

Eric Ryan Bowser

Full Stack Software Engineer | Cloud Architecture Enthusiast

[GitHub](#) | [LinkedIn](#) | [Portfolio](#)

Professional Summary

Experienced Full Stack Software Engineer with 10+ years of expertise in C#/.NET development, modern web technologies, and cloud architecture. Specializing in WPF/MVVM desktop applications, high-performance API integrations, and React.js component development. Currently expanding expertise in cloud technologies through AWS and CompTIA certifications while developing innovative applications in AI automation and cloud study tools.

Core Technical Skills

Languages & Frameworks

- Backend: C#/.NET Core 8.0, ASP.NET Core Web API, ASP.NET MVC, Node.js, Express.js
- Frontend: React.js, JavaScript/TypeScript, HTML5/CSS3, Tailwind CSS, Bootstrap
- Desktop: WPF/XAML, MVVM Architecture, Windows Forms

Cloud & Azure Services

- Azure Expertise: App Service, Azure Functions, Azure Storage, Azure SQL Database, Cosmos DB, Azure DevOps, Key Vault, Application Insights
- CI/CD & DevOps: GitHub Actions, Azure DevOps Pipelines, TeamCity, Octopus Deploy
- Containerization: Docker for consistent development-to-production deployments, deployment automation scripts

Security & Infrastructure

- Authentication & Authorization: JWT token management with public/private key cryptography, Auth0 OAuth2/OIDC integration, Bearer token authorization patterns
- Infrastructure & Deployment: NGINX reverse proxy and load balancing, DNS configuration and IP routing, SSL/TLS certificates with Cloudflare management
- Secure Credential Management: Environment variables (.env), Azure Key Vault, secure API design practices, Email services with Google Authentication and SendGrid

Databases & Data

- SQL Server (advanced T-SQL, query optimization, performance tuning), PostgreSQL, Cosmos DB, MongoDB
- Entity Framework Core with LINQ, Dapper, advanced indexing and execution plan analysis, Stored Procedures, User-Defined Functions, Table-Valued Parameters

Tools & Methodologies

- RESTful APIs, Microservices Architecture, OpenAPI / Swagger
- Git/GitHub, Azure DevOps, Cake Build
- Tooling development for automation, monitoring, and reporting
- Agile/Scrum, SOLID Principles, Design Patterns, TDD, xUnit, Jest, React Testing Library

Professional Experience

Visible Supply Chain (Maersk)

Supply Chain / Integrations Specialist | Feb 2023 - Dec 2023

Performance-Critical Full-Stack System Integration & Modernization

Full-Stack Architecture & Framework Modernization

- Migrated .NET Standard 4.6.1 hybrid application to .NET Core 7.0, optimizing for Azure deployment
- Architected scalable microservices for external carrier system integration (USPS, FedEx APIs)
- Implemented secure authentication, error handling, and Key Vault integration for shipping operations
- Designed and deployed RESTful Web APIs with comprehensive error handling and circuit breaker patterns

Cloud Database Migration (On-Premises to Azure)

- Architected and executed complex migration from on-premises PostgreSQL Server to Azure Cosmos DB
- Designed optimized data schema for NoSQL document storage while maintaining application compatibility
- Implemented secure connection strings and authentication with Azure Key Vault
- Validated data integrity and performance across migration with zero downtime deployment
- Improved query performance and scalability leveraging Cosmos DB's distributed architecture

Performance Optimization & Database Tuning

- Reduced API response times by 40% through strategic in-memory caching and LINQ query optimization
- Analyzed SQL Server execution plans, created optimized indexes, and tuned long-running queries
- Built optimized T-SQL stored procedures with Table-Valued Parameters for high-volume data processing
- Decoupled monolithic architecture using composition patterns and dependency injection for improved maintainability

High-Throughput Integration & Monitoring

- Built multithreaded processing system for concurrent carrier API requests with retry logic and resilience patterns
- Integrated NLog for comprehensive application monitoring and SQL Server failure tracking
- Implemented Azure DevOps CI/CD pipelines for automated testing and deployment

Willis Towers Watson

Full Stack Software Engineer | 2016 - Aug 2022

.NET Core Modernization, Cloud Database Migration & Enterprise React Architecture

Full-Stack Application Modernization

- Led migration of multiple legacy .NET applications to .NET Core, modernizing infrastructure and improving performance by 30%
- Managed Entity Framework Core implementations with advanced LINQ queries for optimal query performance
- Maintained strict backward compatibility while implementing secure coding practices across the stack
- Reduced page load times through performance profiling and optimization of database queries

