Eric R. Bowser GitHub LinkedIn

Experienced Full Stack Software Engineer with expertise in C#/.NET development, specializing in desktop applications using WPF/MVVM architecture and high-performance system integrations. Proven track record in modernizing legacy .NET applications to .NET Core, optimizing performance for high-throughput environments, and building robust automation frameworks. Strong background in regulated industries including financial services, with experience in multithreaded applications and external system integrations.

Core Technical Skills

C# & .NET Development

- C#/.NET Framework & .NET Core (through 7.0), ASP.NET Core Web API, Entity Framework
- WPF/XAML, MVVM Architecture, Data Binding, Custom Controls
- Multithreaded Application Development and Debugging
- Performance Optimization, Memory Management, Caching Strategies

Desktop & Enterprise Applications

- WPF/MVVM Design Patterns, INotifyPropertyChanged Implementation
- Windows Forms, Custom Statistical Report Generation
- High-Throughput Application Architecture
- Legacy Application Modernization

API & System Integration

- RESTful Web APIs, SOAP/WCF Services, HTTP/HTTPS Protocols
- External System Integration (Carrier APIs: USPS, FedEx, etc.)
- Authentication: Microsoft Identity, JWT, Bearer Tokens
- Auth0 integrations for JWT tokens and 0Auth authentication

Database & Data Management

- Microsoft SQL Server, T-SQL (Stored Procedures, User-Defined Functions, TVPs)
- PostgreSQL, Cosmos DB, Database Migration Scripts
- Azure Data Studio, Azure Cosmos DB Emulator

Testing & Quality Assurance

- Unit Testing, Integration Testing
- xUnit, NSubstitute, Moq, Selenium and
- Debugging Complex Applications, Performance Analysis

DevOps & Cloud

- Azure DevOps, GitHub/Git, CI/CD Pipelines
- Microsoft Azure, TeamCity, Octopus Deploy
- Docker Containerization, Bash/PowerShell Scripting
- Certifications in Progress: CompTIA Cloud+ (v25.5) IT7011, AWS Solutions Architect Associate (v25.2) IT7013

Web Development

- React.js, Node.js, JavaScript/TypeScript
- Bootstrap, Tailwind CSS, Component Libraries

Professional Experience

Visible Supply Chain | Supply Chain | Integrations Specialist | Feb 2023 - Dec 2023

Performance-Critical System Integration & Modernization

- Modernized .NET Standard 4.61 application to .NET Core 7.0, improving performance and maintainability
- Implemented in-memory cache strategies for high-volume request processing, reducing API response times around
 - address validations
 - o well as zoning and route optimizations
- Decouple monolithic architecture to use composition as well as easier testing with interfaces
- Developed robust integration solutions supporting both SOAP/WCF and REST APIs based on client requirements
- Built multithreaded processing capabilities for handling concurrent carrier API requests (USPS, FedEx)
- *NLog* logging to show application failures and *SQL Server* failures
- Implement retries for during API peak times

System Architecture & Integration

- Architected scalable microservices integrating with external carrier systems
- Implemented secure API authentication and error handling for mission-critical shipping operations
- Created *T-SQL* stored procedures and database optimizations for client data processing
- Managed Azure DevOps CI/CD pipelines and source control workflows

Willis Towers Watson | Full Stack Software Engineer | 2016 - Aug 2022

.NET Application Modernization & Component Development

- Led migration of legacy .NET applications to .NET Core framework, ensuring backward compatibility and improved performance
- Developed reusable React.js component library for enterprise-wide consistency across public-facing applications
- Implemented *RESTful Web APIs* with Microsoft Identity and *JWT* authentication for secure inter-service communication

Performance & Reliability Engineering

- Utilized SumoLogic data aggregation for troubleshooting and performance monitoring
- Utilized SQL Server Profiling to analyze long queries and execution plans
- Maintained automated testing suites ensuring feature parity across deployments
- Managed GitHub source control with TeamCity builds and Octopus deploy CI/CD pipelines

Gold Point Systems | Software Developer | 2013 - 2015

WPF/MVVM Desktop Application Development

- Designed and developed production WPF/MVVM applications for financial loan origination processing
- Implemented complex data binding patterns and INotifyPropertyChanged interfaces for real-time UI updates
- Built custom statistical reporting applications using C# drawing libraries for regulatory compliance
- Async / await processing to alleviate any main thread couplings

Database & Reporting Systems

- Created complex SQL reports for client statistics and Credit Union regulatory analysis
- Developed data migration and transformation tools for client onboarding
- Create stored procedures for data aggregations and processing as well as reusability

Technical Projects

AI Development Tools

- Developing personal AI automation tools using multiple APIs (Gemini, OpenAI, Claude)
 - Mainly for image generations and working with SVG files
- Built Node.js backend APIs with React.js front-end for AI tool integration
- GitHub: <u>AssistFront</u> | <u>Assist</u>

Porch Financial Integration Testing

- Short-term engagement (2 months) testing platform migration from legacy system to modern architecture
- Implemented REST API integration with event-driven architecture for real-time data synchronization
- Applied Behavior Driven Development (BDD) methodologies for integration testing

Additional Experience

Tech Systems | IT / Systems Administration

- Network infrastructure setup and maintenance
- System monitoring using Nagios server implementation
- Hardware and software deployment for engineering workstations

Education

Weber State University | Bachelor of Science, Computer Science

• Coursework: Software Engineering, Network Security, Software Development

Key Strengths for Medical Device Development

- Regulated Industry Experience: Financial services background with compliance and audit requirements
- Performance-Critical Applications: Experience with high-throughput, memory-optimized applications
- Desktop Application Expertise: Production *WPF/MVVM* development for mission-critical business applications

- System Integration: Proven ability to integrate with external APIs and legacy systems
- Modernization Specialist: Successfully upgraded multiple legacy applications to modern frameworks