

Abtin Jalaei

(937) 750 7083 • abtin.jalaei@gmail.com • [in ajalaei](https://www.linkedin.com/in/ajalaei) • [abtin-jalaei](https://github.com/abtin-jalaei) • abtin-jalaei.github.io • Fairfax, VA

EDUCATION

Wright State University, Dayton, Ohio
Bachelor of Science in Computer Science

Sep 2011 - May 2015
GPA: 3.78

PROFESSIONAL EXPERIENCE

Van Metre - Ashburn, Virginia
.NET Developer

Jun 2024 - Sep 2025

- Developed cost approval workflows integrating **.NET APIs**, **Blazor UI**, and Excel import/export, **streamlining** approval processes, improving auditability, and reducing manual effort by 35%.
- Implemented functionality to attach documents to purchase orders (POs) in a **Blazor WASM** app and **.NET C# RESTful API**, integrating **Azure Blob Storage** and **SQL Server**, reducing PO approval/rejection time by 40% and streamlining the workflow for 1,000+ monthly POs.
- Implemented automated approval reminders and email attachment integration via **Azure Blob Storage** and **Power Automate**, improving on-time PO approvals by 25% and streamlining document handling for users.
- Authored a design document for integrating **Azure Repos** with **Azure Pipelines**, enabling continuous deployment and automated **SonarQube** code quality analysis, reducing deployment errors by 40% and accelerating release cycles.
- Designed and implemented integration tests with **xUnit** for the .NET 8 ERP API, improving code reliability and enabling earlier detection of defects, reducing post-deployment issues by 25%.
- Improved **Blazor UI** with **CSS styling**, **Excel** export, and automated purchase orders cancellation alerts, increasing visibility for canceled orders by 30% and streamlining administrative tasks for end users.

Capital One - McLean, Virginia
Senior Associate Software Engineer

Jul 2022 - Apr 2024

- Developed a **Python** automation script to continuously scan **GitHub** repositories for vulnerabilities, reducing detection time by 60%, automatically notifying teams via **Slack** and generating **Jira** tickets to accelerate remediation.
- Designed a tool in Python that auto-generated unit tests for user-written feature code, enhancing code reliability and maintainability by 50%.
- Engineered a Python data pipeline on AWS EMR using **PySpark** and **Jupyter Notebook**, reducing data processing time by 50% and enabling faster analytics for large-scale datasets.
- Implemented **New Relic** integration via user SDK, reducing time to generate usage reports by 35% and providing actionable insights into user engagement and system performance.

Hyosung America - Miamisburg, Ohio
Software Engineer

Sep 2016 - Jul 2022

- Built and deployed a serverless **.NET Core** check fraud detection system on **AWS** leveraging API Gateway and Lambda, cutting fraud detection latency from 5s to under 1s and improving detection accuracy by 25%.
- Engineered a .NET Core solution hosted on **AWS EKS** using **Docker** containers to manage ATM and safe box cash flows for banks and credit unions, achieving auto-scaling for 50+ institutions, reducing reconciliation errors by 35%, and maintaining 99.9% system reliability.
- Developed a **Vue.js-based UI** for a cash management platform hosted on **AWS S3**, reducing page load times by 45% and improving user task completion speed by 30% through optimized component rendering and API integration.
- Developed a Windows-integrated Single Sign-On (SSO) capability, cutting average login time by 70% and enhancing security by centralizing authentication under **Active Directory**.
- Implemented new **.NET WebForms** within an existing ASP.NET MVC application using **Entity Framework** to manage system settings in SQL Server, reducing configuration update time by 40% and allowing administrators to modify settings without code changes.
- Integrated ASP.NET applications with external SOAP/XML web services to enable real-time customer search, reducing lookup time by 50% and improving data accuracy by 35%.
- Enhanced security for an Android application by leveraging **Azure Functions** for encryption key management, eliminating hard-coded vulnerabilities.
- Supported development of Monimobile **Android** and **iOS** apps leveraging **Azure Table Storage** for Collaboration on Monimobile Android and iOS app enhancements using Azure Table Storage, boosting system scalability for 1,000+ users and increasing mobile uptime to 99.9%.

PROJECTS

Fraiday (.NET + AI Automation Library)

- Developed a **.NET 8 NuGet package** integrating **Mistral** and **OpenAI APIs** for multi-step automation workflows.
- Enabled “bring-your-own-key” AI model access with **Power BI** and **Excel** integration.
- Developed a **Next.js** frontend with **Supabase** authentication (Google, Apple, and email providers) and token metering dashboards.
- Architected the platform for multi-tenant AI agent hosting, allowing users to deploy personalized agents with voice and image generation.

Fantasy Stories (.NET 8 + Azure + Mistral AI)

- Built an interactive story system supporting text + voice logs, AI-generated content, and pay-per-image model.
- Integrated Supabase authentication and token metering with Mistral API calls.

Fantasy Stories (React + Firebase + Mistral AI)

- Built an interactive story system supporting text, AI-generated content, and pay-per-image model.
- Integrated Supabase authentication and token metering with Mistral API calls.

Mobile Food Vendor Management (Flutter + Firebase)

- Created a Flutter app for home-based food vendors to manage menus and track orders in real-time.
- Used Firebase Authentication, **Firestore**, and **Cloud Functions** for backend logic and data sync.

SKILLS

Functional: Agile, SDLC, JIRA, Git

Technical: C#, Python, Java, Swift, TypeScript, JavaScript, HTML, CSS

Frameworks: .NET 8, Blazor, React, Vue.js, Flutter, ASP.NET MVC, Entity Framework, Telerik Blazor

Cloud & DevOps: Azure (App Services, Blob Storage, AD B2B, OpenAI), AWS (API Gateway, EMR, SQS, Cognito, SageMaker, Polly, Lex, Lambda), GitHub Actions, Jenkins, Docker, SonarQube

Databases: SQL Server, PostgreSQL, DynamoDB, MongoDB, Firebase, Azure Table Storage, SQLite

Architecture: Microservices, Event-Driven, Domain-Driven Design, MVVM, MVC

Security: OAuth 2.0, OpenID Connect, Azure AD, Active Directory, SSO

AI & ML: Azure OpenAI, AWS SageMaker, Mistral (fine-tuning, agent config), Prompt Engineering, RAG Pipelines, Token Metering

Tools: Swagger, Jupyter Notebook, Power Automate, New Relic, xUnit, Supabase

CERTIFICATIONS & ACHIEVEMENTS

- AWS Certified Solutions Architect – Associate
- Certified Secure Software Engineer
- MIT Cybersecurity Professional Certificate
- Dean’s List | Outstanding Student Award