Gurinder Singh

Staff iOS & Applied AI/ML Engineer

Portfolio   LinkedIn

gsingh622@yahoo.com

Scan for Portfolio

Career Summary

Staff iOS & AI/ML Engineer with over a decade of experience scaling applications for millions of users. Patent-holder and technical leader specializing in bridging cutting-edge AI/ML with practical mobile solutions. Proven track record of building legendary apps at global scale, from startup innovation to enterprise solutions serving 90M+ users worldwide. Passionate about mentoring engineers, conducting technical interviews, and fostering inclusive tech communities while driving innovation at the intersection of iOS and artificial intelligence.

Core Skills

Languages & Frameworks: Swift, SwiftUI, Python, TypeScript, Next.js, FastAPI, Vapor (Server-Side Swift), Objective-C, Flutter/Dart

AI/ML Stack: LLM Agents, RAG Pipelines, LlamaIndex, Supabase, ChromaDB, Pinecone, Core ML, MLX, LoRA/QLoRA, Stable Diffusion, LangChain, DeepLake

Mobile Systems: ActivityKit, WidgetKit, Dynamic Island, SwiftData, Realm, Combine, UIKit, Async/Await Architectures, Feature Flags

Cloud & Infrastructure: Supabase Edge Functions, Docker, RunPod, DataDog (Observability), AWS Serverless (NodeJS/Lambda), DynamoDB, Cloudflare Tunnels, Hostinger VPS

Dev Practices: CI/CD Automation, Observability, Snapshot Testing, State Machines, Accessibility, Concurrency

Creative Tooling: FFmpeg, ComfyUI, ElevenLabs, Whisper-MLX, MCP (Model Context Protocol), Bluetooth Low Energy (BLE)

Experience

PayPal / Venmo

Staff iOS Engineer → Applied AI/ML Engineer (2020 – Present)

- Built PayPal/Venmo's first applied agentic AI platform for autonomous merchant onboarding and product enhancement.
- Pioneered AI image generation with custom SDXL LoRA models producing professional imagery in ~30 seconds, saving merchants $100–$500 per product.
- Delivered first org-wide MCP (Model Context Protocol) integration for seamless AI agent orchestration.
- Developed AI-powered crash detection system using LangChain + DeepLake with automated DataDog monitors — now adopted org-wide.
- Built payment-splitting integration for $400M partnership deal with Amex.
- Led moonshot initiative winning $60M CVS contract for contactless payments.
- Filed "Interface Widget Tool for Automatic QR Code Generation" patent.

Previous Career History

iOS Developer/Consultant (2017 – 2020)

Google Stadia, Morgan Stanley, Parabit Systems, Gedeon GRC

Hackathon Achievements & Innovation

28+ hackathons attended across 6+ countries as participant, mentor, and judge. Earned 2 first-place wins and served as a judge at Yale (2x) and mentor at multiple events. Recognized globally for innovation and technical excellence.

- **MLH @ Bloomberg London (2017) — 1st Place:** Automated Search & Rescue System.
- **Devcamp NYC (2016) — 1st Place:** Talent Management App.
- **HackZurich (2018) — Finalist:** AR Car Buying Tool.

Education

New York City College of Technology, Brooklyn

BS in Computer Systems (Deferred) | 2012 – 2016