**MANASA KALVACHERLA**

 **Senior .NET Developer**

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# PROFESSIONAL SUMMARY

* Having 10+ years of experience in systems analysis, design, development, and implementation of various applications using **Microsoft .NET Framework, Visual Studio, C#.NET, and ASP.NET.**
* Extensive experience in working on projects with Waterfall and Agile methodologies such as Test-Driven Development (TDD) and SCRUM.
* Expert in utilizing the latest **C# 10.0** features to enhance code efficiency and maintainability, skilled in optimizing the performance of application using multithreading techniques by ensuring the resource utilization and responsive user interfaces and leveraging advanced collection types and techniques for optimized data management.
* Proficient in applying **MVC**, **MVVM**, **Singleton and Factory** patterns for creating scalable and maintainable applications structures. Skilled in using UML diagrams for effectively visualizing and refining system architectures.
* Skilled in implementing diverse architectures including **Onion architecture, MVC architecture, N Tier architecture, and Micro services**, ensuring scalable and maintainable application designs aligned with industry best practices.
* Ensured secure, efficient communication between **mainframe** systems and external applications by leveraging **VHI**’s capabilities, improving system performance and data accessibility
* Strong experience using **IIS Web Server, Object Oriented** Analysis and Designing (OOAD), Object oriented programming
* Developed robust web applications using **ASP.NET Web Forms, ASP.NET Core, Micro services, ASP.NET MVC**, and ASP.NET Web API frameworks, aligning each with specific project needs and objectives.
* Skilled in developing and integrating robust **RESTful and SOAP web services** for ensuring seamless communication between different systems and ensuring efficient data exchange across many platforms.
* Proficient with **Python, PowerShell, Azure PowerShell, and working across various .NET Frameworks, .NET Core, and Visual Studio environments**.
* Proficient in **XML, XSD, XSLT**, and **SOAP** technologies, applying expertise to develop structured data formats and facilitate seamless communication across distributed systems.
* Skilled in designing and developing cloud-based solutions in **Microsoft Azure, including IoT, APIM, AAD, and utilizing Docker Containers on OpenShift Container Platform (OCP).**
* Experienced with using Source Code Version Control Systems like MS Visual Source Safe (VSS) and TFS (Team- Foundation Server)
* Expert in responsive web design using **CSS** pre-processors, JavaScript libraries such as Angular, RXJS, ReactJS, and in developing SPA applications with mobile compatibility.
* Strong experience in **Azure DevOps,** parallelism with **TPL, PLINQ**, mobile app development, data visualization with **Power BI, SSRS**, and RDBMS like **Oracle** and **MS SQL-Server.**
* Strong experience in working with decoupled architecture using MVC framework.
* Strong experience with ORM framework using Entity Framework to automate database activities.
* Exposure in using technologies like Ionic, Cordova and PhoneGap for building mobile applications.
* Excellent working experience using the Internet Information Server (IIS), Windows/NT Server.
* Good Knowledge in using **SharePoint**.
* Proficient in using T-SQL for developing complex stored procedures, Triggers, Tables, Views, User-Defined Functions, SQL joins, Index, and query writing.
* Good Working experience with Team Foundation Server (TFS), Subversion, GIT, GitHub and Visual Source Safe (VSS).
* Experience in Unit Testing using tool NUNIT and several Integration Testing, System testing and Performance testing.
* An organized professional with immensely strong leadership capabilities with excellent project management and communication skills.

# TECHNICAL SKILLS

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| **Programming Languages**  | C#, VB.NET, Typescript  |
| **Web Technologies**  | ASP.NET, MVC, Web API, WCF, HTML, CSS, jQuery, JavaScript, Angular JS, Angular, Angular CLI, Angular Material, Bootstrap  |
| **.NET Technologies**  | .NET Framework, ASP.NET Web API, ASP.Net Core, ASP.NET MVC, ADO.NET, WPF, Entity Framework, LINQ  |
| **Design Patterns**  | MVC, MVVM, Singleton, Factory, DI, SOA  |
| **Database Development**   | SQL Server, SSIS, SSRS T-SQL, MongoDB.  |
| **Software Methodologies**  | SDLC, Agile  |
| **RAD/IDE**  | Visual Studio, Visual Basic, Visual Studio Code  |
| **Cloud**  | MS Azure  |
| **Source Repositories**  | GitHub, TFS, Git  |
| **ORM**  | Entity Framework Core, Entity Framework  |
| **Modelling and Design Tools**  | Microsoft Vision, UML  |
| **Operating Systems**  | Windows, LINUX, UNIX  |
| **Testing**  | Postman, Soap UI, Fiddler, MS-Test, NUnit, Jasmine, xUnit  |
| **Bug tracking tools**  | JIRA, TFS  |

