PATRICK YIN

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EDUCATION

University of Washington 2023–
Ph.D. Computer Science & Engineering **GPA: 4.0/4.0**

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

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

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)
Submitted to *International Conference on Learning Representations (ICLR), 2025*

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
Submitted to *IEEE International Conference on Robotics and Automation (ICRA), 2025*

EXPERIENCE

Graduate Researcher, UW Robotics — *Advised by Abhishek Gupta* 2023–
Sim-to-real transfer and real-world finetuning for dexterous robotic manipulation.

Undergraduate Researcher, Berkeley AI Research — *Advised by Sergey Levine* 2020–2023
Offline goal-conditioned reinforcement learning and finetuning with affordance models 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. Worked with Snowflake/SQL, Kubernetes, and Docker.

PROFESSIONAL SERVICE

Conference Reviewer

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

UW CSE PhD Admissions Reviewer 2024

OUTREACH AND SERVICE

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