Yajat Yadav

yajatyadav@berkeley.edu | yajatyadav.com | linkedin.com/in/yajatyadav | github.com/yajatyadav

Education

University of California, Berkeley — Berkeley, CA

Bachelor of Science in Electrical Engineering and Computer Sciences; ***GPA: 4.0/4.0*** — *Aug 2022 – May 2026*

- Department Relations Head @ Eta Kappa Nu (EECS Honor Society), Machine Learning @ Berkeley, Neurotech @ Berkeley
- Selected Coursework (**A+ in bold**, Grad classes underlined): Computer Vision, Learning Theory, Deep RL (audit), **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**

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, submitted to 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.

UC Berkeley EECS Department — Jan 2023 – Jun 2025

Teaching Assistant — *Berkeley, CA*

- EECS 126 TA(Sp. 25), Reader for EE 120 (Fall 24, Sp. 24);AI for CS 70 (Fall 23, Sum. 23), CS 61B (Sum. 23), CS 61A (Sp. 23).
- Held office hours and discussion section to provide support in homework, projects, tests, etc. and to provide students mentoring.
- Collaborated with professors & graduate students for course logistics, creating course materials, writing tests, and grading.

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.

Computational Precision Health Lab — Jan 2023 – Dec 2023

Undergraduate Researcher | Advised by Prof. Ahmed Alaa — *Berkeley and UCSF, CA*

- Simulated & evaluated LLM-agent-based tumor boards for medical reasoning tasks in oncology diagnosis, management, & treatment.
- Analyzed tumor-board transcript data to refine natural language models, working with UCSF doctors to integrate domain knowledge.

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*

- Submitted to ICLR 2026, currently under review.

ONG:Orthogonal Natural Gradient Descent — 2025

Yajat Yadav*, Patrick Mendoza, Jathin Korrapati*

- 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.*

- Journal Article in *Neuro-Oncology*, Volume 26.

Honors & Awards

EECS Evergreen Undergraduate Research Award (2x) — 2024, 2025

Top 8 in Nation, USA Biology Olympiad National Finals — 2020

Gold Medal, British Biology Olympiad — 2020, 2021

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