

Vaishnavi Reddy

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Professional Summary

- Over **10 years of IT experience** in analysis, design, development, testing, and deployment of enterprise applications across healthcare, finance, insurance, aviation, and public sector domains.
- Experienced in **SDLC methodologies**, including **Agile Scrum** and **Waterfall**, actively participating in sprint planning, retrospectives, daily stand-ups, and release cycles to ensure continuous delivery.
- Strong expertise in **.NET technologies** such as **ASP.NET Core Web API, ASP.NET MVC, WebForms, and Microservices**, with hands-on development using **C# 10.0 features, multithreading, LINQ, and collections**.
- Applied **software architectures** including Onion, MVC, N-Tier, and Microservices to deliver modular, scalable, and maintainable applications.
- Proficient in implementing **design patterns** such as Repository, Factory, Singleton, and Dependency Injection, with the use of UML and use-case diagrams for design clarity.
- Skilled in building **RESTful APIs** and **SOAP/XML services** to integrate third-party and legacy systems, improving data exchange and interoperability.
- Hands-on with **Entity Framework, EF Core (7/8), and ADO.NET**, using Code First and Database First approaches to optimize ORM and database access.
- Developed responsive front-end applications using **Angular, AngularJS, React.js, TypeScript, JavaScript, HTML5, CSS3, Bootstrap, jQuery, and Ajax** to deliver interactive, WCAG-compliant UIs.
- Integrated **Blazor Server and Blazor WebAssembly** for interactive reporting dashboards and real-time healthcare applications with **Telerik UI** for advanced charts and visualizations.
- Backend expertise in **SQL Server (2012–2019)** and **PostgreSQL**, creating stored procedures, triggers, functions, indexes, and query optimizations for large transactional systems.
- NoSQL experience with **MongoDB** and **AWS DynamoDB**, handling unstructured datasets for flexible queries and high availability.
- Built and deployed cloud-native applications using **Azure (App Services, API Gateway, AD, Blob Storage, App Insights, DevOps)** and **AWS (EC2, S3, Lambda, Elastic Beanstalk)**.
- Implemented **OAuth2.0, JWT, and SSL/TLS** security protocols for API authentication and role-based access control, ensuring HIPAA and FHIR compliance in healthcare projects.
- Developed **asynchronous and event-driven messaging** with **Apache Kafka** and **RabbitMQ** to support scalable real-time workflows.
- Proficient in **CI/CD pipelines** using Azure DevOps and TFS, creating YAML pipelines with automated builds, releases, approvals, and regression tests.
- Strong knowledge of **testing frameworks and tools**, including **xUnit, NUnit, Karma, Jasmine, Cypress, Protractor, Postman, Swagger UI, and SOAP UI**, enabling full-stack quality assurance.
- Integrated **SonarQube** for static code analysis, improving maintainability and reducing vulnerabilities, and applied **Log4Net** for centralized logging across distributed systems.
- Hands-on experience with **Azure Application Insights** for telemetry, diagnostics, and proactive monitoring of production systems.
- Skilled in **Git, SVN, and TFS** for version control, applying structured branching, merging, and review practices to support distributed teams.
- Proficient in **Visual Studio (2013–2022), Visual Studio Code, and SQL Server Management Studio (2014–2019)** for development, debugging, and database operations.
- Experienced in hosting and scaling applications on **IIS 8.5/10** and Azure Cloud, ensuring performance, high availability, and disaster recovery.
- Experienced with WCF and WPF frameworks** for building scalable and interactive .NET applications, with strong knowledge of healthcare compliances **such as HIPAA and FHIR**.
- Recognized as a **team player and mentor**, skilled in knowledge sharing, guiding junior developers, and collaborating with cross-functional teams to deliver business-critical solutions.

Technical skills

Languages	C#, VB.NET, TypeScript, JavaScript (ES5/ES6+), T-SQL, PL/SQL, Python (scripting/testing).
.NET Development	ASP.NET Core (3.0, 5, 6, 7), ASP.NET MVC (4/5), ASP.NET Web API, ASP.NET WebForms, WCF, SOAP, ADO.NET, LINQ, RESTful Services, Microservices, Onion Architecture, MVC Pattern. Entity Framework (5/6/Core 2.2/3.1/5/7).
Frontend development	Angular (15), React.js, Blazor (Server & WebAssembly), AngularJS, jQuery, Bootstrap (3/4/5), HTML5, CSS3, AJAX, Telerik UI, Kendo UI.

