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

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, upgrading their computer vision system to use 3D neural networks, and creating rigorous A/B testing protocols and statistical analyses.

Software Engineer Intern, UiPath

2021

Pushed over 30 Git commits to production on Insights team. Worked with Snowflake/SQL, Kubernetes, and Docker.

PROFESSIONAL SERVICE

Computer Vision and Pattern Recognition Conference (CVPR) Reviewer

2024

OUTREACH AND SERVICE

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