

VIVEK RAMAN

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Multi-faceted software engineer with 4+ years of experience building scalable systems and innovative AI products. Currently graduating with MS in Computer Science (CGPA 3.81) in Spring 2026.

EDUCATION

SAN JOSE STATE UNIVERSITY

San Jose, CA

Master of Science - M.S. in Computer Science – CGPA 3.81

May 2026

- Related coursework: Cloud Computing, Database System Internals, Parallel Processing, Artificial Intelligence, Machine Learning

EMPLOYMENT HISTORY

SAN JOSE STATE UNIVERSITY

San Jose, CA

Research Assistant - AI Development

September 2024 - April 2026

- **Developed and distributed a GenAI-powered editorial platform to 800+ SJSU graduate students**, abstracting the LaTeX learning curve to automate complex document formatting and streamline the thesis submission workflow.
- Architected a cross-platform desktop application using Tauri and React, powered by a FastAPI backend with **LangGraph-driven agentic orchestration** and secured through enterprise-grade SAML SSO integration.
- Spearheaded end-to-end development and stakeholder roadmaps, implementing a comprehensive automated evaluation suite to ensure stability and mitigate performance regressions across evolving LLM iterations.
- Engineered a suite of GenAI learning tools, including **RAG-based assistants** and **automated study frameworks**, resulting in **measurable improvements** in cohort grades and a 25% increase in engagement for **400+ students**.
- Served as a **Strategic Technical Consultant** to senior faculty, bridging traditional curricula with cutting-edge technology by successfully **integrating LLM workflows and spatial computing** into core academic programs.

BLIBLI.COM

Bangalore, India

Software Development Engineer

January 2021 - June 2024

- **Modernized legacy architecture by migrating to a Java 17 and Spring Boot 3 microservices stack**, achieving a **50% increase in system performance** and scaling the platform to handle peak traffic of **60,000+ RPM**.
- **Appointed Code Owner for the Inventory and Order Management system**; optimized core database performance and buffer management (**PostgreSQL/Redis**) to ensure high-availability for **millions of monthly transactions** across 10,000+ sellers.
- Engineered a customer-facing self-service order cancellation flow and revamped the offline seller interface, **reducing customer support tickets by 75%** and driving a **60% increase in seller platform engagement**.
- Collaborated with technical, product, and executive stakeholders as a **primary point of contact** for the fulfillment pipeline, ensuring zero-downtime during high-concurrency regional shopping events.

TECHNICAL SKILLS

- **Generative AI (GenAI):** LangChain, LangGraph, Pydantic AI, OpenAI API, OpenRouter, AI SDK, Claude SDK
- **Machine Learning (ML) Libraries:** Tensorflow, Keras, scikit-learn, Pytorch
- **Languages & Frameworks:** JavaScript, Java, Python, C#, C++, C, React, Next.js, Spring Boot, Electron, Tauri, Vue, Unity
- **Databases & Orchestration:** PostgreSQL, MongoDB, Kubernetes, Kafka, Redis, Memcached, Apache Solr, Firebase
- **Cloud Providers:** Amazon Web Services (AWS), Google Cloud (GCP), Oracle Cloud (OCI), Microsoft Azure, Vercel, Netlify, Firebase, Supabase

SIDE PROJECTS

- **Resume-Tailoring Orchestrator:** Developed a **multi-agent LangGraph system** to perform **recursive entity extraction** and **automated LaTeX reconstruction** for dynamic document optimization.
- **C++ Relational Database:** Built a page-based storage engine and buffer manager from scratch to handle low-level file organization and SQL-like query processing.
- **Splitwise.com Automation Suite:** Engineered a suite of productivity tools, including a **Chromium extension** for **LLM-powered receipt extraction** and a **Next.js utility** that bypasses rate limits to facilitate high-volume expense creation.

NOTABLE ACCOMPLISHMENTS

- Participated as a **panel speaker** in the **Academic Technology Expo 2025** and the **San Jose GovAI Coalition Summit 2025**.
- Co-founded the Innovation Studio at Quinbay, fostering exploration in innovative cutting-edge tech like AI and XR.
- Built an app leveraging Augmented Reality and game-based learning that secured state govt funding of \$10,000, and published an IEEE research paper at the CONIT 2021 conference.