# Sai Kumar Challagundla Sr. Full stack .Net Developer

Phone: +1 (314) 763-4694 | Email:saikumarch219@gmail.com www.linkedin.com/in/sai-kumar-ch

### PROFESSIONAL SUMMARY

- Senior .NET Developer with over 9 years of experience designing and developing web and Windows applications using Microsoft technologies.
- Strong skills across the Software Development Life Cycle (SDLC), object-oriented design, and modern architectural patterns, delivering scalable, high-performance solutions for enterprise clients.
- Specialized in .NET, .NET Core, ASP.NET Core, MVC (4/5), C#, WPF, WinForms, ADO.NET, Entity Framework, and WCF, applying SOLID principles and design patterns like Factory, Dependency Injection, and Lazy Loading.
- Experienced in building responsive, modern user interfaces using HTML5, CSS3, JavaScript, jQuery, Bootstrap, and frameworks like Angular (1.x through 14) and React.js.
- Developed Single Page Applications (SPA) with TypeScript and Angular CLI, integrating dynamic content using AJAX, JSON, and XML.
- Skilled in Microsoft Azure services, including Service Bus, Event Hubs, API Management, Azure Storage (Blobs, Tables, Queues, Files), and Cosmos DB, as well as AWS services like EC2, S3, RDS, EKS, Lambda, SNS, SOS, ECS, IAM, and CloudWatch.
- Strong database skills, with experience writing complex T-SQL queries, stored procedures, triggers, and user-defined functions.
- Worked extensively with SQL Server, Azure SQL Database, Data Lake Analytics, and tools for data migration and data warehousing, including Azure Data Lake, Data Bricks, and Azure SQL Data Warehouse.
- Developed enterprise-level reports using Crystal Reports, SSRS, and SSIS.
- Modernized legacy systems by migrating Visual Basic and ActiveX applications to .NET and converting Oracle Forms to Angular.js solutions, including updating Bootstrap screens into Angular wrappers.
- Experienced with version control and DevOps tools, including TFS, Git, and CI/CD pipelines for continuous integration and deployment.
- Proficient in Object-Oriented Analysis and Design (OOAD) techniques and creating UML diagrams like Use Cases, Class, Sequence, Activity, and State Transition diagrams, and implementing patterns like Singleton, Abstract Factory, Builder, and Prototype.
- Additional experience in multi-threaded programming, IIS administration, SharePoint support activities, and full-stack development across diverse technology ecosystems.
- Technical skills and keywords include .NET Core, ASP.NET, MVC, C#, WPF, WinForms, Angular, React.js, JavaScript, TypeScript, HTML5, CSS3, Bootstrap, Entity Framework, LINQ, Azure, AWS, API Management, SQL Server, T-SQL, SSRS, SSIS, Crystal Reports, OOAD, Design Patterns, SOLID Principles, SPA development, RESTful API integration, JSON, XML, DevOps, CI/CD, Git, TFS, Cloud Integration, Cosmos DB, Azure Data Lake, Azure Event Hub, Azure Service Bus, and Node.js.

## **TECHNICAL SKILLS**

Programming Languages	C#, VB.NET, Typescript
Web Technologies	ASP.NET, MVC, Web API, WCF, HTML, CSS, jQuery, JavaScript, Angular JS, Angular 2/4/5/6/7/8/9/10/11/12/13/14, Angular CLI, 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
Modeling 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

Client: Capital One - Mclean, VA Role: Senior .Net Developer Responsibilities: Oct 2023 – Till Date

- Managed deployments, maintenance, and troubleshooting of applications hosted on Microsoft Azure Cloud Infrastructure, ensuring seamless operations, high system availability, and rapid issue resolution
- Conducted root cause analysis to resolve production issues, contributing to ongoing system enhancements and application maintenance.
- Designed and developed web applications using .NET Core, C#, Web API, Angular (versions 12 and 14), TypeScript, jQuery, and integrated Angular Material for responsive UI components.

