

Michael B. Golden

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Summary

Lead Software Engineer and senior engineering leader driving scalable, cloud-native SaaS platforms in healthcare. Hands-on architect of distributed microservices on C#.NET, Azure and AWS, delivering a 25% increase in system throughput while ensuring HIPAA and SOC 2 compliance. Built CI/CD pipelines and automated testing that cut release cycle time by 30% and improved code quality. Seeking to apply deep technical and leadership expertise to accelerate reliable, compliant product delivery.

Skills

- **Programming Languages & Frameworks:** C#, SQL, JavaScript, TypeScript, HTML, CSS, XAML, .NET, .NET Core, REST APIs, React, Next.js, Angular, Java, PostgreSQL, Postman, Web Application Development, Python
- **Tools & Platforms:** Azure DevOps, GitHub Copilot, Visual Studio, VS Code, SQL Server, SSMS, Git, Miro, Power Apps, Asana, Figma, Jira, Datadog, Claude Code, Anthropic Claude API
- **Cloud, Infrastructure & DevOps:** Amazon Web Services (AWS), Azure, EC2, IAM, SQS, SNS, S3, Route 53, CloudWatch, DynamoDB, Elastic Beanstalk, ElastiCache for Redis, Azure Functions, Azure Cache for Redis, Azure Storage, Cloud-Native Services, High-Availability Architectures, Observability, Infrastructure as Code, API Management, Azure Container Apps, Azure Data Lake Storage Gen2, Azure EntraID, Azure Pipelines, CI/CD, Automated Testing, AWS Lambda, AWS Step Functions, API Gateway, CloudFront, Terraform, GitHub Actions (OIDC), Secrets Manager
- **Architecture & Design:** Backend Engineering, API/Service Contract Design, Microservices, Distributed Systems-, Event-Driven Architecture, Database Design, Data Modeling, Caching/Sync Strategies, Service Ownership-, SLO/SLI-Driven Operations, Backend Resiliency Patterns, Performance Engineering, Security Controls, Technical Design Documentation, Code Reviews, HIPAA and SOC 2 Compliance, Healthcare Data Standards - HL7, Scalability Design, System Design, Security Design, Reliability Engineering, Performance Optimization, Database Query Analysis, Scalable Web Applications, AI-Powered Customer Experiences, Training LLMs, Restful API, Software Architecture And Design, Agentic AI systems, AI guardrails & human-in-the-loop design, RAG, LLM tool calling, Optimistic concurrency
- **Leadership & Strategy:** Engineering Leadership, Program Management, Health Technology, SaaS, People Management-, Coaching, Career Development, Agile Software Development, Software Development Team Leadership, Software Engineering Leadership
- **Machine Learning:** Hybrid system design, LLM Fine-tuning, LoRA / PEFT, teacher-student distillation, Gradient-boosted regression (scikit-learn), Feature Engineering, Debugging, Pytorch, CUDA

Work Experience

Imagemakers Inc | *Lead Software Engineer*

Jan 2025 - Present

Moved from Director of Software Engineering into a hands-on Lead Software Engineer role focused on backend architecture, API design, implementation, performance, and delivery execution for enterprise client systems. Lead multiple project teams in parallel, partnering with PMs, QA, developers, and stakeholders to translate business requirements into scalable services, reliable integrations, and maintainable technical designs. Own technical leadership across architecture, code reviews, service implementation, performance tuning, automated testing, and release readiness while balancing rapid delivery with long-term stability and technical debt management.

- Directed a backend engineering team to adopt robust service design, API review processes, automated testing, CI/CD, and deployment-readiness practices while managing HIPAA and SOC2 compliance, boosting throughput by 25% and stabilizing production
- Mentor engineers through technical discovery for third-party integrations and AI-powered customer experiences, guiding API contract validation, authentication flows, failure-mode analysis, and scalable web application design to reduce integration errors and shorten time to market for new features.
- Established team standards around AI-assisted development guardrails, emphasizing testability, maintainable service boundaries, and secure patterns, and coached engineers through peer-led code reviews to cut defects.
- Design and implement RESTful backend APIs, service-layer abstractions, microservices patterns, database access strategies, and integration points for client-facing web applications, enabling higher traffic volumes with stable response times.
- Expanded automated regression testing, peer review standards, and CI/CD deployment validation while maintaining HIPAA and SOC2 compliance requirements, reducing production defects, improving release confidence, and supporting resilient multi-sprint backend delivery.
- Define and communicate a multi-year technical roadmap, aligning team priorities, service ownership, and delivery plans with business goals to guide three major releases on schedule.