Enterprise API Development & Integration

- Architected and built RESTful Web APIs with Microsoft Identity, Auth0, and JWT authentication for secure inter-service communication
- Implemented Bearer token authorization and comprehensive API documentation using Swagger/OpenAPI
- Developed automated testing suites ensuring feature parity and security across deployments
- Created reusable API patterns following SOLID principles for consistency across microservices

Frontend Component Architecture

- Developed enterprise-wide React.js component library with TypeScript for UI consistency across applications
- Created 50+ reusable components using Bootstrap and React-Bootstrap with comprehensive documentation
- Established coding standards and best practices for component development reducing development time by 25%
- Implemented TypeScript for type safety and improved maintainability

Performance Monitoring & Reliability

- Utilized SumoLogic for comprehensive troubleshooting, performance monitoring, and system insights
- Implemented SQL Server profiling and query optimization, creating strategic database indexes for performance gains
- Maintained GitHub source control with TeamCity builds and Octopus Deploy CI/CD pipelines

Independent Software Developer & Cloud Architect

Jan 2024 - Present | Full-Stack Development, Cloud Certification & AI Integration

CloudPrepper - Cloud Certification Study Platform

- Architected and developed comprehensive full-stack study application for CompTIA Cloud+ and AWS certifications
- Built React.js frontend with flashcard system, practice exams, and progress tracking using Tailwind CSS
- Implemented spaced repetition algorithm for optimal learning retention with advanced analytics
- Developed RESTful API with Node.js/Express and PostgreSQL for secure user progress tracking
- Containerized with Docker for consistent development-to-production deployments

AI Assistant Platform Suite

- Architected multi-AI platform integrating OpenAI, Google Gemini, and Anthropic Claude APIs
- Developed Node.js/Express backend with secure API management and real-time streaming responses
- Built React frontend with TypeScript for robust, maintainable code and optimal performance
- GitHub: Frontend (<https://github.com/ericbowser/AssistFront>) | Backend (<https://github.com/ericbowser/Assist>)

Pet ID Tags - Full-Stack Application

- Designed and built complete full-stack application for smart pet ID tags with QR code generation
- Architected PostgreSQL database schema for efficient pet profiles and owner contacts
- Implemented JWT-based user authentication and secure profile management systems
- Created Docker containers for consistent development and production deployment

Portfolio Website & Containerized Email Backend

- Developed modern, responsive portfolio website showcasing projects and technical expertise at erb-think.com
- Built containerized Node.js/Express backend using Docker for email service reliability and scalability
- Implemented secure email delivery with Google Authentication and SendGrid integration
- Demonstrates production-grade microservices architecture separating frontend from backend services

Key Differentiators

Full-Stack Problem Solving

- 10+ years of proven ability to design, develop, and maintain mission-critical full-stack applications
- Deep expertise in performance optimization: 40% API response improvement, SQL query tuning, database indexing
- Experience with scalable microservices architecture and secure coding practices across platforms
- Skilled in troubleshooting complex technical issues across the entire stack

Security - Infrastructure Excellence

- Implemented enterprise-grade authentication (JWT, Auth0) and secure API authorization patterns
- Designed and deployed production-ready infrastructure: NGINX load balancing, DNS routing, SSL/TLS certificates
- Built containerized applications with Docker for consistent, scalable deployments
- Managed infrastructure from application security to infrastructure security, demonstrating Sr. level depth

Cloud-Native Development

- Hands-on Azure expertise: App Service, Functions, Storage, SQL Database, Key Vault, DevOps pipelines
- Proficient with multiple CI/CD platforms (GitHub Actions, Azure DevOps, TeamCity, Octopus Deploy)
- Experienced with microservices architecture and RESTful API design for enterprise systems
- Demonstrated adaptability across evolving DevOps landscapes

Technical Versatility & Architecture

- Full-stack capability: .NET Core/C# backend, React/TypeScript frontend, database optimization
- Tooling development for automation, monitoring, and reporting systems
- Strong foundation in both object-oriented and functional programming paradigms

Enterprise Experience

- Proven track record modernizing legacy systems while maintaining business continuity
- Experience in high-throughput, mission-critical applications requiring peak performance
- Ability to work with complex external integrations (carrier APIs, multiple data sources, third-party services)
- Demonstrated success in cross-functional Scrum/Agile environments

Certifications & Professional Development

In Progress (Exam dates: November 2025)

- CompTIA Cloud+ (CV0-004) - Demonstrates hands-on cloud architecture and deployment expertise
- AWS Certified Solutions Architect - Associate (SAA-C03) - Validates cloud design and infrastructure skills

Education

Weber State University - Bachelor of Science, Computer Science (2011-2014) | Concentration: Software Engineering & Network Security

References available upon request