- Created and maintained RESTful Web API services and microservices in .NET Core and .NET 6, employing microservices architecture for independent scalability and efficient updates.
- Developed modular, reusable components and single-page applications using Angular CLI, Angular MVC architecture, and modern front-end practices including directives, modules, dependency injection, and routing.
- Designed and built robust, scalable APIs capable of handling high user loads, integrating Azure Storage Queues for microservices communication.
- Implemented IoT communication protocols like MQTT and CoAP for efficient data exchange in specialized systems.
- Developed RESTful APIs and microservices in Rust, emphasizing performance, security, and maintainable code architecture.
- Integrated Jenkins for continuous integration and deployment, ensuring streamlined build and release pipelines.
- Participated in client meetings alongside project managers, engaging in requirement gathering, analysis, reverse engineering, and scope definition to inform design and development processes.
- Designed and optimized SQL Server database schemas, developing complex objects such as stored procedures, functions, tables, views, packages, and triggers to support business logic and improve performance.
- Implemented database replication strategies and SSIS configurations to enhance performance in high-traffic scenarios.
- Migrated and managed database tables using Entity Framework Core for seamless data access and modernization.
- Ensured compliance standards were met while deploying technology solutions on Azure PaaS infrastructure.
- Integrated test automation into CI/CD pipelines using XUnit for both unit and integration testing, identifying issues early in the development lifecycle.
- Worked with PowerShell and modern web technologies including AJAX, JSON, HTML, CSS, and JavaScript, developing reusable modules for enhanced UI responsiveness.
- Managed work and project tracking through JIRA, maintaining dashboards for sprint planning, daily stand-ups, and progress evaluation.
- Employed Git for version control, maintaining clean and organized repositories to support collaborative development and deployment processes.

**Environment:**.NET Framework, C#, .Net Core, Web API, Jenkins, Entity Framework, Visual Studio, MongoDB, SQL Server, JavaScript, JQuery, Angular 12/14, Typescript, Angular CLI, Angular Material, HTML, CSS, jQuery, MS Azure, Azure DevOps, Windows, IIS, SQL Server, XUnit, Jira.

Client: Molina healthcare - Bothell, WA

May 2021 - Sept 2023

Role: Senior .Net Developer

Responsibilities:

- Designed and developed business logic components in C#, creating various abstract classes, interfaces, and reusable classes to support scalable enterprise applications.
- Managed change requests and enhancements for enterprise web-enabled applications built with .NET technologies, including C#, ASP.NET, ADO.NET, Web Services, XML, REST, and IIS.
- Developed RESTful services using ASP.NET Web API and C#, delivering responses in both JSON and XML formats with custom formatters.

- Architected and implemented enterprise applications with C#, ASP.NET, jQuery, AJAX, HTML5, Angular (versions 9-11), CSS3, and leveraged TypeScript to minimize runtime errors and enhance code maintainability.
- Redesigned the main website to improve user experience and introduce new functionality using Angular 9, incorporating dynamic client-side JavaScript for web forms and navigation.
- Developed custom directives, pipes, and controls in Angular (versions 10/11) and built core functionalities with the ASP.NET Web API framework.
- Utilized Entity Framework for implementing CRUD operations in ASP.NET Web API and MVC, adding support for sorting, filtering, and paging of data.
- Created web-based dashboards for warehouse performance analytics using ASP.NET MVC.
- Implemented asynchronous functionality in web applications using AJAX Toolkit, enhancing interactivity and performance.
- Designed, modeled, and developed a multi-threaded, enterprise n-tier software agent using WCF services hosted in Windows services to support distributed computing scenarios.
- Configured and deployed applications to Azure Cloud Services, developing build and release pipelines in Azure DevOps using XAML scripts.
- Utilized Azure IoT Edge frameworks to enable edge computing on devices, allowing local data processing and reducing latency in IoT applications.
- Developed high-performance systems-level software in Rust, leveraging its low-level control and safety features for critical applications.
- Created and customized user controls for Silverlight 5 and WPF applications using C#, Visual Studio, and Expression Blend, and implemented WPF UIs with XAML for engaging desktop experiences.
- Implemented remote validation in web forms using unobtrusive JavaScript and JSON for enhanced user input validation.
- Designed and developed SQL Server database schemas, writing complex stored procedures, triggers, and views to optimize data storage and retrieval.
- Utilized LINQ to SQL, LINQ to XML, and LINQ to Objects for efficient, on-demand data querying across applications.
- Performed backup and restore operations using PowerShell and SharePoint Management Shell to ensure data protection and recovery.
- Employed Microsoft Team Foundation Server (TFS) for source control, work tracking, and automated build processes, ensuring collaborative and efficient development workflows.
- Actively participated in Agile methodology, attending Scrum meetings and contributing to iterative development cycles.
- Conducted unit and integration testing using N-Unit to ensure software quality and reliability throughout the development lifecycle.

