**Vamsi Yarraguntla**

**Sr .NET Full Stack Developer**

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**PROFESSIONAL SUMMARY:**

* Experienced in end-to-end SDLC processes, including requirement analysis, design, development, testing, deployment, and maintenance of web applications.
* Developed enterprise backend applications using C# and .NET Core (3.1/5/9/10), applying SOLID principles, object-oriented programming, and dependency injection for maintainability and performance.
* Built RESTful APIs using ASP.NET Core Web API, implementing HATEOAS, API versioning, OAuth 2.0, JWT, and Azure Active Directory (AAD) for secure authentication and authorization.
* Integrated Rest APIs to enhance communication efficiency between microservices and front-end applications.
* Developed dynamic SPA (Single Page Applications) using Angular (2/5/11/17) and React (16/17/18), ensuring responsive and interactive UI experiences.
* Utilized RxJS, NgRx (for Angular), and Redux Toolkit for efficient state management in complex applications.
* Created custom directives, pipes, reusable components, and lazy loading techniques in Angular for optimized front-end development.
* Implemented TypeScript, SCSS, Bootstrap, CSS, and Material UI, enhancing UI/UX design consistency and accessibility.
* Worked with ASP.NET MVC and Blazor to build scalable and structured web applications with efficient server-side rendering.
* Utilized Entity Framework Core and Dapper for ORM-based and raw SQL-based database interactions, optimizing data retrieval.
* Managed SQL Server (2014 - 2019) and Oracle 12c, optimizing queries, stored procedures, indexing strategies, and materialized views for large-scale applications.
* Worked with NoSQL databases (MongoDB, Cosmos DB) to handle unstructured and semi-structured data in distributed applications.
* Developed cloud-based applications on Azure (Azure DevOps, Azure Functions, Azure API Management, Azure Service Bus, Azure Monitor, Azure Key Vault) and AWS (EKS, EC2, Lambda, S3, RDS, CloudWatch, IAM).
* Automated CI/CD pipelines using Azure DevOps, GitHub Actions, Jenkins, AWS CodePipeline, CodeBuild, and CodeDeploy, reducing deployment time and improving release efficiency.
* Worked with message-driven architecture using Apache Kafka, RabbitMQ, and Azure Service Bus, supporting data streaming and event-driven processing.
* Developed analytics dashboards using Power BI, SSRS, and Tableau, integrating financial and healthcare data for business insights.
* Conducted performance tuning and load testing using JMeter, Postman, Azure Monitor, and K6, ensuring high-transaction applications meet performance SLAs.
* Developed desktop applications using WPF (Windows Presentation Foundation) with MVVM (Model-View-ViewModel) architecture, improving UI separation and maintainability.
* Worked with Git for version control, utilizing GitHub, GitLab, and Azure Repos, implementing branching strategies (Git Flow, feature branches, pull requests) for collaborative development.
* Utilized SQL Server Management Studio (SSMS) for database administration, performance tuning, query optimization, and stored procedure debugging in SQL Server (2014-2019).
* Worked in Agile/Scrum environments, collaborating with cross-functional teams, participating in daily stand-ups, sprint planning, retrospectives, and delivering features in iterative development cycles using JIRA and Azure Boards.
* Passionate about continuous learning and staying updated with emerging technologies to enhance development processes and implement best industry practices.

