Yajat Yadav

Email | Personal Website | Google Scholar | LinkedIn | GitHub

Education

The University of Texas at Austin — Austin, TX
Ph.D. in Computer Science — *Aug 2026 – Expected May 3031*
- Incoming Ph.D. Student studying reinforcement learning algorithms, advised by Prof. Amy Zhang and Prof. Peter Stone
- NSF GRFP Fellowship, UT Computer Science Chair's Strategic Fellowship

University of California, Berkeley — Berkeley, CA
Bachelor of Science in Electrical Engineering and Computer Sciences; ***GPA: 4.0/4.0*** — *Aug 2022 – May 2026*
- Selected Coursework (**A+ in bold**, Grad classes underlined): Computer Vision, Learning Theory, Convex Optimization, Deep RL, **Machine Learning**, **Optimization Methods**, **Probability and Random Processes**, Abstract Algebra, **Abstract Linear Algebra**, Computational Photography, **Combinatorial Algorithms**, **Signal Processing**, **Controls**, **Operating Systems**, **Computer Architecture**, **Discrete Math**, **Multivariable Calculus**
- Teaching Assistant for various EECS courses(Probability Theory, Discrete Math, Signal Processing, Data Structures) for 7 semesters.
- Department Relations Head @ Eta Kappa Nu (EECS Honor Society), Project Manager at ML @ Berkeley, Neurotech @ Berkeley

Experience

Robotic AI and Learning Lab, UC Berkeley — Aug 2024 – Present
Undergraduate Researcher | Advised by Prof. Sergey Levine — *Berkeley, CA*
- Developed generalizable finetuning technique to robustly extend robot foundation models to unseen tasks, accepted at ICLR 2026.
- Experimented with self-distillation, scaling test-time compute, and reasoning models for planning long-horizon robotics tasks.
- Currently investigating multi-task reinforcement learning approaches in robotic manipulation and control.

Amazon Web Services — May 2024 – Aug 2024
Software Development Engineer Intern — *Seatle, WA*
- Developed AWS IAM backend service for efficient propagation of AWS Orgs information among thousands of hosts across the globe.
- Created a highly-configurable client library & algorithm for dynamically resizing network traffic, helping reduce 84% of timeout errors.
- Conducted performance optimization & distributed load testing, ensuring clients and services were robust to millions of requests/sec.

Center for Computational Biology, UC Berkeley — Jan 2024 – Jul 2024
Undergraduate Researcher | Advised by Prof. Yun Song — *Berkeley, CA*
- Designed machine learning approach for choosing DNA primers for HIV genome selective amplification experiments.
- Developed multimodal deep network utilizing DNA sequence, structure, and taxonomy to predict plasmids' origins of transfer.

Borde, Inc. — May 2023 – Aug 2023
Machine Learning Engineering Intern — *Sunnyvale, CA*
- Implemented object detection CV models for real-time classification of various crops during machine processing (100+ unit/s).
- Coded a full-stack, websocket-based web app for streamlining the end-to-end process of labeling crop samples for sorting, configuring model training, and deploying/monitoring models at edge devices across 10+ farms.

Publications and Preprints

Robust Fine-tuning of Vision-Language-Action Robot Policies via Parameter Merging — 2025
Yajat Yadav*, Zhiyuan Zhou, Andrew Wagenmaker, Karl Pertsch, Sergey Levine*
- International Conference on Learning Representations (ICLR) 2026.

ONG: Orthogonal Natural Gradient Descent — 2025
Yajat Yadav*, Patrick Mendoza, Jathin Korrapati*
- Poster at NeurIPS 2025: Non-Euclidean Foundation Models and Geometric Learning Workshop, Class Project.

VROOM: Visual Reconstruction over Onboard Multiview — 2025
Yajat Yadav*, Varun Bharadwaj, Tanish Baranwal, Jathin Korrapati*
- Preprint, Class Project.

Agent-Based Modeling for Patient-Centered Clinical Decision Support in Neuro-oncology — 2024
Eduardo Rodriguez Almaraz, Brenda Miao, ***Yajat Yadav****, et al.*
- Supplemental Journal Article in *Neuro-Oncology*, Volume 26 Supplement 5.

Honors & Awards

NSF Graduate Research Fellowship — 2026
UT Computer Science Chair's Strategic Fellowship — 2026
EECS Evergreen Undergraduate Research Award (2x) — 2024, 2025
Dean's List, UC Berkeley — 2022 - 2024
Top 8 in Nation, USA Biology Olympiad National Finals — 2020

Technical Skills

Languages: Python, Java, C++, C, Rust, Ruby, TypeScript, MATLAB, R, HTML/CSS, Bash, SQL, RISC-V, x86
ML Frameworks: Jax/Flax, PyTorch, TensorFlow, OpenCV, SciPy, Hugging Face, Weights & Biases
Web Development: React, Express.js, Django, Spring, JUnit, Mockito, Ruby on Rails
Dev Tools: Docker, Azure, AWS (EC2, S3, Lambda, CloudWatch), GitLab, Kubernetes, PostgreSQL, Berkeley DB