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 Evsenbach, Homer Walke, Patrick Yin, Kuan Fang, Ruslan Salakhutdinov, Sergev Levine International Conference on Learning Representations (ICLR), 2024 (Spotlight Talk)

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

Offline goal-conditioned reinforcement learning and finetuning with affordance models for real-world robotic control.

Machine Learning Engineer Intern, Ambi Robotics

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

UW CSE PhD Admissions 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