

Jai Singh

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EDUCATION

University of California - Berkeley

May 2024

Bachelor's in Computer Science

GPA: 3.9

- Coursework – Computer Vision, Machine Learning, Databases, Computer Security, Efficient Algorithms & Intractable Problems, Artificial Intelligence, Data Structures & Algorithms, Computer Architecture, Internet Architecture, Discrete Math & Probability
- Activities – Founder of Tiny Dorm (student music community, 1000+ attendees, received cease-and-desist from NPR's Tiny Desk); Education Lead at Project RISHI (Non-Profit Organization)

EXPERIENCE

Oracle

Redwood City, CA

Software Engineer

September 2024 – Present

- Built production **AI agents** for Oracle's General Ledger team; product was selected for a **live demo at Oracle CloudWorld**
- Designed and built an internal **agent evaluation platform** covering eval pipelines, prompt improvement workflows, and guardrail enforcement, now used by **400+ developers** across multiple teams to ship agents with higher reliability
- Architected a **multi-agent system** that processes natural language budget transfers by applying knowledge from internal compliance and policy documents; **finalist at Oracle's company-wide Gen AI hackathon**
- Designed **hierarchical SQL views** and optimized query performance for enterprise-scale financial reporting

Working Trees (Stanford StartX)

Berkeley, CA

Software Engineering Intern

January 2024 – May 2024

- Built production **ML pipelines** for reconstructing 3D tree models from single images, working directly with professors and environmental scientists to apply published research
- **Fine-tuned SAM** and **Depth Anything** for tree-specific segmentation and depth estimation using **reinforcement learning**, optimizing for lower-end mobile devices and cutting **compute time by 50%**
- Developed and validated original **video-to-3D algorithms** achieving 95%+ scale accuracy using Neural Radiance Fields (NeRF) and Gaussian Splatting to produce detailed 3D point clouds

CNMAT Labs @ UC Berkeley

Berkeley, CA

Undergraduate Researcher

August 2023 – December 2023

- Created **Python** programs for sound source separation for music with **unsupervised machine learning** algorithms, employing approaches such as Variational Autoencoders (**VAEs**) and Non-Negative Autoencoders (**NAEs**) to deconstruct sound
- Built a composable **VR/AR environment** on **Meta Quest** using Unity and C#, paired with **generative music** for spatial audio

Onward

Pleasanton, CA

Software Engineering Intern

June 2023 – August 2023

- Developed custom Jira apps using Atlassian Forge, Docker, and Node.js to automate onboarding/offboarding workflows, **reducing manual HR intervention by 50%+**
- Integrated Greenhouse and Workday APIs for end-to-end hiring and termination workflows with background checks and surveys

PROJECTS

Taccid — RL Training Environments for Healthcare Workflows

- Built **RL training environments** for medical prior authorization using **PrimeRL**, **Harbor**, and **Daytona**; agents navigate payer policies and approval workflows through simulated multi-step interactions

Automated Prediction Market Trading Agent

- Built and deployed an autonomous trading agent on Polymarket using **FastAPI** and **LLM-powered trade signals**; ingests live news and market data, generates predictions, and executes trades automatically on a live portfolio of contracts

Snippet — Music Discovery Platform

- Built a **React/Next.js** app with **recommendation algorithms** that adapt from real-time user feedback; integrated **Spotify API** for playlist generation and clip previews

SKILLS

*Technologies: Python, TypeScript, JavaScript, SQL, Java, React, FastAPI, Next.js, Node.js, Pandas, PostgreSQL, MongoDB, Pydantic
AI & Infrastructure: LLMs, Multi-Agent Systems, RL, NLP, Computer Vision, MCP, Docker, Kubernetes, REST APIs, CI/CD, Git, PyTorch*