning
Philippe Hansen-Estruch, Amy Zhang, Ashvin Nair, **Patrick Yin**, Sergey Levine
International Conference on Machine Learning (ICML), 2022

PREPRINTS

SwipeRL: A Reinforcement Learning System for Grasping in Clutter through Non-Prehensile Pre-Grasp Motion
Kai Kwan Fung, Jack Lowry, Boling Yang, Thomas Kaminsky, **Patrick Yin**, Markus Grotz, Maya Cakmak, Joshua R. Smith, Abhishek Gupta

EXPERIENCE

Research Intern, Microsoft Research — *Mentored by Andrey Kolobov* 2025–
Working on simulation data generation and VLA co-training for dexterous robot manipulation.

Graduate Researcher, UW Robotics — *Advised by Abhishek Gupta* 2023–
Working on simulation data generation, sim2real transfer, and real-world finetuning for dexterous robot manipulation.

Undergraduate Researcher, Berkeley AI Research — *Advised by Sergey Levine* 2020–2023
Published 4 papers on offline goal-conditioned reinforcement learning and finetuning for real-world robotic control.

Machine Learning Engineer Intern, Ambi Robotics 2022
Spearheaded training deep learning models on real-world production data and training 3D neural networks.

Software Engineer Intern, UiPath 2021
Pushed over 30 Git commits to production on Insights team working with Snowflake/SQL, Kubernetes, and Docker.

AWARDS

NSF Graduate Research Fellowship. $\sim 7\%$ selection rate. 2025
Highest Distinction in General Scholarship, L&S CS. Top $\sim 3\%$ of graduating class at Cal. 2023
Regents' and Chancellor's Scholar. Top $< 2\%$ of incoming class at Cal. 2019
National Merit Scholar. Top 0.02% of high school seniors in US. 2019

PROFESSIONAL SERVICE

Teaching Assistant
CSE 542: Reinforcement Learning Spring 2024

Conference Reviewer
IEEE International Conference on Robotics and Automation (ICRA) 2025
Conference on Robot Learning (CoRL) 2024
Computer Vision and Pattern Recognition Conference (CVPR) 2024,2025

UW CSE PhD Admissions Reviewer 2024

OUTREACH AND SERVICE

UW Robotics Lab Outreach Coordinator 2023–2024
UAW 4121 Cohort Liaison 2023–2024
UW U-PASS Student Advisory Board Member 2023–2024
Pre-Application Mentorship Service (PAMS) Mentor 2023