# PROFESSIONAL EXPERIENCE

**Nationwide, Columbus, OH (Jun 2023 – till date)**

**Senior .NET Developer Responsibilities:**

* Implemented **Agile** principles in **SDLC** for iterative development and stakeholder feedback in insurance claims processing solution.
* Developed **RESTful APIs** in **ASP.NET Core** for communication between front-end and back-end, and for integrating with external data sources
* **Architected and developed Microservices** for the automated claim processing system, enabling modularity, scalability, and independent deployment of services, improving overall system performance and fault isolation.
* Utilized **Entity Framework Core 6** for seamless integration with **SQL Server 2022**, ensuring efficient data access and management.
* Developed core business logic for the automated claims processing system using **C#** enhancing performance and data handling.
* **Created Web APIs** to streamline data access in the automated claims processing system, enhancing integration with external services
* Developed backend services using **.NET** **Core** 6 and **C# 10.0** to handle claims submission, validation, and processing workflows.
* Implemented **SSIS** for data integration and ETL operations, alongside deploying **SSRS** for generating various types of reports from diverse data sources.
* **Designed and implemented N-tier architecture** to separate business logic, data access, and presentation layers, ensuring a scalable and maintainable application infrastructure
* Secured APIs with **OAuth2** and **OpenID** Connect, utilizing JWT for token-based authentication.
* Designed and developed a dynamic, user-friendly customer portal using **Angular 16,** **HTML5**, **CSS3**, and **Bootstrap**, **JavaScript** to enable customers to submit and track insurance claims online.
* Architected and maintained **MongoDB** databases for scalable, high-performance data storage solutions, ensuring optimal indexing and query performance
* Implemented **SignalR** for real-time web functionality and Integrated **Apache Kafka** for asynchronous messaging between claim processing modules, ensuring reliable and scalable data exchange
* Conducted **unit** **testing** with **xUni**t and **Selenium** for end-to-end testing, while also documenting and testing APIs using **Swagger**
* Developed and implemented automated front-end tests using **Jasmine** to ensure the reliability and functionality of the user interface.
* Implemented **WCF** services to facilitate seamless communication between the automated claims processing system and external data sources, ensuring reliable and secure data exchange.
* Implemented robust **CI/CD** pipelines using tools like Azure DevOps, ensuring automated build, testing, and deployment processes for efficient delivery of updates and enhancements
* Utilized **Postman** and **SOAPUI** for comprehensive API testing, ensuring seamless integration and functionality validation.
* Orchestrated workflows and automated integrations with external systems using **Azure Logic Apps**.
* Containerized applications with **Docker** for consistency and portability, and orchestrated those using **Kubernetes** for high availability and scalability.
* Ensured data security by encrypting data in transit with **TLS** and at rest using **Azure Key Vault**.
* Managed application settings and feature flags using **Azure App Configuration**, and monitored application performance and health with Azure Monitor.
* **Implemented data grids, buttons, and dialog boxes** with **Win Forms** controls to facilitate user interaction with claim data, enhancing usability and productivity.
* Implemented messaging reliability using **Azure Service Bus** and managed container images via **Azure Container Registry**.
* Integrated **Power BI** for advanced data visualization and business intelligence reporting.
* Established CI/CD pipelines with **Azure DevOps** for automated testing, builds, and deployments, and implemented **Git** for effective version control and collaboration.

**Environment:** Angular 16 ,HTML5, CSS3, Bootstrap, Telerik UI Controls, .NET Core 6, C#, Entity Framework Core, SQL Server2022, SignalR, ASP.NET Identity, RESTful APIs, gRPC,Azure Logic Apps, Docker, Kubernetes, Azure DevOps, Git, Azure Monitor, OAuth2, OpenID Connect, JWT, TLS, Azure Key Vault,TDD, Azure Backup, xUnit, Selenium, Swagger, Azure App Configuration, Azure Container Registry, Power BI, Apache Kafka.