Backend development	Web Servers: IIS 8/8.5/10. API Development: RESTful APIs, WCF, SOAP.
Database	SQL Server (2008R2, 2012, 2014, 2016, 2017, 2019), PostgreSQL, Oracle, MongoDB, DynamoDB. Database Tools: T-SQL, Stored Procedures, Triggers, Indexing, Query Optimization,
Cloud services	Microsoft Azure: App Services, API Gateway, Blob Storage, Azure SQL, Azure AD, Azure DevOps, Kubernetes Service (AKS), App Insights. AWS: EC2, S3, Lambda, DynamoDB, Elastic Beanstalk, RDS.
Version control	Git, GitHub, GitLab, Bitbucket, TFS (Team Foundation Server), SVN.
Testing	Unit Testing: xUnit, NUnit, MSTest. UI Testing: Selenium, Protractor, Karma, Jasmine. Tools: Postman, Swagger UI. Test-Driven Development (TDD), Behavior-Driven Development (BDD), cypress.
Authentication & Security	OAuth2.0, JWT, Azure AD, ASP.NET Identity, API Gateway Security. Messaging: Apache Kafka, RabbitMQ.
DevOps & CI/CD	Azure DevOps (Build/Release Pipelines), Jenkins, GitHub Actions, Kubernetes, Docker, SonarQube, Log4Net.
Design & Architecture	Design Patterns: MVC, MVVM, Dependency Injection, Factory, Repository. Architectures: N-Tier, Microservices, Onion, SOA, Event-Driven Architecture.
Visualization tools	Power BI, SSRS, SSIS, Grafana.
Reporting tools	SSRS, SSIS, Crystal Reports, Power BI.
Other tools	Project Management: JIRA, Confluence, TFS. Monitoring/Automation: Power Automate, Power Apps.

Work Experience

Elevance Health

Senior .Net Full Stack Developer

Mar 2023 - Present

Indianapolis, IN

- Followed **Agile Scrum methodology**, actively participating in sprint planning, backlog refinement, daily stand-ups, and retrospectives to ensure iterative delivery of HIPAA-compliant healthcare applications.
- Designed and developed enterprise-grade APIs and microservices using **ASP.NET Core Web API** with **C# (10/11)**, starting with .NET 7 and later transitioning to .NET 8 to leverage performance upgrades, minimal APIs, and enhanced cloud-native features.
- Built and consumed **RESTful APIs** to support claims processing, member management, payments, and reporting systems, ensuring interoperability with internal and external healthcare services.
- Started with **Entity Framework Core 7** during initial project phases and transitioned to **EF Core 8**, utilizing its performance enhancements and full compatibility with .NET 8.
- Developed member portals with **Angular 15**, **TypeScript**, **HTML5**, **CSS3**, and **Bootstrap 5** to support claims, eligibility, and billing workflows.
- Migrated to **Angular 16**, improving performance, accessibility, and WCAG compliance for healthcare applications.
- Integrated **Blazor Server** and **Blazor WebAssembly** components to provide interactive reporting dashboards with **Telerik UI charts**, enabling real-time insights into healthcare utilization trends.
- Leveraged **Azure App Services**, **API Gateway**, **Blob Storage**, and **App Insights** to host, monitor, and secure cloud-native applications while enforcing role-based access through **Azure Active Directory**, **OAuth2.0**, and **JWT**.
- Designed secure **Azure AD authentication policies** to safeguard sensitive patient data, ensuring compliance with **HIPAA regulations**.
- Deployed services in **Docker containers** orchestrated by **Kubernetes**, fully automated with **Azure DevOps CI/CD pipelines**, enabling faster and more reliable releases.
- Integrated **Apache Kafka** to enable asynchronous communication between microservices, ensuring real-time claim and payment updates across distributed systems.
- Configured **Azure DevOps Test Plans** to run automated regression tests, integrating with CI/CD pipelines to prevent defects from reaching production.
- Conducted unit testing with **xUnit** for backend APIs, component testing for **Blazor** modules, and end-to-end UI testing for **Angular 16** apps using **Cypress**, ensuring high coverage and functional stability.
- Automated end-to-end testing with **Protractor**, **Postman**, and **Swagger UI** to validate APIs and healthcare workflows, ensuring HIPAA, FHIR, and WCAG compliance for audits and certifications.
- Improved code quality and security by integrating **SonarQube** into pipelines, enforcing coding standards and reducing vulnerabilities.
- Enhanced **SQL Server 2019** databases using **SSMS 19.1** and **T-SQL**, optimizing queries and managing large datasets to improve healthcare analytics and ensure compliance audits.
- Collaborated with cross-functional teams using **JIRA**, handling backlog management, incident tracking, and sprint reporting.
- Monitored production systems with **Azure Application Insights**, configuring telemetry, logs, and alerts for proactive issue detection and compliance reporting.