**TECHNICAL SKILLS:**

* **Programming Languages:** C#, VB.NET, TypeScript, JavaScript.
* **Back-End Development:** .NET Core, ASP.NET MVC, ASP.NET Core Web API, gRPC, WPF (MVVM).
* **Front-End Development:** Angular, React, Redux Toolkit, NgRx, RxJS, Bootstrap, Material UI, SCSS, HTML5, CSS3.
* **Database Management:** SQL Server, MySQL, Oracle 12c, MongoDB, Cosmos DB, PostgreSQL.
* **ORM & Query Optimization:** Entity Framework Core, Dapper, LINQ, CTEs, Window Functions, Dynamic SQL
* **API Development:** RESTful APIs, HATEOAS, API Versioning, GraphQL, Azure API Management (APIM).
* **Microservices & Containers:** Docker, Kubernetes (AKS & EKS).
* **Authentication & Security:** OAuth 2.0, JWT, AAD, RBAC, ASP.NET Identity, AWS Cognito.
* **Cloud Platforms:** Azure, AWS.
* **CI/CD & DevOps:** Azure DevOps, GitHub Actions, Jenkins, AWS CodePipeline, CodeBuild, CodeDeploy, Terraform.
* **Event-Driven & Messaging:** Apache Kafka, RabbitMQ, SignalR, WebSockets, Azure Service Bus.
* **BI & Reporting:** Power BI, Crystal Reports, SSRS, Tableau.
* **Version Control:** Git, GitHub, GitLab, Azure Repos, Git Flow.
* **Testing & Debugging:** Unit Testing (XUnit, NUnit), Load Testing (JMeter, K6), Integration Testing.
* **IDE & Development Tools:** Visual Studio, Visual Studio Code, SQL Server Management Studio (SSMS).

**PROJECT EXPERIENCE:**

**Broadridge, Lake Success, NY**

**Role:** **Sr .Net Full Stack Developer | Jan 2023 – Present**

**Responsibilities:**

* Developed and maintained financial applications using C#, implementing object-oriented design principles and SOLID architecture to ensure code maintainability.
* Utilized reflection, generics, and delegates in C# to create dynamic and reusable components for financial data processing.
* Built and optimized RESTful APIs using ASP.NET Core Web API, implementing HATEOAS and API versioning for smooth backward compatibility.
* Developed custom middleware components in ASP.NET Core MVC for centralized exception handling, logging, and request validation.
* Utilized Entity Framework Core's Lazy and Eager loading to optimize database query performance and avoid unnecessary data retrieval.
* Implemented batch processing and bulk data operations using Entity Framework Core, improving transaction processing efficiency.
* Designed partitioned tables, indexed views, and materialized views in SQL Server, improving performance for large-scale financial data storage.
* Developed and optimized Common Table Expressions (CTEs) and window functions to simplify complex financial reporting queries.
* Implemented dynamic SQL execution and query optimization techniques to handle complex financial calculations and large data sets efficiently.
* Built and maintained front-end applications using Angular 17, TypeScript, RxJS, and NgRx, enhancing user experience with interactive and responsive UI components.
* Developed custom Angular directives and pipes to extend functionality and improve code reusability in financial dashboards.
* Implemented authentication and authorization using OAuth 2.1, JWT, and Azure Active Directory (AAD), enforcing Role-Based Access Control (RBAC) for financial applications.
* Integrated Azure API Management (APIM) to enforce rate limiting, authentication, and request validation for secure API communications.
* Developed and maintained CI/CD pipelines using Azure DevOps, automating build, test, and deployment processes for seamless software delivery.
* Deployed microservices-based financial applications using Azure Kubernetes Service (AKS), ensuring modularity and high availability.
* Implemented caching strategies with Azure Redis Cache, optimizing API response times and reducing database load.
* Created financial dashboards using Power BI and SSRS, integrating data from SQL Server for financial analysis and reporting.
* Conducted performance tuning and load testing using JMeter and Azure Monitor, identifying and resolving bottlenecks in high-transaction applications.
* Ensured high code coverage by implementing comprehensive unit tests for business logic, data access layers, and API controllers in ASP.NET Core applications.
* Experienced in mentoring junior developers, conducting code reviews, and sharing best practices to ensure high-quality code and foster a collaborative learning culture within the team.
* Demonstrated ability to work effectively in Agile and Scrum-based development environments, contributing to sprint planning, stand-up meetings, and retrospectives to improve workflows and overall team efficiency.

**Environment:** C#, .NET Core 8, ASP.NET MVC, Entity Framework Core, Angular 17, RxJS, NgRx, SQL Server, Azure DevOps, Azure Kubernetes Service (AKS), Azure Functions, Azure Active Directory (AAD), RBAC, Azure API Management (APIM), Redis Cache, Docker, Microservices, Swagger, OAuth 2.1, JWT, Power BI, SSRS, Azure Monitor, CI/CD, Agile/Scrum.