**State of CA, SFO, CA (Aug 2020 – May 2023)**

**Senior .NET Developer**

**Responsibilities:**

* Designed and developed a scalable fare collection system using **.NET Core, ASP.NET Core MVC**, and **Entity Framework** core.
* Implemented **Test-Driven Development (TDD)** to ensure robust code quality in projects, including a scalable fare collection system built with **ASP .NET MVC** and **micro-services** architecture.
* **Performed performance tuning and optimization** in **N-tier applications** by improving database queries, load balancing, and efficient data flow between the application and presentation layers.
* **Implemented error handling and logging** in **C#** with **ASP.NET** Core middleware, improving reliability and simplifying troubleshooting in the fare collection application..
* **Developed RESTful APIs** for the fare collection system to enable **real-time data** exchange for fare calculations, payment processing, and user account management, enhancing system functionality and user experience.
* Utilized Azure API Management for managing and securing APIs, and **Azure Load Balancer** for traffic distribution.
* Implemented **React components** using functional and class-based patterns, leveraging **Hooks** and **Redux** for state management in enterprise-grade web applications.
* Developed intuitive front-end interfaces using **HTML5**, **CSS3**, **jQuery** and **JavaScript** to enhance application scalability and performance.
* Optimized **SQL Server** databases with **Redis** for efficient data storage and caching, utilizing **LINQ** for streamlined data querying in the .NET ecosystem.
* Implemented **MongoDB** for scalable and efficient storage of dynamic data in a high-volume fare collection system, optimizing performance and flexibility
* Implemented secure authentication and authorization using Azure AD B2C**, JWT**, and **OAuth2**.
* Implemented unit tests with **xUnit**, integrated Log4net for logging and error tracking, and conducted thorough API testing and validation using **Postman** for debugging endpoints.
* **Developed and maintained CI/CD pipelines** using Azure DevOps, automating build, test, and deployment processes to ensure rapid and reliable releases for the fare collection system.
* Integrated **SignalR** for real-time communication and updates within the fare collection system.
* Utilized **Power** **BI** for data visualization and dashboards to monitor fare collection metrics.
* Developed **WCF** services for distributed system communication and created user-friendly **WPF** desktop applications..
* Implemented **SSIS** for handling **ETL** processes, ensuring efficient data integration, and developed SSRS reports to enable insightful data analysis and visualization.
* **Utilized ASP.NET Web Forms data controls** such as GridView and FormView for displaying and editing fare transaction details, ensuring accurate data management
* **Integrated Apache kafka with .NET services** to support real-time processing of fare transactions, improving system responsiveness during peak usage.
* Containerized **microservices** with **Docker** and deployed on **Kubernetes**, ensuring scalability, high availability, and streamlined CI/CD deployments.
* Documented APIs using **Swagger** and provided training to junior developers.
* **Collaborated using Git** for version control, managing codebase efficiently with branching strategies, and **tracked tasks and progress** using **JIRA**, ensuring smooth project management and sprint delivery...

**Environment:** .NET Core, ASP.NET Core MVC, Entity Framework Core,Angular,.NET MAUI, HTML5, CSS3, jQuery, Node.js, SQL Server, Redis, LINQ, Azure AD B2C, JWT, OAuth2, SignalR,TDD, Azure API Management, Azure Load Balancer, Azure Functions, Azure DevOps, Stripe, PayPal, Power BI, Application Insights, RESTful APIs, GraphQL, WCF, WPF, xUnit, Log4net, Postman, SSIS, SSRS, Kafka, Git, JIRA, Docker, Kubernetes, Swagger,

**OhioHealth - Columbus, OH (May 2018 – July 2020)**

**.NET Developer**

**Responsibilities:**

* Implemented **Agile** SDLC to develop a compliant telehealth platform, focusing on stakeholder priorities.
* Designed and developed a robust telehealth platform using **ASP**.**NET** and Angular for virtual consultations and remote monitoring.
* Developed and maintained Windows Forms and Web Forms applications using **VB.NET**, implementing business logic, UI design, and data access layers for seamless user experiencesssss
* Developed scalable backend services with **C# 10.0** and **.NET Core**, ensuring high performance and integration capabilities.
* Created **RESTful APIs** with **ASP.NET Web API** for efficient patient data management and virtual consultations.
* Utilized **Angular 12** in the telehealth application to enable seamless real-time patient monitoring and secure data exchange between doctors and patients.
* **Monitored and troubleshot N-tier system performance** using logging, profiling, and diagnostic tools, identifying bottlenecks and ensuring optimal system functionality across all layers
* Developed responsive and dynamic user interfaces for the telehealth application using **Angular 12**, **JavaScript**, **Bootstrap**, and **HTML5 , CSS3**, ensuring a seamless user experience across devices.
* Integrated **XML** for interoperability with external **EHR** systems like **EPIC**, ensuring standardized data exchange.
* Integrated **WebRTC** and **SignalR** for secure real-time video conferencing and chat functionalities.
* Implemented **SAML** for seamless single sign-on (SSO) integration across healthcare applications.
* Utilized **Redis** Cache for optimizing data retrieval and application performance during peak usage.
* Implemented **Azure** **Service** **Bus** for asynchronous messaging, enhancing platform responsiveness.
* Conducted security audits and vulnerability assessments to comply with **HIPAA** and **GDPR** regulations.
* Implemented **Kubernetes** health checks for automated service recovery and continuity.
* Leveraged **Azure Cosmos DB** for globally distributed, low-latency healthcare data management.
* Deployed and maintained the platform on **Microsoft Azure App Services** for scalability.
* Implemented CI/CD pipelines using Azure DevOps for automated deployments and updates.
* Integrated Azure Application Insights for monitoring and optimizing application performance.
* Developed responsive UI components with **HTML5**, **CSS3**, and **Angular** Material for optimal user experience.
* Utilized **TypeScript** in Angular for scalable client-side logic and service development.
* Conducted automated testing with **NUnit** and **Moq** to ensure robust and reliable platform functionality.

