

Jack Yang

jack-yang.com | jackyang03@berkeley.edu

EDUCATION

University of California, Berkeley

Berkeley, CA

BA, Computer Science and Applied Math (Machine Learning and Optimization); Minor, German

May 2027

- **Coursework:** Efficient Algorithms & Intractable Problems, Numerical Analysis, Machine Learning, NLP, Deep Neural Nets, Linear Algebra, Optimization Models, OS, Real + Complex Analysis, Negotiation

WORK EXPERIENCE

AI Research Intern

Jan 2026 – Present

UCSF NeuroAI Lab

San Francisco, CA

- Investigated speech model architectures for the **vCDR** (voice Clinical Dementia Rating), a deployed AI voice agent that autonomously administers the gold-standard dementia assessment; system runs on HIPAA-compliant Azure infrastructure and has conducted **100+ real patient and study-partner interviews**
- Built **vCDR-bench**, an evaluation harness benchmarking realtime speech-to-speech and ASR architectures (GPT-4o Realtime, gpt-4o-transcribe) and LLM scoring fidelity across interview modules spanning all six CDR clinical domains
- Engineered constrained LLM scoring pipelines with schema-validated structured outputs, embedding-based similarity scoring, and utterance-level transcript traceability for auditable, clinician-comparable ratings

SDE / ML Intern

May 2025 – Aug 2025

AWS Bedrock: Capacity Optimization Team

New York, NY

- Architected a high-throughput Capacity Optimization platform; automated fleet-scale resource allocation for 60+ engineers using IaC, achieving 90%+ test coverage
- Designed an agentic CoT engine to automate capacity resolution; reduced P99 operational latency by 94%

Software Engineering Intern

June – August 2024

LiveX AI

Palo Alto, CA

- Engineered a high-performance ranking engine and feedback profiling pipeline using approximate nearest-neighbor vector search; optimized retrieval latency and relevance to recover **\$120K ARR** by mitigating churn

Investment Research Intern

June 2023 – Aug 2023

Ocean Arête Limited

Hong Kong S.A.R.

- Synthesized quantitative unit economics for GenAI infrastructure at a \$1B Macro Fund; performed sensitivity analysis on hardware/compute costs across 3 asset classes
- Presented investment theses to CEO on long-term impact of LLM adoption on enterprise SaaS productivity

LEADERSHIP EXPERIENCE

President of Risk Management / SVSH Prevention

2024 – 2025

UC Berkeley CalGreeks

Berkeley, CA

- Managed 10+ weekly events for 500+ attendees across 35 fraternities, implementing emergency response protocols and leading risk workshops for 70+ delegates

Team Captain, Debate

2020 – 2022

German Swiss International School

Hong Kong S.A.R., China

- Captained team to victory at the **Hong Kong Bar Association National Debate Competition** (2021, national champions); individually awarded **Best Speaker**, Singtao National Debate Competition (team placed 2nd nationally)

TECHNICAL SKILLS

Programming Languages: C/C++, Python (FastAPI, Sklearn), Java, SQL, TypeScript

AI & Machine Learning: LLMs, Speech/Realtime Voice Models, Model Context Protocol, RLHF, Distributed Systems

Cloud & DevOps: IaC; AWS: Lambda, EventBridge, IAM, CloudWatch, Bedrock, S3; Azure OpenAI

Software: Git, Unix CLI, CI/CD Pipelines, VIM, Observability & Telemetry (CloudWatch, Prometheus)