PATRICK YIN

patrickhaoy@berkeley.edu \phi patrickyin.me \phi linkedin.com/in/patrickhaoy \phi github.com/patrickhaoy

EDUCATION

University of California, Berkeley

B.A., Computer Science

GPA: 4.0/4.0

August 2019 - Present

Selected Coursework: Machine Learning, Deep Learning, Artificial Intelligence, Computer Vision, Robot Manipulation and Interaction, Convex Optimization, Probability, Parallel Programming, Algorithms

RESEARCH EXPERIENCE

Robotic AI & Learning Lab (RAIL), UC Berkeley

July 2020 - Present

Advised by Professor Sergey Levine

Research Focus: Robot Learning, Deep Reinforcement Learning, Planning, Representation Learning

INDUSTRY EXPERIENCE

Machine Learning Engineer Intern, Ambi Robotics

January 2022 - May 2022

- Worked on improving the computer vision system which powers Ambi's parcel sorting system, AmbiSort.
- Investigated utilizing real-world production data for training, upgrading Ambi's computer vision system to use 3D neural networks, and creating rigorous A/B testing protocols and statistical analyses.

Software Engineer Intern, UiPath

June 2021 - August 2021

- Pushed over 30 Git commits to production on the UiPath Insights team.
- Developed Snowflake/SQLServer connections and queries using C# and .NET Core to capture data from bots.
- Created and deployed Kubernetes jobs calling Looker API to authenticate users and manage client dashboards.

PUBLICATIONS

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

AWARDS

Regents' and Chancellor's Scholar

2019

Offered to top 2% of incoming undergraduates at UC Berkeley

National Merit Scholar

2019

1 of 2500 National Merit Scholarship Winners in the United States

SKILLS AND INTERESTS

Languages
Frameworks/Tools
Interests

Python, C/C++, Java, JavaScript/TypeScript, Swift, HTML/CSS, SQL, Bash, Powershell PyTorch, JAX, Tensorflow, GCP/AWS/Azure, CUDA, OpenMP, Docker, Kubernetes, React basketball, running, windsurfing, hiking, videography, weightlifting, lofi, 3D printing