

Adam Shappy

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Senior Software Engineer with 6 years across cloud-native platforms, developer tooling, and AI agent systems. Built conversational AI agents with AWS Strands Agents for enterprise CRM and developed MCP tooling adopted across hundreds of engineering teams. Combines full-stack engineering depth with customer-facing deployment to bridge AI capabilities and real business impact.

Technical Skills

Languages: TypeScript, .NET, Python, Go, Node.js, SQL

AI & Agents: AWS Strands Agents, LLM Integration, Agentic Frameworks, Model Context Protocol (MCP), Prompt Engineering, Function Calling, RAG

Cloud & DevOps: AWS (CDK, Lambda, DynamoDB, API Gateway, CloudFormation, EventBridge), Docker, CI/CD

Frontend: React, Next.js, React Native, GraphQL

Databases: MongoDB, PostgreSQL, DynamoDB

Experience

Cox Automotive

Senior Software Engineer | 2021–Present

- *Alvin: AI Agent for Enterprise CRM* [Python, AWS Strands Agents]
 - Built conversational AI agent enabling dealership salespeople to query, summarize, and act on CRM data through natural language, integrated with one of the automotive industry’s largest datasets
 - Implemented function calling via AWS Strands Agents, allowing the LLM to autonomously select and execute CRM operations based on user intent
 - Partnered with product managers and dealership stakeholders to translate business requirements into agent capabilities through iterative feedback loops
- *MCP Developer Platform & AI Tooling* [TypeScript, Bun, Node.js, Zod]
 - Built MCP (Model Context Protocol) tools enabling AI coding assistants (Copilot, Claude Code) to interact with Rally enterprise project management: adopted across hundreds of internal engineering teams
 - Improved LLM tool discovery by correcting resource ID resolution and refining Zod parameter schemas
- *Direct Mail Automation Platform* [TypeScript, AWS CDK, React, Next.js]
 - Led end-to-end development of direct mail API and React dashboard, building CI/CD pipeline from inception and integrating third-party Lob API for mail processing
 - Resolved critical race condition blocking production release; implemented observability with Splunk and New Relic
- *Cross-Team Developer Platform* [TypeScript, Nx, React, TailwindCSS]
 - Architected shared monorepo powering CRM features across multiple product teams; built custom code generators accelerating team onboarding and enforcing architectural consistency

Alpine Media Technology

React Native Developer | 2020–2021

- Maintained mobile app generator and CMS-driven theming engine that produced branded iOS and Android apps for major ski resorts; managed client onboarding and App Store release cycles

Open Source & Projects

- *Mini Mealie: Chrome/Firefox Extension* [TypeScript, MCP]
 - Created open-source browser extension with 2,000+ active users and growing international adoption
 - Developed using AI-assisted workflows (Copilot, Claude Code) with custom MCP tools; collaborated with external contributors to add cross-browser Firefox support
- *Self-Hosted Infrastructure* [Docker, Ollama, Mastra, Traefik, Cloudflare Tunnel, CrowdSec]
 - Designed and maintain 30+ container home lab running local LLMs (Ollama) and AI agent frameworks (Mastra) behind a zero-trust architecture with Authelia SSO, Traefik reverse proxy, and Cloudflare Tunnel; secured with CrowdSec intrusion prevention

Education

University of Vermont | B.S. Chemistry, Minor Mathematics

Flatiron School | Software Engineering Certification