**Environment**: Agile SDLC, ASP.NET, Angular, C#, .NET Core, micro services architecture, ASP.NET Web API, XML, EPIC, WebRTC, SignalR, SAML, Redis Cache, Azure Service Bus, HIPAA, GDPR, Kubernetes, Azure Cosmos DB, Microsoft Azure App Services, CI/CD pipelines, Azure DevOps, Azure Application Insights, HTML5, CSS3, Angular Material, TypeScript, NUnit, Moq.

**PNC Bank - Highland Hills, OH (Nov 2016 – Apr 2018)**

**Dot Net Developer**

 **Responsibilities:**

* Led **Agile** development of a Digital Banking Platform using **ASP.NET MVC** and **C#** for robust architecture.
* Developed dynamic, responsive interfaces using **Angular, JavaScript, Bootstrap and HTML5**, ensuring a seamless and secure user experience across all devices.
* Developed RESTful APIs and **GraphQL** endpoints for seamless frontend-backend data exchange.
* Implemented **OAuth2**, **OpenID** Connect, and **AWS Cognito** for secure authentication and authorization.
* Integrated JWT and **SAML** for secure token-based authentication and single sign-on (SSO).
* Utilized **Entity Framework Core** for efficient database management and performance.
* Optimized database performance with **SQL Server** and **Amazon RDS**, ensuring scalability and reliability.
* Leveraged AWS Lambda, API Gateway, and S3 for scalable and serverless backend solutions.
* Developed real-time features using **AWS** **WebSocket** API and Amazon **DynamoDB** for interactive banking functionalities.
* Established CI/CD pipelines with **AWS** **CodePipeline** for automated deployments.
* Containerized applications with Docker and managed deployments using **Amazon ECS** and **EKS**.
* Monitored application performance using **AWS CloudWatch** and AWS X-Ray for proactive issue detection.
* Implemented **Stripe** and **PayPal** for secure payment processing and PCI compliance.
* Conducted unit testing with **xUni**t and **NUnit** to ensure code reliability.
* Managed projects and workflows using **JIRA** for agile project management and collaboration.

**Environment:** ASP.NET Core, C#, Angular 10, RESTful APIs, GraphQL, OAuth2, OpenID Connect, AWS Cognito, JWT, SAML, Entity Framework Core, SQL Server, Amazon RDS, AWS Lambda, API Gateway, S3, WebSocket API, DynamoDB, Docker, Amazon ECS, EKS, AWS CodePipeline, AWS CloudWatch, AWS X-Ray, Stripe, PayPal, xUnit, NUnit, JIRA

**Evoke Technologies, Hyderabad, India Oct 2013 – Aug 2016**

**Junior .NET Developer**

**Responsibilities:**

* Involved in full SDLC followed by agile methodologies to produce high quality software model using N-Tier Architecture.
* Involved in creating services using WCF and consumed it in the web application.
* Used **ADO. Net** technology extensively for data retrieving, querying, storage, and manipulation interface screens developed using **ASP. Net.**
* Utilized **VB.NET** with ADO.NET for database connectivity, performing CRUD operations and optimizing SQL queries for enhanced application performance.
* Used **Ajax** to avoid posting back to the server. Responsible for implementing Stored Procedures for Data Retrieval and Updating.
* Involved in writing Complex **SQL statements** and stored procedures using SQL Server.
* Worked in the Performance tuning at the Application and Database Layers.
* Involved in developing business logic layer and Data Access layer and written methods in C#, Visual Studio .NET
* Designed and developed various abstract classes, interfaces, classes to construct the business logic using C#.
* Using the GIT configuration for managing source code, clone project files, updating the branch and getting the latest code daily.

**Environment: NET** Framework, ASP .NET, Visual Studio, ASP.NET MVC, MVC, Razor Views, Partial Views, Layouts, ADO.NET, Web services, XML, HTML, JavaScript, jQuery, SQL Server, AJAX, and SQL Server Management Studio.

**EDUCATION:**

Bachelor of Technology in Computer Science at Sumathi Reddy Institute of Technology ,Warangal,India(2009-2013)