- Mentored junior developers on **Angular, Blazor, API security, and Azure DevOps** best practices, raising the team's productivity and technical standards.
- Supported compliance efforts by ensuring solutions adhered to **HIPAA, FHIR, and WCAG standards**, preparing systems for audits and healthcare certifications.
- Integrated **Telerik UI libraries** into Blazor and Angular applications, providing advanced charts, reports, and visualization capabilities for member-facing portals.
- Built and debugged applications in **Visual Studio 2022**, managing SQL operations in **SSMS 19.1**, and maintained version control through **GitHub/GitLab**.
- Implemented **caching strategies with Redis** to reduce repeated database lookups, improving response times for frequently accessed claims and member data.
- Designed and maintained **CI/CD YAML pipelines** in **Azure DevOps**, introducing automated quality gates and approvals to ensure only tested and compliant builds were deployed.
- Worked with **FHIR APIs** to support secure healthcare interoperability and patient data exchange across external systems, improving integration with providers and payers.
- Applied **API versioning strategies** in **ASP.NET Core Web API**, ensuring backward compatibility for downstream systems during service upgrades.
- Performed **load testing** on critical APIs using **JMeter** to ensure scalability during peak enrollment and claims processing periods.
- Leveraged **Microsoft 365 (Teams, SharePoint, OneDrive)** for documentation, collaboration, and knowledge sharing across distributed healthcare teams.
- Designed and delivered enterprise reporting and analytics solutions using **SSIS, SSRS, Tableau, and Power BI**, enabling automated ETL workflows, compliance dashboards, and real-time insights for claims, eligibility, and billing systems.
- Introduced **role-based dashboards** in Angular and Blazor, tailoring experiences for members, providers, and compliance officers, which improved usability and user satisfaction.

Environment: Agile, ASP.NET Core Web API (.NET 7/8), Microservices, RESTful APIs, JSON, Entity Framework Core 7/8, SQL Server 2019, Angular 15/16, Blazor, Telerik UI, Bootstrap 5, OAuth2.0, JWT, Azure (App Services, API Gateway, Active Directory, App Insights, DevOps), Apache Kafka, Docker, Kubernetes, Redis, xUnit, Cypress, Protractor, Postman, Swagger UI, Git (GitHub/GitLab), Visual Studio 2022, SSMS 19.1, SonarQube, JIRA, HIPAA, FHIR, WCAG.

American Airlines

Aug 2021 - Feb 2023

.Net Full Stack Developer / Angular Developer

Fort Worth, TX

- Followed **Agile** methodology with sprint planning, retrospectives, and iterative development cycles, ensuring aviation operations applications were delivered on time with improved collaboration between developers, QA, and business teams.
- Designed and implemented **Onion Architecture** with **C# ASP.NET Core Web API (C# 7.0)**, creating modular services for flight scheduling and passenger workflows that improved scalability and simplified system maintenance.
- Built enterprise **APIs** with **C# 7.0** to manage passenger, baggage, and crew operations, ensuring accurate data synchronization across **booking, check-in, and rostering systems** while reducing manual intervention.
- Developed and consumed **RESTful Web Services** to integrate booking, baggage, and crew modules with other airline systems, streamlining workflows and enabling faster operational decision-making.
- Utilized **Entity Framework Core 2.2/3.1** for ORM, writing optimized queries and stored procedures that improved system performance for high-volume transactions in flight operations.
- Standardized data communication using **JSON payloads** to ensure secure and lightweight interactions between services, reducing overhead and ensuring consistent data formats.
- Integrated **OAuth2** authentication with **Azure API Gateway** to enforce security for passenger and flight data, protecting sensitive information and meeting airline industry compliance standards.
- Designed and developed Angular 12 dashboards for crew rostering and passenger check-ins using TypeScript, RxJS, and NgRx for state management, enabling real-time visibility into schedules and improving the efficiency of front-line operations.
- Built interactive UI components with **HTML5, CSS3, JavaScript, Bootstrap 4** creating mobile-friendly and responsive airline portals that improved user experience for employees.
- Maintained **SQL Server 2017** databases by optimizing indexes, query execution plans, and schema designs, ensuring fast response times during high passenger and baggage processing loads.
- Implemented asynchronous messaging with **RabbitMQ**, integrating **C# services** to enable reliable communication between booking and baggage workflows, reducing data processing delays and increasing system stability.
- Conducted unit testing with **xUnit** to validate backend business logic, identifying issues early and ensuring a higher level of stability across passenger and crew management systems.
- Performed **Angular UI testing** with **Karma** and **Jasmine**, validating user-facing components to ensure accuracy and consistency in aviation workflows.

