

Avneesh Muralitharan

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EDUCATION

University of California, San Diego

M.S in Computer Science, Artificial Intelligence

San Diego, CA

June 2026

- GPA: 3.54/4.0
- Relevant Coursework: Deep Learning, Data Mining and Predictive Analytics, Recommender Systems, Parallel Programming

University of California, Santa Cruz

B.S in Computer Science

Santa Cruz, CA

June 2024

- GPA: 3.65/4.0

WORK EXPERIENCE

Anywager (anywager.net)

Solo Developer

Sunnyvale, CA

May 2026 – Present

- Launched a Chrome extension with 100+ installs that scans webpages and highlights any text that matches a live Kalshi prediction market, surfacing live-odds and a link to Kalshi on hover
- Built a serverless semantic-search pipeline on a Cloudflare Worker — OpenAI embeddings over 2k+ Kalshi markets in a Vectorize vector DB with nearest-neighbor matching, KV caching, and a cron job that re-embeds only changed markets

Syneris

Machine Learning Engineer Intern

Sunnyvale, CA

June 2025 – August 2025

- Built Claude 4 Sonnet + Mistral-Embed **RAG** assistant over 150+ FDA documents parsed using **OCR** to answer clinical trial compliance questions for biotech companies
- Decreased search latency 180x (minutes to ≤ 1 second) through **quantized embeddings** and **Pinecone** DB
- Deployed Mistral-Embed as a **Spring Boot microservice** for scalable embedding generation

Dell Technologies

Machine Learning Engineer Intern

San Jose, CA

January 2024 – June 2024

- Developed an assistant designed to recover from Dell PowerProtect system upgrade failures by using Llama 3 and RAG over 10,000 server manuals stored in **ChromaDB**.
- 72x faster recovery from upgrade failures w/ **markdown chunking** to ensure complete workflow retrievals

Alveo Technologies

Software Engineering Intern

Alameda, CA

February 2021 – August 2021

- Eliminated \$4,000 in licensing fees via a **React/Electron/Flask/Plotly** app for remote assay execution and visualization, replacing ThermoFisher software
- Validated 15,000+ COVID-19 test kits on the manufacturing floor through a React/Electron/Flask app that called **embedded C** scripts on physical test harnesses

PROJECTS

AlphaZero Mancala Bot

March 2025

- Wrote a 60% winrate (against skilled human players) deep learning + MCTS Mancala bot trained using **reinforcement learning** and **Proximal Policy Optimization**.

Contrastive Learning and Fine-Tuning Techniques for BERT

March 2025

- Boosted accuracy from 2.7% to 92.0% by fine-tuning **BERT** on MASSIVE dataset (Multilingual Amazon Scenario Set for Intent and Slot Labeling) using **Layer-wise Learning Rate Decay**.
- Reduced parameters by 99.5% keeping 84.2% accuracy using **LoRa**.

SKILLS

C++, Python, Java, Javascript, HTML/CSS, RISC-V, MERN (MongoDB, Express.js, React.js, Node.js), Firebase, AWS, GCP, Docker, CUDA optimization, Pytorch