

Aaryan Patil

Co-Founder & Software Engineer at Engram Robotics

United States | [LinkedIn](#) | [GitHub](#) | [Website](#)

Berkeley CS + Data Science student building distributed software systems for physical AI robots. Combines foundation model research with production systems shipping real multi-step task execution.

EXPERIENCE

Software Engineer Oct 2026 — Present
Walmart

Co-Founder & Software Engineer Mar 2026 — Present
Engram Robotics *Berkeley, CA*

Co-founded a robotics company building distributed software for physical AI. Designed and shipped the core orchestration service with an LLM planner that compiles natural-language instructions into validated task graphs, dispatches capabilities over a real-time pub/sub message bus (DDS/ROS2), and handles failure detection at the orchestration layer. Built the stateful context service with interruptible task stack, persistent vector store for retrieval-augmented generation, and containerized testing. Achieved 80–90% success rates on locomotion and manipulation tasks.

Undergraduate Machine Learning Researcher Feb 2026 — Present
Berkeley Artificial Intelligence Research *Berkeley, CA*

Third author on ICRA 2027 paper introducing a context-conditioned vision-language-action model that learns new tasks zero-shot from 1–2 demonstrations on a frozen foundation-model backbone. Implemented cross-attention conditioning and short-term memory modules in PyTorch; diagnosed and fixed a bf16 numerical overflow that reduced auxiliary loss from ~1.0 to ~0.009. Owns multi-GPU distributed training and architecture ablations on Berkeley's compute cluster and built automated benchmarking pipelines evaluating policies across simulation suites.

COO Jan 2026 — Present
Stealth Startup

Co-Founder & Software Engineer Aug 2025 — Mar 2026
briefly *Berkeley, CA*

Built and scaled a consumer web platform compressing long lectures into structured video. Grew to 7,000+ users and 2M+ organic impressions, raised a pre-seed round at \$3M valuation. Owned the backend including transcript ingestion, contextual compression pipeline, asynchronous media-processing job queue, and the REST API serving the web client.

EDUCATION

University of California, Berkeley Sep 2024 — Jun 2028
Computer Science in Data Science
GPA: 3.85/4.00

Northwood High School

4.6 GPA, Vice President @ Biology Olympiad Club, Treasurer @ UNICEF

PROJECTS

Transformer implementation from first principles, Building GPT from Scratch
Implemented a full transformer end-to-end from scratch: byte-pair tokenization, multi-head causal self-attention, positional embeddings, and the full training loop without high-level modeling libraries.

Webcam-based vision screening battery, VisionScreen
Built a browser-based vision screening battery with a dense encoder-decoder performing semantic segmentation of the eye. Trained locally on an M4 Max using PyTorch's Metal backend.

AI voice tutor with spatial memory canvas, Mentora
Built a voice-interactive tutoring system with a spatial memory canvas that speaks, listens, and renders visual components. Implemented multimodal RAG combining voice, visuals, and chat history.

CERTIFICATIONS

2023 USA Biology Olympiad Semifinalist + Honorable Mention, USA Biology Olympiad Mar 2023

Paderewski Guild Medalist, American College Of Musicians Jul 2022

Piano Certificate of Merit Level 10 - OC Branch & California State Honors Award, Music Teachers' Association of California May 2022

4x USA Fencing All-American First Team, USA Fencing

4x USA Fencing Medalist, USA Fencing

SKILLS

C/C++ · Python · Java · C# · JavaScript · TypeScript · SQL · Bash · ROS2 · DDS · MCP · PyTorch · GR00T · OpenCV · FastAPI · React · Node.js · Next.js · ChromaDB · Whisper · pandas · NumPy · Docker · Linux · NVIDIA CUDA · TensorRT · AWS · PostgreSQL · Redis · Git · CI/CD