- Automated end-to-end **API testing** with **Postman** and **Swagger UI**, validating REST endpoints and ensuring accuracy in integrations across operational systems.
 - Configured **CI/CD pipelines in Azure DevOps** to automate builds, containerized deployments, and releases, reducing deployment errors and downtime while improving delivery speed.
 - Deployed workloads on **Azure Cloud Services** to support microservices-based airline applications, ensuring high availability, scalability, and disaster recovery for baggage, crew, and passenger workflows.
 - Improved code quality and reliability by integrating **SonarQube** for static analysis, reducing technical debt, and enforcing coding standards across distributed teams.
 - Managed version control using **Git** with feature branching and pull requests, and collaborated via **JIRA** for sprint planning, backlog refinement, and incident management.
 - Designed and debugged backend and front-end code in **Visual Studio 2019**, and managed **SQL Server** databases with **SSMS 17.9**, optimizing queries to ensure real-time operational data visibility.
 - Implemented **Log4Net centralized logging** for monitoring aviation event flows, capturing exceptions, and improving observability across distributed airline systems.
 - Collaborated with QA teams using **BDD practices** and supported automated regression testing via **Azure DevOps Test Plans**, Protractor, Postman, and Swagger UI to validate APIs and workflows.
 - Documented system architecture, workflows, and API specifications while providing audit support to ensure compliance, security, and long-term maintainability of airline systems.
- Environment:** Agile, Onion Architecture, ASP.NET Core Web API (C# 7.0), RESTful Services, JSON, Entity Framework Core 2.2/3.1, SQL Server 2017, Angular 12, HTML5, CSS3, JavaScript, Bootstrap 4, OAuth2, Azure (API Gateway, App Services, DevOps), RabbitMQ, xUnit, Karma, Jasmine, Postman, Swagger UI, Git, Visual Studio 2019, SSMS 17.9, SonarQube, Log4Net, JIRA.

Commonwealth of Pennsylvania

Jul 2019 – Jul 2021

Sr .NET Full Stack Developer

Harrisburg, PA

- Followed **Agile Scrum methodology**, actively engaging in sprint planning, backlog refinement, daily stand-ups, and retrospectives for continuous delivery of state government applications.
- Designed and developed **payment processing portals** using **ASP.NET MVC 5, C# (VB.NET, ADO.NET)** with a layered **MVC architecture**, streamlining government workflows.
- Built and consumed **RESTful Web Services** for integrating external third-party applications and state-level legacy systems.
- Implemented WCF services IN C# for backward compatibility with older enterprise systems and enhanced citizen-facing desktop utilities using **WPF** and **WinForms** to provide modern interfaces for legacy state applications.
- Utilized **Entity Framework 5 (ORM)** for database communication, improving performance and simplifying query management.
- Standardized **JSON** for secure and lightweight data exchange between portals and services.
- Created front-end modules with **ASP.NET MVC Views**, ensuring strong server-side rendering and session management.
- Developed responsive UI with **HTML5, CSS3, JavaScript, Bootstrap 3, and AJAX** to improve usability across citizen-facing applications.
- Modernized legacy MVC modules by introducing React.js with React Hooks and Redux, enabling interactive, scalable, and reusable citizen-facing applications with improved performance and user experience.
- Managed **SQL Server 2012/2014** for relational data storage, creating stored procedures, triggers, views, and indexes for faster execution.
- Managed **MongoDB (NoSQL)** to digitize unstructured land record documents and enable flexible queries.
- Built **AWS-based integrations** using **S3** for document storage, **Lambda** for event-driven operations, and **EC2** for legacy hosting.
- Conducted unit testing with NUnit for server-side business logic validation and applied React Testing Library to ensure reliable component rendering and UI behavior in modernized React.js modules.
- Implemented automated build and deployment workflows with **Visual Studio 2013/2015** and **SQL Server Management Studio**.
- Tracked versions and code changes using **Team Foundation Server (TFS)** with branching strategies, coordinating work items for sprint tracking, bug management, and backlog grooming across multiple teams.
- Monitored and troubleshooted performance issues by leveraging **Log4Net** for centralized logging and event tracking, while documenting workflows and technical specifications to support compliance and audits.
- Enhanced portal security with role-based access control (RBAC) in **ASP.NET MVC**, while migrating static content into dynamic AJAX-driven components to improve usability and reduce reload times.
- Collaborated with QA teams to maintain testing standards, ensuring coverage, reducing defects, and supporting legacy-to-modern transitions by aligning new **React.js** modules with existing MVC pages.
- Ensured scalability and fault tolerance by designing hybrid **SQL + NoSQL** solutions for structured and unstructured datasets, enabling reliable performance for high-volume government applications.

