Contact

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Top Skills

Scalable Architecture
Agentic AI Development
AI Agents

Languages

Tamil (Native or Bilingual)
Malayalam (Native or Bilingual)
English (Full Professional)
Hindi (Limited Working)
Sanskrit (Elementary)

Certifications

Python for Data Science, AI and Development
Deep Learning Specialization
Game Theory

Honors-Awards

Winner - Reverse Coding, Shaastra'17
Special Guest - PM Box
Sarita Khemka Endowment Award
A Srinivas Memorial Award
General Proficiency Award

Publications

Deterministic Dispersion of Mobile Robots in Dynamic Rings
RNN based question answer generation and ranking for financial documents using financial NER

Madhav Sankar Krishnakumar

Senior Software Engineer at Google
San Francisco Bay Area

Summary

Hi there, glad to e-meet you!I'm a Senior Software Engineer at Google with 6+ years of experience building large-scale backend systems at Google and Microsoft. I work on the API platform behind Google Ads campaign management, including the public Google Ads API.At Google, I've led a data-layer migration across 25+ product teams, built per-customer rate limiting that protects shared database capacity, and made the platform's request path non-blocking (up to 2.5x higher peak throughput in stress tests). These days I also build AI agents and the tooling around them: an evaluation framework for MCP tools, an onboarding assistant that cut onboarding time by 80%, and an autonomous code-health agent.Before Google, I spent two years on Microsoft 365 Security and Compliance, where I single-handedly delivered a legal-enforcement data collection solution in six months and designed a file connector that opened up a $3B market opportunity. I have an M.S. in Computer Science from UCLA and a B.Tech. from NIT Trichy, and I've published research in distributed algorithms and natural language processing.I'm a firm believer in the growth mindset: curiosity plus perseverance can crack almost any problem. Fun fact: I once attended India's Republic Day Parade as a special guest of the Prime Minister.Always happy to talk distributed systems, APIs, or AI agents. Reach me here, at madhavsankar@gmail.com, or at madhavsankar.github.io.

Experience

Google
3 years 10 months

Senior Software Engineer
March 2026 - Present (9 months)
Mountain View, California, United States

Lead AI-agent tooling, evaluation, and developer automation for Google Ads' API platform.

• Lead the evaluation framework for AI-agent (MCP) tools: daily health checks and regression runs, side-by-side environment comparisons, alerting, and per-step tool-call, latency, and token metrics that surface capability gaps early.
• Launched and run an AI onboarding assistant that interviews client teams and validates their setup up front, cutting average onboarding time by 80%.
• Built and run an autonomous code-health agent that finds stale configuration flags and sends verified cleanup changes; it removed ~100 flags and ~1,750 lines of code and config in its first six weeks.
• Mentor engineers (6 mentored or onboarded so far) and review code as a Java and Kotlin readability reviewer; created the team's on-call training.

Software Engineer III
February 2023 - March 2026 (3 years 2 months)
Mountain View, California, United States

Backend engineer on the API platform behind Google Ads campaign management, including the public Google Ads API ((https://developers.google.com/google-ads/api/docs/start).

• Led a data-layer (ORM) migration across 25+ product teams: drove a strategy change that cut projected effort by ~50%, built frameworks for incremental migration (cutting interop latency ~75%), added compile-time guardrails, and scaled the work with LLM-assisted code migration.
• Designed and launched per-customer rate limiting on database load so no single customer can overload shared capacity; extended it to streaming reads, set limits from historical usage, and added a quota cache that absorbs traffic spikes from abusive accounts.
• Made the platform's critical request path non-blocking (up to 2.5x higher peak throughput in stress tests) and drove async framework adoption across 15 product teams.

Google
Software Engineer Intern
June 2022 - September 2022 (4 months)
Mountain View, California, United States

• Enhanced the Ad Load for queries without historical interaction results by extrapolating from their similar queries' data. Increased Ad-metric coverage by 8%.
• Developed a Query Intelligence Tool to interactively perform query analytics.

Microsoft

2 years 2 months

Software Engineer II
July 2021 - August 2021 (2 months)
Hyderabad, Telangana, India

Architect, design and develop large-scale services to simplify customer compliance management.

• Designed an Azure Cloud Services based File Connector to import large items from third-party data sources into Microsoft 365, overcoming the current size restriction of 10MB and opening up opportunities worth $3 billion TAM.

• Collaborated with CellTrust partner team as the Microsoft DevRel to onboard the CellTrust SL2 Connectors to the Microsoft Ecosystem.

Software Engineer
July 2019 - July 2021 (2 years 1 month)
Hyderabad, Telangana, India

• As part of the M365 Security and Compliance team, single-handedly led the E2E delivery of the LENS (Legal Enforcement and National Security) solution within six months. The solution is used by Microsoft CELA for legal enforcement data collection.

• Redesigned the admin logs module of the microservice architecture to enable customer aggregation and filtering requirements. Implemented the corresponding UX changes to the Compliance Portal using typescript and ReactJS.

• Reduced the Connectors page latency by 96% using asynchronous programming techniques and Azure Table schema changes, thereby improving customer experience.

• Prototyped a solution to reduce web service's COGs by 20% with the help of Docker containerization of cloud solutions and Kubernetes orchestration.

Microsoft
Software Engineer Intern
May 2018 - July 2018 (3 months)
Greater Hyderabad Area

Enhance the latencies of the first version of the SharePoint Desktop application.

• Provided an enhanced experience to the users by reducing End User-Perceived
Latency(EUPL) on the SharePoint Desktop App using PWA(Progressive Web Applications) concepts.

• Successfully brought down the page load latency by six times and the application boot time by a staggering 42 times with the help of caching techniques and improvements in the Auth flow.
• Implemented Web Parity changes to separate the Desktop App from Web View
Hosted App, System Tray and background task features.

Indian Institute of Technology, Hyderabad
Deep Learning Research Intern
December 2017 - December 2017 (1 month)
Greater Hyderabad Area

Worked on Image Processing and Deep Learning concepts under the supervision of Dr. Sparsh Mittal, Assistant Professor. We worked on the various Convolutional Neural Network models and on how improved accuracy in image classification have been attained over the years. We also worked on compression techniques to reduce the memory and time overhead in the processing of the image.

I used the knowledge I gained here to create 'ViewPal', a live video captioning model that could aid the visually challenged by giving a live relay of events.

Indian Institute of Technology, Madras
Distributed Algorithms Research Intern
May 2017 - June 2017 (2 months)
Chennai

• Solved the problem of dispersion of Mobile Robots on a ring in the presence of two types of dynamism: vertex permutation and 1-interval connectivity under the supervision of Prof. John Augustine.
• Presented at the International Conference on Distributed Computing and Networking 2018.

Education

University of California, Los Angeles
Master of Science - MS, Computer Science · (September 2021 - December 2022)

National Institute of Technology Tiruchirappalli
Bachelor of Technology - BTech, Computer Science · (2015 - 2019)

National Institute of Technology Tiruchirappalli
Minor, Humanities/Humanistic Studies · (2017 - 2019)

DAV Senior Secondary School, Mogappair
High School · (2009 - 2015)