Client:State of CA, SFO, CA Senior Full Stack .NET Developer Responsibilities: Jan 2020 to Apr 2021

- Led the design and implementation of an e-commerce platform using Onion Architecture, significantly improving code maintainability, testability, and scalability.
- Built RESTful services with ASP.NET Core Web API and C#, applying dependency injection and integrating components with ASP.NET (C#) and JavaScript following industry best practices.
- Developed a robust data access layer utilizing Entity Framework (EDMX) to ensure efficient database connectivity, manipulation, and optimized data operations.

- Created platform-specific code for iOS and Android using Xamarin. Forms to deliver native functionality and a native look and feel where cross-platform capabilities were insufficient.
- Provided production support, diagnosing and resolving issues related to data, user interface code, and backend services to ensure smooth system operations.
- Migrated legacy applications to .NET Core and Web API, deploying enhancements that improved system performance and scalability.
- Designed and implemented OAuth2 authentication and authorization solutions for secure API integrations, strengthening platform security and enhancing customer experience.
- Designed, developed, and maintained complex reporting solutions using SQL Server Reporting Services (SSRS) and Power BI, including managing data migration projects with T-SQL.
- Developed responsive user interfaces with Angular 5, HTML, CSS, and JavaScript, incorporating dynamic HTML-to-PDF conversions and optimizing Angular components through rigorous testing practices.
- Optimized SQL Server database schemas, improving query performance by 40%, and developed stored procedures, triggers, and views to enhance data access and reporting efficiency.
- Implemented RabbitMQ to establish reliable communication between point-of-sale systems and inventory databases, reducing stockouts and improving inventory accuracy.
- Employed comprehensive unit and integration testing strategies using XUnit for backend systems and Jasmine for front-end components, ensuring high reliability across e-commerce and inventory applications.
- Utilized Azure DevOps for CI/CD pipelines, integrated Azure services like App Services, Functions, and SQL Database to build scalable solutions, and leveraged Azure Monitor and Application Insights for proactive system monitoring and issue resolution.
- Configured and maintained IIS for secure and optimized web application hosting, managing CI/CD pipelines and version control with GitHub for streamlined deployments.
- Used Agile tools such as JIRA, Trello, and Azure DevOps to manage project tasks, enhance team collaboration, and ensure delivery within timelines and scope.
- Employed Docker for containerization and Kubernetes for orchestration of deployments, ensuring scalable and efficient management of application workloads.

**Environment**: Scrum, Kanban, ASP.NET Core Web API, C#, ASP.NET Core DI, javascript, Python, Restful API, Entity Framework-EDMX, JSON, OAuth2, Angular 5, SQL Server 2017, SSRS, XUnit, RabbitMQ, Jasmine, AJAX, Postman, Azure DevOps, Azure cloud, GitHub, JIRA, Trello, Docker, Kubernetes.

Client: Alaska Airlines - Seattle, WA Role:.Net Developer Responsibilities:

May 2018 – Dec 2019

- Designed and developed user interfaces for web applications using ASP.NET, C#, HTML, CSS, XML, Angular Material, and Angular (versions 2 and 6), ensuring modern, responsive, and user-friendly designs.
- Developed middle-tier business components in C#.NET to implement core business logic and ensure maintainable, modular architecture.
- Deployed ASP.NET Core web applications via Azure DevOps pipelines, automating builds and deployments for streamlined delivery.
- Migrated services from SOA architecture to RESTful APIs using ASP.NET Web API, modernizing application integration and performance.

