

Ryan Monroe

Staff+ Agentic Systems & AI Platform Engineer | Full-Stack Technical Leader

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TECHNICAL PROFILE

Hands-on technical leader with 10+ years building full-stack and platform products across regulated healthcare, financial services, adtech, enterprise software, and applied AI. Former Fidelity Director and current ImagineX Engineering Manager / Tech Lead on a Hims & Hers engagement, managing five engineers while leading architecture and delivery. Designs and operates agent systems spanning multimodal local inference, multi-agent orchestration, MCP and tool integrations, persistent memory, scheduling, approval controls, and evaluation-oriented feedback loops.

CORE CAPABILITIES

Agent platforms: multimodal local inference, multi-agent orchestration, tool calling and routing, MCP, reusable skills, persistent memory, subagents, scheduling, long-running workflows, human approvals

Product engineering: TypeScript, JavaScript, Python, Java, React, Next.js, Node.js, Spring Boot, APIs, browser automation, PostgreSQL, MongoDB, Redis, Snowflake

Cloud and delivery: AWS, GCP, Azure, Docker, Kubernetes, regulated workflows, traceable execution, risk controls, adversarial testing

PROFESSIONAL EXPERIENCE

ImagineX - Engineering Manager / Tech Lead, Hims & Hers Engagement

Feb 2025 - Present | Miami, FL

- Manage five engineers and lead frontend and platform engineering for regulated digital-health products while remaining hands-on across architecture, code review, debugging, and production delivery.
- Pioneered an internal agent-orchestration platform for epic planning, ticket delivery, debugging, implementation review, and repeatable engineering workflows with explicit human review and traceable execution.
- Own launches for testosterone, menopause, and ED-related product lines, translating ambiguous direction into shipped full-stack systems.

Fidelity Investments - Director, Full-Stack Engineering

May 2023 - Jan 2025 | Miami, FL

- Led Technical Life Management across 100+ applications while contributing hands-on to architecture, Snowflake data pipelines, frontend, backend, and delivery.
- Managed and mentored four senior engineers across multiple squads and aligned modernization priorities with product and engineering leaders.
- Built customer-attribute pipelines into LiveRamp, improving data quality, audience precision, and activation; contributed to a 2-5% lift in custom conversion on a top year-over-year ad-spend initiative.

SELECTED AGENTIC SYSTEMS

AIC (AI Companion) - Local-First Multimodal Agent Runtime

- Designed and built a real-time voice, vision, memory, and tool-using agent with a fully offline Apple Silicon execution path and a separate NVIDIA Jetson deployment profile.
- Coordinated local ASR, LLM inference, TTS, wake word, vision, emotion recognition, persistent memory, and tool execution through typed Redis events and a central conversational state machine.
- Built a hardware-accelerated embodied interface using C++, Filament, Metal/Vulkan, real-time lip sync, face tracking, gaze, emotion-aware posture, and speech-reactive animation; added supervision, health telemetry, deployment automation, and end-to-end validation.

Genius Care - Production Clinical AI Agent Platform

- Built and deployed a clinical agent platform spanning a LiveKit voice receptionist, clinical scribe, encrypted workflow APIs, and a React practice dashboard across Fly.io, Cloudflare, and Vercel.
- Implemented scheduling, EHR and browser automation, safe human escalation, PHI encryption and audit controls, durable idempotency and rollback paths, and CI and evaluation gates.

Toolshed - Agent Capability and Operations Platform

- Built and operated a capability platform comprising 115 reusable agent skills plus executable services across research, commerce, prediction, browser automation, voice, infrastructure, and content workflows.
- Integrated MCP tools, scheduled execution, approval boundaries, shared state, alert routing, and multi-host deployment across Mac and NVIDIA Jetson environments.
- Implemented operational safeguards including health checks, circuit breakers, canaries, drift tripwires, reconciliation, audit trails, and recoverable deployment workflows.

ADDITIONAL EXPERIENCE

Independent Projects & Consulting - AI Systems and Security Intelligence

2024 - Present

- Build and operate autonomous AI systems spanning orchestration, tool execution, persistent memory, approvals, scheduling, monitoring, and multi-channel operations.
- Conduct adversarial LLM testing to evaluate safety boundaries, prompt-defense weaknesses, and agent-reliability risks.

Hudson MX - Director of Software Engineering

Apr 2020 - May 2023

- Led engineering for a large-scale Java / Spring Boot / Angular media-buying platform and the remote-first Atlanta engineering org within a broader organization of roughly 25 engineers.

Tin Roof Software / NCR and State Farm - Lead / Senior Software Engineer

2016 - 2020

- Led NCR's next-generation point-of-sale platform and a 15-person distributed Scrum team; built Spring Boot and Angular applications, test automation, and enterprise release systems.

EDUCATION

Georgia Tech - Coursework toward an M.S. in Computer Science, Machine Learning concentration (2018-2019)

Georgia State University - B.S. in Computer Science

PROFESSIONAL DEVELOPMENT

Anthropic - Claude Certified Architect, Foundations - exam preparation in progress