**Elevance Health, Indianapolis, IN**

**Role: Sr. .Net Full Stack Developer | Sep 2022 – Nov 2023
Responsibilities:**

* Designed and developed enterprise healthcare applications using C# and .NET Core, focusing on high availability, performance, and scalability.
* Utilized asynchronous programming, parallel processing, and LINQ in C# to improve application efficiency and optimize resource utilization.
* Created and enhanced RESTful APIs using .NET Core Web API, implementing CQRS, Repository Pattern, and Swagger for better maintainability and structured data handling.
* Developed modular and reusable back-end components using .NET Core and ASP.NET MVC, improving application maintainability and integration across healthcare systems.
* Worked on ASP.NET MVC to develop interactive and dynamic web applications, ensuring seamless and responsive user experience.
* Developed front-end applications using React 18, Redux Toolkit, and JavaScript, enhancing user experience with modern UI frameworks.
* Worked with Oracle 12c, optimizing queries, stored procedures, and indexing strategies to improve performance and data integrity.
* Created and managed Oracle PL/SQL functions, triggers, and views, ensuring efficient data transactions for healthcare applications.
* Integrated Apache Kafka to implement event-driven architecture, supporting data streaming and high-volume transaction processing.
* Implemented authentication and authorization using OAuth 2.1, JWT, and Azure Active Directory (AAD) with Role-Based Access Control (RBAC) for secure system access.
* Maintained CI/CD pipelines using Azure DevOps, automating build, test, and deployment processes to enhance efficiency.
* Deployed containerized applications using Docker and Kubernetes (AKS), ensuring scalability and resilience of microservices.
* Developed and managed Power BI dashboards, providing insights into financial transactions and healthcare analytics.
* Conducted performance tuning and load testing using JMeter and Azure Monitor, optimizing application performance under high traffic.
* Ensured compliance with PCI-DSS and HIPAA standards by implementing secure data processing workflows for financial and healthcare applications.
* Worked in an Agile/Scrum environment, collaborating with cross-functional teams to develop and maintain scalable healthcare applications.

**Environment:** C#, .NET Core 7, ASP.NET MVC, React 18, Redux Toolkit, JavaScript, Oracle 12c, Entity Framework Core 7, Apache Kafka, Azure DevOps, Azure Kubernetes Service (AKS), Azure SQL, OAuth 2.1, JWT, Azure Active Directory (AAD), RBAC, JMeter, Swagger, Azure Monitor, Docker, Kubernetes, Power BI, Agile/Scrum.

**State of UT, Salt Lake City, UT**

**Role: .Net Full Stack Developer | Sep 2021 – Aug 2022
Responsibilities:**

* Developed and modernized web applications using C#, .NET Core, and ASP.NET MVC, ensuring robust, scalable, and high-performance solutions.
* Implemented asynchronous programming, LINQ, and dependency injection in C#, enhancing application efficiency and maintainability.
* Built and maintained RESTful APIs using ASP.NET Core Web API, enabling secure and efficient data exchange between various systems, payment gateways, and auditing modules.
* Developed dynamic and interactive front-end applications using Angular 17, RxJS, and NgRx, ensuring a seamless user experience with validation.
* Worked with Entity Framework Core and SQL Server, optimizing database queries, indexing, and transactions for high-performance data processing.
* Designed and implemented stored procedures, views, and triggers in SQL Server, enhancing data consistency and system performance.
* Used both Code-First and Database-First approaches in Entity Framework Core to streamline data migrations and schema management.
* Wrote complex SQL queries and applied performance-tuning techniques, ensuring efficient data retrieval and processing.
* Implemented role-based authentication and authorization using ASP.NET Identity, OAuth 2.0, and AWS Cognito, securing application access and user data.
* Worked on microservices architecture using AWS Elastic Kubernetes Service (EKS), improving scalability and independent deployment of services.
* Automated CI/CD pipelines using AWS CodePipeline, CodeBuild, and CodeDeploy, significantly reducing software release time and deployment errors.
* Collaborated in an Agile/Scrum environment with cross-functional teams to develop scalable and efficient taxation solutions.

