Eric R. Bowser [GitHub](https://github.com/ericbowser/) [LinkedIn](https://www.linkedin.com/in/erbowser/)

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
  + 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: [AssistFront](https://github.com/ericbowser/AssistFront) | [Assist](https://github.com/ericbowser/Assist)

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