

Christopher Magana

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SUMMARY

Senior full-stack engineer with 5+ years shipping production systems across defense, robotics, and healthcare on AWS serverless and containerized stacks. Now extending that range into AI-assisted development with multi-agent autonomous workflows shipping production code, ready to lead organizations through the next shift in how software gets built.

EXPERIENCE

Full-Stack Software Engineer

Feb 2023 - Present

Geisel Software

Worcester, MA

- Scoped requirements directly with stakeholders and owned delivery from design through production across multiple client engagements.
- Rebuilt CI/CD for AI-assisted development velocity: trunk-based workflow, CalVer releases, staging-to-prod promotion, per-environment rebuilds from pinned SHAs, automated smoke tests on ECS Fargate.
- Onboarded engineers onto active projects, establishing architectural patterns, documentation, and review standards to accelerate ramp-up.

Client: Valinor Technologies, Deployable Medical System (HarborOS)

Defense / Healthcare

Co-Architect

- Co-architected the full software stack for a containerized mobile medical bay with telehealth, patient monitoring, remote device control, and offline-first medical resources; delivered prototypes to U.S. Marine Corps and special operations forces.
- Guided the product through FedSTART certification for federal deployment while expanding the feature set under aggressive timelines.
- Integrated multiple proprietary medical devices without hardware access until final stages, designing abstraction layers that enabled rapid integration once hardware arrived.

Client: Amazon Robotics, Serverless Data Platform

Robotics R&D

Full-Stack Engineer

- Shipped features and performance optimizations for the primary data discovery, visualization, and troubleshooting tool used by robotics engineers across multiple programs, serving 15K+ requests/month.
- Built interactive 3D visualizations (point clouds, video overlays, spatial telemetry) enabling R&D debugging of robotic warehouse automation.
- Engineered a data indexing solution achieving a 50x reduction in load times.

Embedded / Full-Stack Software Engineer

Aug 2021 - Feb 2023

General Dynamics Mission Systems

Dedham, MA

- Delivered a hybrid embedded + web system on a 5-person cross-disciplinary IRAD team spanning systems, embedded, and security.
- Implemented a React-based management interface, owning the full integration path between hardware and UI.
- Earned direct mentorship from the company President through consistent contribution to product and business strategy beyond engineering scope.

PROJECTS

AI-Assisted Development Workflows | *Claude Code, MCP, Agent Teams, Git Worktrees*

2023 - Present

- Design state-of-the-art AI-assisted development workflows that partition work by strengths: humans for architecture, judgment, and review; AI for parallel execution, pattern-matching, and scale.
- Built a hierarchical multi-agent system where an orchestrator delegates to parallel workers in isolated Git worktrees, enabling concurrent autonomous feature execution under human-gated review without loss of quality.
- Reduced code-reading token usage by over 95% in retrieval-heavy workflows.

TECHNICAL SKILLS

AI & LLMs: Claude Code, Agent Teams, MCP, Prompt Engineering, Context Management, RAG, Knowledge Graphs, Token/Caching Optimization

Languages: TypeScript, Python, JavaScript, SQL, Bash, C++, Kotlin, Java

Web: React, Next.js, React Native, Three.js, Node.js, NestJS, REST APIs, GraphQL, Tailwind, Django, Ionic, PWA

Data: PostgreSQL, MongoDB, DynamoDB, Redis, SQLite, S3

Cloud & DevOps: AWS, Serverless, Microservices, Docker, Kubernetes, Git, GitHub Actions, Bitbucket, CI/CD, Jest, Pytest, IaC

EDUCATION

Northeastern University

Boston, MA

Bachelor of Science in Computer Engineering

Aug 2017 - Aug 2021