Director of Software Engineering

Nov 2021 - Dec 2024

Led backend architecture, cloud migration strategy, technical design, and engineering execution for distributed web and service-based client platforms. Directed a 13-person engineering organization while remaining closely involved in API design, Azure hosting architecture, service implementation standards, code review, CI/CD practices, and production-readiness planning. Partnered with clients, product stakeholders, and engineering leads to translate requirements into scalable technical designs, delivery plans, and reliable implementations across concurrent projects.

- Oversaw a 13-person engineering organization, standardizing branch strategies, pull-request requirements, CI/CD practices, and HIPAA and SOC2 compliance checkpoints to create clear workflows and reduce merge friction by 30%.
- Coached engineering leads and external partners on integration boundaries, delivery standards, technical architecture, and security controls while fostering collaboration and consistent implementation patterns across teams.
- Stabilized at-risk production by mentoring teams to diagnose architectural gaps, clarify integration requirements, and reinforce operational compliance and security best practices.
- Built proof-of-concept integrations to validate API feasibility, authentication requirements, data mapping, error handling, and operational constraints for proposed client applications.
- Migrated legacy server-hosted workloads to Azure using cloud-native microservices patterns and Azure Container Apps, modernizing applications into scalable SaaS platforms while improving maintainability, reliability, and production observability.
- Defined a multi-year engineering vision and platform strategy, establishing standards for system design, operational readiness, quality, and reliability across distributed systems while managing HIPAA and SOC2 compliance requirements for clients.

FoodChain ID | Software Development Manager

Jan 2020 - Nov 2021

Managed engineering teams across onshore and offshore groups while owning production, operations, infrastructure, and delivery planning for multiple concurrent projects. Directed technical design, resource allocation, budgeting, time tracking, and release execution while ensuring reliable service uptime, performance, and accountability. Mentored engineers from junior through architect level, improved team delivery practices, and partnered with business and finance stakeholders to align technical execution with product and operational goals.

- Rationalized overlapping application platforms across business units and acquisitions by evaluating service capabilities, integration dependencies, licensing impact, and migration paths, reducing operational complexity and supporting scalable SaaS delivery.
- Diagnosed engineering delivery bottlenecks by reviewing code quality, testing practices, deployment processes, and service ownership gaps, then implemented Agile delivery standards and mentoring plans to improve accountability, continuous improvement, and execution.
- Defined standardized microservices backend delivery patterns from intake through release, covering infrastructure as code, service conventions, branching strategy, automated quality gates, CI/CD, and deployment controls, which increased consistency across teams and reduced deployment errors
- Improved DevOps maturity by introducing automated test execution, build validation, release controls, production-readiness checks, and container-based deployments using Azure Container Apps across distributed application teams.
- Mentored mid-level and senior engineers on backend design, SQL performance, code reviews, test coverage, deployment discipline, and operational ownership, leading to higher code quality and faster issue resolution.

Team Lead

Feb 2017 - Dec 2019

Managed a 17-person engineering team across multiple projects and architected an initial .NET Core, Angular, and service-oriented application stack hosted on Azure. Partnered with business analysts and product stakeholders to refine requirements into implementable technical designs, authored detailed specifications, provided estimates for planning, and conducted comprehensive code reviews to maintain standards, improve maintainability, and support predictable delivery.

- Led a software development team delivering full-stack features across .NET Core, Angular, TypeScript, SQL Server, and Azure-hosted services, coordinating API, data model, UI, QA, and release dependencies with product stakeholders for predictable delivery.
- Implemented release-note automation and Agile delivery workflows tied to work-item tracking and deployment processes, improving traceability between shipped features, fixes, and client-facing communication.
- Improved code quality by 40% by enforcing pull-request reviews, pre-QA code inspection, CI/CD validation, automated testing, and repeatable deployment pipelines across application teams.

Senior Software Engineer

Dec 2015 - Jan 2017

Managed a global application development team of 2 developers, providing mentorship and guidance in C#, SQL, and Entity Framework. Implemented a code review process to improve code quality and prevent errors from reaching QA. Reviewed and provided estimates for large project specifications, ensuring accuracy and feasibility. Authored specification documents for features, providing implementation details and clear direction for developers. Collaborated with business analysts to ensure developer requirements were well-defined.

- Reduced environment provisioning and deployment lead time from weeks to minutes by automating TeamCity CI/CD workflows and SQL Server deployment processes, improving delivery consistency and operational readiness.
- Migrated team planning, backlog, build, and release workflows into Azure DevOps to centralize work tracking, improve traceability, and support Agile software development practices.
- Implemented event-driven integration patterns with AWS SQS and SNS to decouple services, improve failure isolation, support asynchronous processing, and increase resilience across distributed workflows.

