

KYLE SEBESTYEN

Principal Software Engineer | AI & Platform Engineering | Azure

Fishers, Indiana 765-618-9453

PROFILE

Principal Software Engineer with 20 years of experience designing, rescuing, and evolving production software. Hands-on architect with deep C#/.NET and Microsoft Azure expertise across distributed systems, identity, observability, DevOps, data, and developer tooling. Leads AI engineering practices while continuing to ship production code, with a consistent focus on turning ambiguous problems into pragmatic systems that improve reliability, team capability, and delivery speed.

SELECTED IMPACT

- **AI SDLC automation:** Designed Agent Smith, a configuration-driven multi-agent harness that takes Azure DevOps work items through codebase analysis, tests, implementation, validation, independent code review, PR creation, and tracker synchronization. Used on ~50 stories and distributed internally through an agent marketplace.
- **Performance:** Profiled a large-customer review workflow that could take up to 18 minutes and exhaust SQL DTUs; reduced execution time to ~38 seconds.
- **Engineering leverage:** Reviewed 314 pull requests and contributed 164 PRs in 2025 while leading team practices, mentoring engineers, and remaining a high-output individual contributor.
- **Reliability:** Built source-aware .NET rate limiting, resolved a long-standing Carbon.WebApi deadlock, added startup-time DI validation, and created proactive Azure/App Insights/Slack observability that repeatedly surfaced issues before customer reports.
- **Identity:** Used AI as a research accelerator to learn, decompose, and implement self-service enterprise SSO supporting OIDC, SAML 2.0, and SCIM within a single sprint.

CORE EXPERTISE

C# / .NET Microsoft Azure AI agents & multi-agent workflows Azure Functions Service Bus
Event Grid Event Hub Azure SQL / SQL Server Cosmos DB ADX Application Insights
Azure DevOps / CI/CD Key Vault / Entra OIDC / SAML 2.0 / SCIM Distributed systems
Observability Performance engineering Angular / JavaScript Playwright
AWS Lambda / Step Functions

EXPERIENCE

Everon (formerly DigiOp)

Mar 2024 - Present

Principal Engineer

- Lead AI engineering practices across a software organization of roughly 8 engineers; previously led a 4-person AI team and a 4-person backend team, and now lead a backend team alongside a Principal Architect.
- Built Agent Smith, an internal multi-agent SDLC platform that automates ticket intake, repository analysis, testing, implementation, validation, code review, pull-request creation, and Azure DevOps state synchronization with explicit human control points.
- Built internal leverage tools including Carbon-CLI, CarbonMCP, IDE extensions, AI-assisted Azure SQL diagnostics, and secure Support self-healing utilities; Support tooling has eliminated tens of hours of recurring developer interruption and is estimated to approach 100 hours saved in a year.
- Architected event-driven SQL entity propagation with Azure Functions and Event Grid so downstream services, caches, and databases can react independently to domain create/update/delete events.

- Improved platform resilience through proactive Azure/App Insights alerting into Slack, ingestion anomaly detection, custom rate limiting, ADX-throttling mitigation with distributed caching, DI startup validation, and resolution of a critical WebApi thread deadlock.
- Modernized delivery and security by moving Function Apps from manual publishing into Azure DevOps pipelines, automating integration tests before slot swaps, implementing authorization middleware, moving secrets to Key Vault/App Configuration with Entra RBAC, and encrypting third-party credentials with customer-specific keys.
- Reduced cloud and database pressure through performance profiling and storage redesign, including the 18-minute-to-38-second review-loading improvement and an AppendBlob-to-BlockBlob migration for expensive case uploads.

Pie Insurance

Jun 2022 – Apr 2024

Senior Full Stack Engineer

- Worked across AWS-hosted business systems written in Go, Node.js, and C#, sharing ownership of a diverse application portfolio with a strong engineering team.
- Expanded cloud and cross-language experience while contributing hands-on to production systems and leading an early internal Lunch & Learn on practical generative AI.

DigiOp

May 2018 – Jun 2022

Application Architect

- Helped grow Carbon, a security analytics platform, across Angular, C#/.NET, SQL Server, Cosmos DB, Azure services, and multiple product integrations; guided developers and performed architecture/code reviews.
- Designed a reusable Playwright frontend testing platform with generic, customer-specific, and all-customer runners; secured authentication tokens in Azure Key Vault and integrated execution into CI.
- Architected and delivered cloud, mobile, desktop, identity, data, and operational capabilities while working closely with Product, Support, implementation teams, and engineering.

EduSource

Jan 2015 – May 2018

Software Engineer / Consultant

- Worked in a consulting-oriented role across client systems while mentoring college and early-career developers.
- On a critical engagement where a company had lost its development staff and lacked usable source code for hundreds of deployed web applications, reverse-engineered compiled .NET assemblies and IL, extracted dependencies, and mapped applications to stored procedures and database behavior so the business could keep operating and regain system understanding.

Vision3

Jun 2008 – Dec 2014

Software Engineer - iOS / .NET / Flash / Unity3D

- Built interactive applications spanning Objective-C/iOS, C#/.NET, Flash/ActionScript, Unity3D, REST APIs, sockets, gesture input, touchscreen installations, and real-time 3D model manipulation.
- Partnered closely with designers to turn visual concepts into polished interactive experiences for clients including Delta Faucet, NCAA, Raytheon, Medtronic, DePuy, Rolls-Royce, and Firestone Building Products; also built a CMS for larrythecableguy.com.

EARLIER EXPERIENCE

Sport Graphics

Jul 2007 – Jun 2008

Flash/.NET Developer

Built NCAA and client web experiences using C#/.NET, ASP.NET, SQL Server, Flash, AJAX, JavaScript, HTML/CSS, WSDL/XML services, analytics, and payment integrations.

Farm Bureau Insurance

Jul 2006 – Jul 2007

.NET Developer

Built internal web applications with VB.NET, ASP.NET, ADO.NET, SQL/DB2, JavaScript, HTML/CSS, and AJAX, including a statewide application used by insurance managers to manage client relationships.

LEADERSHIP, LEARNING & COMMUNITY

- Delivered several dozen Lunch & Learns on AI and engineering topics including App Insights debugging, .NET performance, advanced Git, developer tooling, testing, and cloud architecture.
- Participated in Spring Into AI and Summer Into AI 2026, building and shipping AI experiments that informed tools later used in professional workflows.
- Leadership style: lead by example, unblock people, teach the reasoning instead of only the answer, and build tools that increase the capability of the whole team.

EDUCATION

Indiana Wesleyan University

2002 – 2006

Bachelor's Degree, Computer Information Systems

Minor in Graphic Arts