

James (Yoon Jae) Nam

jamesnam12345@gmail.com
<https://jamesnam12345.github.io/>

Summary

Senior Software Engineer with over 12 years of experience building scalable real-time communication systems and mobile/web infrastructure. Spent 9 years at Google as a core contributor and engineering leader on the Google Chat team, driving product growth from early stage to over 10x scale. Expert in cross-platform architecture, concurrency, and full-stack engineering. Passionate about applying AI/LLMs to solve complex engineering and user problems.

Employment

Senior Software Engineer	Google (Sunnyvale, CA)	October 2016 – January 2026
AI Innovation & Leadership		
<ul style="list-style-type: none">• AI Prototypes: Developed multiple full-stack AI prototypes using Firebase Studio and Antigravity, including a natural language CRM interface, a multimodal (video+audio) agent for e-commerce, and a Chat application that uses Gemini function calling.• AI Debugging Tools: Built an AI-driven debugging tool using context-aware prompt engineering to diagnose crash reports.• Mentorship: Managed 10 interns, with 7 returning as full-time engineers. Conducted 100+ interviews and served on hiring committees.• Awards: Awarded 10+ peer bonuses and Gold Awards for contributions to multiplatform engineering and concurrency.		
Core Infrastructure & Architecture		
<ul style="list-style-type: none">• Cache Invalidation Protocol: Architected and implemented a revision-based cache invalidation protocol to resolve complex data integrity issues without requiring app upgrades, a solution subsequently adopted by major projects (threading, attachments).• Web on Shared Architecture: Led core parts of the “Web on Shared” infrastructure initiative, migrating Google Chat Web to a shared data layer to unify logic across Android, iOS, and Web.• Kotlin Multiplatform (KMP): Contributed to Kotlin Multiplatform efforts by identifying desired and incompatible code patterns and implementing 10+ regex-based static analysis checks to prevent regressions.• Concurrency & Stability: Significantly reduced iOS crash rates by diagnosing complex concurrency issues and authoring comprehensive guidelines and precise regex-based static analysis checks on thread safety in the shared client data layer.		
Product Scale & Feature Growth		
<ul style="list-style-type: none">• Scale & Growth: Played a pivotal role in scaling the product over 10x, enabling “Guest Access” (cross-organization communication) and “Consumer Access” (free user support).• User Capabilities System: Designed and implemented the “Chat User Capabilities” system, a centralized logic engine governing user permission across 20+ Chat features, adopted on both client and server.• Sync Reliability: Resolved critical user-visible sync issues by enhancing the revisioned sync mechanism, ensuring data freshness.		
Software Engineer, Growth team	Coursera (Mountain View, CA)	January 2015 – September 2016
<ul style="list-style-type: none">• Built key workflows (Home, Dashboard, Onboarding) and analyzed 100+ A/B tests.• Developed SEO tools that achieved #2 rankings for terms like “machine learning” and “computer science”.		
Software Engineer	Palantir Technologies (Palo Alto, CA)	January 2014 – January 2015
<ul style="list-style-type: none">• Re-architected a major product into a single-page application (SPA), significantly improving user experience.• Built an internal analytics system to provide insights into user engagement.		

Education

Stanford, CA	Stanford University	2010 – 2014
<ul style="list-style-type: none">• B.S.E. in Computer Science (conferred in January 2014)• Awards: Frederick E. Terman Award (Top 5% of Engineering Majors)• GPA: Major 4.1/4.3, Overall 4.0/4.3.		

Certifications

- Deep Learning Specialization (Coursera / DeepLearning.AI)
- Machine Learning Specialization (Coursera / Stanford Online, DeepLearning.AI)

Skills

- **Languages:** Java, Python, Swift, Kotlin, Objective-C, JavaScript/TypeScript, SQL, C++
- **Technologies:** Gemini API, AI Agents, Flutter, React, Django, Next.js, Firebase, Tensorflow, PyTorch, Gemini CLI, Antigravity
- **Concepts:** Real-time Communication, Distributed Systems, Concurrency, Cross-Platform Development (KMP)