Punctil - Startup | Software Engineer

Nov 2015 - Dec 2023

Brought in early in the company's journey. Worked with the CEO to create product direction and provide stability to existing clients. Went with the CEO to present the product to an Enterprise client. Later, they worked with their IT to onboard and integrate HL7 mapping.

- Implemented scalable web application features and enhancements across the LAMP stack, maintaining integration stability and supporting evolving client workflows.

Mediware (now Wellsky) | Software Engineer

May 2010 - Dec 2015

Provided bug fixes and features for a Rehabilitation documentation system that handled everything from appointment scheduling to billing and supported a custom HL7 Interface. Assisted in onboarding new hospital implementations

- Supported a rehabilitation documentation system covering appointment scheduling, billing, and custom HL7 interfaces, delivering bug fixes and features while assisting with hospital implementations.

AI PROJECTS

PlayIT | <https://10finger.dev/project/playit> | Personal

- Designed and built an end-to-end machine learning system that predicts game enjoyment and estimated playtime for any public Steam profile, combining a gradient-boosted regression model with a fine-tuned language model that generates personalized recommendations and cost-per-hour estimates; deployed as a publicly demo-able application.
- Fine-tuned a 1.5B-parameter LLM (LoRA/PEFT) via teacher–student distillation from a 7B model, cutting inference cost while producing review-grounded explanations; reduced held-out evaluation loss from 1.73 to 1.10 as the training set grew.
- Drove cold-start prediction accuracy from 54% to 65% (leave-one-user-out cross-validation) across ~15 documented experiments - feature engineering, genre expansion, and a ~20→400 increase in training users via friends-of-friends social-graph crawling with bias-aware sampling.
- Diagnosed and fixed model-quality issues using permutation importance and counterfactual analysis - added a monotonic review-sentiment constraint so popular-but-poorly-reviewed titles can't outrank better ones, and a candidate filter that removes non-game software.
- Built the production backend and web application stack with an asynchronous Flask job API, single-GPU queue serialization, persistent job state, and a Next.js/TypeScript frontend on Vercel; exposed home-GPU inference through a Cloudflare Tunnel with zero secrets in version control.
- Documented the system architecture, design decisions, experiments, and dead ends in 20 Architecture Decision Records; used an AI coding agent as a pair-programmer for breadth while owning all modeling, backend, and architecture decisions.

FleetAlert AI | <https://fleetalert.10finger.dev> | Personal

- Designed and built a guardrailed agentic AI system on AWS in which Claude investigates fleet-maintenance alerts using telemetry, service history, and RAG-based knowledge retrieval, then proposes fixes a human must confirm before anything executes; deployed it as a public demo with three entry points (web, a scheduled inbound email, and an autonomous telemetry detector) sharing one investigation engine.
- Built a Capabilities Engine that every agent action runs through, with JSON-schema input/output contracts, safety tiers, ownership, and retry policy; the agent only ever holds read-only and propose-action tiers, so no model output can reach execution, and a CI gate fails the build if a capability ships without tests and a contract document.
- Made human-in-the-loop structural rather than prompt-based: a Step Functions task-token callback pauses execution until a person confirms or rejects (routing to support after two hours), a three-action whitelist is checked at proposal and again before execution, and a rejected fix triggers one retrieval-backed retry that cannot repeat it; inbound email is treated as untrusted data that cannot bypass confirmation.
- Instrumented every model call, capability call, guardrail decision, and human action as a structured trace span with latency, token, and cost data, shown live in the UI and converted into CloudWatch metrics with a dashboard, alarms, and a daily cost cap enforced by a DynamoDB conditional write before any model call.
- Built a golden-scenario eval harness (8 scenarios × 3 trials against real Claude, graded deterministically from trace spans) that gates agent changes in CI and replays recorded runs for free on every pull request; it caught a test scenario contradicting its own answer, a max-tokens truncation bug producing placeholder rationales, and a prompt that overrode the model's evidence, and drove a Sonnet 5 → 5.5 migration that cut cost 36% and latency 56% with no loss in pass rate.
- Built the full serverless stack in Terraform (Lambda, API Gateway, Step Functions, EventBridge, DynamoDB, S3/CloudFront with Origin Access Control, ACM, Secrets Manager, CloudWatch/SNS) with GitHub Actions OIDC CI/CD: plan, tests, and evals on every pull request, apply and deploy on merge; prevented race conditions with conditional writes and documented every decision in 21 Architecture Decision Records.

EDUCATION

Arizona State University | Bachelor of Science, Computer Systems Engineering

Tempe, AZ 2010