Environment: Agile (Scrum), ASP.NET MVC 5 (VB.NET, ADO.NET), Entity Framework 5, RESTful/WCF Services, JSON, SQL Server 2012/2014, MongoDB, React.js, HTML5, CSS3, JavaScript, Bootstrap 3, AJAX, AWS (S3, Lambda, EC2), xUnit, Log4Net, TFS, Visual Studio 2013/2015, SSMS 2014.

HI Trust

Feb 2018 - Jun 2019

.Net Developer

Frisco, TX

- Followed **Agile methodology**, working closely with BA and QA teams in sprint planning, daily stand-ups, and retrospectives to deliver enhancements for telecom billing and provisioning systems.
- Migrated customer care applications from **AngularJS** to **React.js**, significantly improving UI rendering speed, responsiveness, and end-user satisfaction.
- Designed and developed **.NET MVC 4.0** billing and self-service modules, integrated with **SOAP/XML Web Services** and standardized **XML schemas** for interoperability with external telecom platforms.
- Applied **ADO.NET** with **C# queries** for dynamic database operations, writing optimized queries and parameterized procedures, while managing customer provisioning data using **MongoDB** and **AWS DynamoDB**.
- Built responsive UIs with **HTML5, CSS3, JavaScript, jQuery, and Ajax**, modernized with **React.js components**, enabling interactive and reusable user modules.
- Deployed workloads on **AWS EC2, S3, and Elastic Beanstalk**, creating automated CI/CD pipelines that supported scalable deployments and reduced downtime.
- Implemented **C# OOP principles** and asynchronous web controls to streamline workflows, improve responsiveness, and enhance telecom service request handling.
- Conducted testing with **xUnit** for C# business logic validation, achieving 95%+ coverage for billing and provisioning modules, and ensuring stable, defect-free releases.
- Managed builds in **Visual Studio 2015/2017**, database migrations in **SSMS**, and implemented structured version control workflows using **SVN** for distributed teams.
- Applied **Log4Net** for centralized logging and performance monitoring of telecom transactions, reducing issue resolve time.
- Managed backlog refinement, incident tracking, and sprint execution in **JIRA** to align development with business priorities.
- Documented business process flows and SDLC phases to support compliance and knowledge transfer.
- Partnered with cloud engineers to optimize **AWS resource usage**, lowering infrastructure costs while ensuring scalability and high availability of telecom systems.
- Developed internal telecom support tools with **WinForms** to simplify provisioning tasks and monitoring, while ensuring backward compatibility with existing billing workflows.

Environment: Agile, .NET MVC 4.0, SOAP/XML Services, ADO.NET, XML, React.js, HTML5, CSS3, JavaScript, jQuery, Ajax, MongoDB, AWS (EC2, S3, DynamoDB, Elastic Beanstalk), xUnit, SVN, Visual Studio 2015/2017, SSMS, Log4Net, JIRA.

Qualcomm

Sep 2014 - Dec 2017

.Net Developer

India

- Followed **Waterfall SDLC methodology**, contributing to requirement gathering, design, coding, testing, and deployment of enterprise-scale applications.
- Developed and maintained **ASP.NET WebForms applications** supporting large-scale internal and external workflows, ensuring usability and performance.
- Built and consumed **SOAP/XML Web Services**, using **XSD schemas** for structured data exchange across legacy enterprise systems and partner integrations.
- Applied ADO.NET with **C# stored procedures and triggers** in PostgreSQL for optimized database performance.
- Designed reusable **WebForms server controls** and applied **C# OOP principles** to build class libraries and core business logic components.
- Modernized front-end modules by integrating **AngularJS** with **HTML5, CSS3, JavaScript, jQuery, and Ajax**, enhancing responsiveness and cross-browser compatibility.
- Deployed and managed applications on **IIS 8.5/10**, tuning performance for high-volume enterprise environments with asynchronous Ajax calls.
- Conducted unit testing with **xUnit**, implemented logging and exception handling, and ensured stable application performance through regression coverage.
- Maintained source control with **SVN**, managed branching/merging strategies, and collaborated with distributed teams using **JIRA** for task tracking.
- Designed reusable **WinForms** modules and enhanced desktop UIs with **WPF**, improving responsiveness and user interaction across enterprise-scale applications.

Environment: Waterfall, ASP.NET WebForms, C#, SOAP/XML, ADO.NET, PostgreSQL, AngularJS, HTML5, CSS3, JavaScript, jQuery, Ajax, IIS 8.5/10, xUnit, SVN, JIRA