**Environment:**  C#, .NET Core 7, ASP.NET MVC, ASP.NET Core 7, RESTful API, Angular 17, RxJS, NgRx, SQL Server, Entity Framework Core 7, AWS (EC2, S3, Lambda, RDS, CloudWatch, IAM, EKS), Power BI, RabbitMQ, Docker, Kubernetes, Git, Terraform, CI/CD (AWS CodePipeline, CodeBuild, CodeDeploy), Agile/Scrum.

**American International Group, New Jersey, USA**

**Role: .Net Developer | Feb 2019 – July 2021
Responsibilities:**

* Developed and optimized high-performance C# applications, implementing multi-threading and asynchronous programming to enhance application responsiveness and scalability.
* Refactored legacy C# codebases to improve maintainability, applying SOLID principles and design patterns such as Dependency Injection and Repository Patterns.
* Designed and built RESTful APIs using ASP.NET Core Web API, integrating with EHR/EMR systems like Epic, Cerner, and Meditech using FHIR and HL7 standards for secure patient data exchange.
* Developed ASP.NET MVC applications with Razor views and partial views, optimizing rendering performance and improving user experience.
* Implemented authentication and authorization in ASP.NET MVC applications using Identity Framework, OAuth 2.0, and JWT for secure access control.
* Developed and deployed scalable microservices using .NET Core and Azure Kubernetes Service (AKS), ensuring high availability and fault tolerance.
* Configured and optimized CI/CD pipelines in Azure DevOps, automating builds, testing, and deployments for seamless application updates.
* Integrated Azure API Management (APIM) for secure API gateway implementation, ensuring authentication, rate limiting, and API version control.
* Optimized API query performance by implementing indexing, partitioning, and stored procedures in Azure SQL, reducing API response times for large-scale healthcare data retrieval.
* Developed and maintained SQL Server stored procedures, views, functions, and triggers to improve data integrity and system performance.
* Developed and deployed Power BI dashboards, providing insights into patient records, billing trends, and compliance metrics via REST APIs.

**Environment:** C#, .NET Core 7/8, ASP.NET Core, ASP.NET MVC, Web API, React, Azure DevOps, AKS, Azure SQL, Redis Cache, RabbitMQ, OAuth 2.0, JWT, Power BI, Terraform, CI/CD, Azure API Management, Microservices, Agile/Scrum, FHIR, HL7, HIPAA Compliance, Azure Service Bus, Azure Blob Storage.

**DBS Bank, Hyderabad, India**

**Role:** **Software Engineer - .Net | May 2016 – Oct 2018**
**Responsibilities:**

* Developed and maintained banking applications using C# and VB.NET, enhancing performance and scalability for payment processing and account management systems.
* Refactored legacy VB.NET applications to .NET Core, improving maintainability and integrating modern security standards.
* Designed and implemented RESTful APIs using ASP.NET Core Web API, integrating with banking core systems, third-party payment gateways (Stripe, SWIFT, PayPal), and fraud detection services.
* Developed dynamic and interactive web applications using AngularJS, improving user experience and responsiveness for banking dashboards.
* Implemented asynchronous messaging with RabbitMQ to enhance transaction processing speed and reliability.
* Migrated banking services to AWS (EC2, Lambda, RDS, EKS), leveraging serverless computing and containerization for scalability and cost efficiency.
* Developed serverless batch processing for banking reconciliations and tax calculations using AWS Lambda and Step Functions, reducing manual efforts.
* optimized SQL databases on Amazon RDS (MySQL), ensuring high availability, performance, and scalability.
* Implemented secure authentication and authorization using OAuth 2.0, JWT, and AWS Cognito, ensuring compliance with PCI-DSS security standards.

**Environment:** C#, VB.NET, AngularJS, .NET Core, ASP.NET Core, Web API, RabbitMQ, AWS (EC2, S3, Lambda, RDS, EKS, IAM), SQL Server, MySQL, Entity Framework Core, Microservices, OAuth 2.0, JWT, Power BI, SSRS, CI/CD, PCI-DSS Compliance, Agile/Scrum.

**EDUCATION:**

* Bachelor’s in computer science – Vignan Institute of Technology and Science (2016).
* Master’s in computer science – Fitchburg State University (2023).