

Harish Shankar

US Citizen | (413) 472-6572 | harishpshankar08@gmail.com | [Portfolio](#) | [Github](#) | [LinkedIn](#)

EDUCATION

University of Massachusetts Amherst

May 2026

Honors B.S. Computer Science, B.A. Mathematics & Minor in Philosophy

GPA: 3.89

Coursework: Operating Systems, Web Development, Programming Methodologies, Artificial Intelligence, Algorithms and Data Structures, Applied Linear Algebra, Algorithms for Data Science, AI Alignment

Awards: Phi Beta Kappa Nominee, Chancellor's Scholarship, Dean's List (7x)

WORK EXPERIENCE

Squire

May 2025 – Present

Co-founder & CTO

San Francisco, CA

- Designed and deployed a multi-agent AI assistant (Google ADK, FastAPI) with 70+ MCP tools; developed parallel agent execution cutting end-to-end latency by 63% and enabling tens of concurrent in-flight agent runs
- Built an idempotent Pub/Sub ingestion pipeline for Gmail/Calendar webhooks with retries and deduplication; removed polling overhead and enabled 0.74s median push notifications to users via iMessage
- Developed a real-time chat interface (Next.js 15, React 19) with SSE streaming, optimistic React Query cache mutations, Zod-validated type-safe data layers, CSP-hardened middleware, and voice input with silence detection

Ericsson

June 2024 – August 2024

Software Engineer Intern

Remote

- Achieved 84% model size reduction (7B to 1.1B) by engineering a knowledge distillation (KD) pipeline with SFT and LoRA on TeleQuAD dataset; delivering statistically significant gains ($p < 0.05$) across 13 linguistic metrics
- Orchestrated 16 experimental configurations comparing Vanilla vs. Dual Space KD; utilized Wilcoxon signed-rank tests to prove that vocabulary alignment yielded statistically significant improvements in 93% of evaluated metrics
- Validated RAG pipeline performance by re-executing 6 RAGAS metrics; established a 97% concordance rate with Subject Matter Experts for Factual Correctness, outperforming standard cosine-similarity baselines

Srishti Software

June 2023 – August 2023

Software Engineering Intern

Remote

- Led the migration of a 50,000+ line codebase to React Native, enabling cross-platform development
- Prototyped a Cloudflare CDN-backed caching layer for backend API responses, reducing e2e latency by up to 10s
- Resolved critical hardware fragmentation issues on Android devices by developing a custom aspect-ratio matching algorithm for the camera feed, eliminating image distortion and improving model accuracy by 42%

PROJECTS

NES Emulator | C++

- Built a cycle-approximate emulator, implemented 6502 CPU core, PPU graphics pipeline, cartridge bus, and APU.
- Supports real-time rendering, controller input, and accurate ROM execution with modular mapper support.

LEADERSHIP & ACTIVITIES

Undergraduate Course Assistant

Sep 2023 – Present

University of Massachusetts Amherst

Amherst, MA

- Led weekly office hours of 30+ students; proctored examinations, graded homework, and led exam review sessions.
- Created specifications and autograder to test linting, coverage, and correctness of 250+ student projects.

Product Manager

Feb 2023 – May 2023

BUILD UMass

Amherst, MA

- Led a team of student developers, assigning tasks and monitoring sprint progress through Jira.
- Managed end-to-end product lifecycle using Agile practices, prioritizing features, and ensuring on-time delivery.

TECHNICAL SKILLS

Languages: Python, TypeScript, Go, C/C++, Java, SQL, Rust, Swift

Frameworks: React, NextJS, FastAPI, Pytorch, Llama-Index, Google-ADK

Developer Tools: Git, Linux, Docker, CloudFlare, MongoDB, PostgreSQL, Redis