- Built and maintained CRUD APIs using .NET Core, supporting robust backend services for front-end consumption.
- Designed and implemented front-end solutions using modern technologies such as Angular UI Router, Bootstrap, JavaScript, jQuery, and NgRx for state management.
- Utilized SQL Server for data persistence, writing complex queries for efficient data retrieval and storage.
- Leveraged Microsoft Azure services including Azure Functions, Web Jobs, Azure Storage, and SQL Databases for scalable cloud solutions and asynchronous operations with external APIs.
- Applied Cascading Style Sheets (CSS) to enhance the look and feel of web applications, ensuring consistent and engaging user experiences.
- Focused on developing reusable components to promote maintainable and scalable application architecture.
- Actively participated in all phases of the Software Development Life Cycle (SDLC), including analysis, design, implementation, testing, and maintenance, following Agile methodologies.
- Engaged in requirements gathering and collaborated closely with clients and end-users to ensure alignment of solutions with business needs.
- Conducted unit testing using N-Unit, performed debugging, and provided ongoing application support to ensure high-quality deliverables.
- Utilized Git for version control, collaboration, bug tracking, and configuration management across development teams

**Environment:** Agile, Scrum, NET Framework, C#, ASP.NET Web API, Web API, Jenkins, Entity Framework, Visual Studio, MongoDB, SQL Server, JavaScript, JQuery, Angular 2/4, Typescript, Angular CLI, Angular Material, HTML, CSS, jQuery, MS Azure, SQL Azure, Azure DevOps, Windows, IIS, SQL Server, NUnit, Jira.

Client: Home Depot - Austin, Texas Role : .Senior NET Developer Responsibilities: Feb 2017 – April 2018

- Worked in Agile/Scrum environments, collaborating closely with team members to deliver applications on schedule and maintain iterative development practices.
- Designed and developed web applications using ASP.NET technologies, including Master Pages, Web Forms, User Controls, Data Grid Controls, custom controls, and client-side scripting with JavaScript and jQuery.
- Developed reactive front-end applications using AngularJS, Angular CLI, and NxConsole, creating reusable components, services, and pipes to ensure maintainable and modular code.
- Built RESTful Web APIs and WCF services using ASP.NET and C#, hosted on IIS, enabling seamless communication between front-end and back-end systems.
- Implemented Azure Service Bus queues and web jobs to facilitate decoupled communication between REST Web APIs, enhancing system scalability and maintainability.
- Utilized Entity Framework and LINQ for data access, writing efficient queries for sorting, filtering, and manipulating data from SQL Server databases.
- Designed and developed complex database objects in SQL Server, including tables, indexes, stored procedures, functions, and triggers to support data persistence and business logic.
- Employed advanced C# features such as Generics, Lambda Expressions, Extension Methods, and LINQ to Objects for efficient coding practices and data manipulation.
- Managed data import and export operations using XML serialization and deserialization techniques for seamless data exchange between systems.
- Developed business logic layers and N-Tier architecture components using C# and ASP.NET in Visual Studio, ensuring clean separation of concerns and maintainability.

- Worked extensively with Microsoft Azure services, including Azure SQL Database and cloud-based deployment solutions, to build scalable cloud applications.
- Applied Cascading Style Sheets (CSS) for styling, enhancing UI consistency and user experience across web applications.
- Utilized Git for source control, version management, and collaborative development, ensuring codebase integrity and traceability.

**Environment:** .NET Framework, C#, ASP.net, ASP.NET Web API, Visual Studio, VB.NET, SQL Server, IIS, WCF, JavaScript, JQuery, LINQ to SQL, XML, Angular JS, AJAX, HTML5, CSS, MS Azure, SQL Azure, Git, NUnit.

Client:Cyient – Hyd, India

Role.Net Developer
Responsibilities:

July 2015 – Jun 2016

- Developed robust business logic and data access layers using C# in Visual Studio .NET, applying object-oriented principles including abstract classes, interfaces, and reusable components.
- Extensively utilized ADO.NET for efficient data retrieval, querying, and data manipulation across multiple interface layers.
- Designed and developed responsive web interfaces with ASP.NET, leveraging Master Pages for consistent layout and using AJAX to enhance user experience by reducing full-page postbacks.
- Implemented effective error handling for runtime and design-time exceptions in C#.NET, and performed client-side validations using JavaScript to ensure data integrity and usability.
- Designed and developed Web Services and WCF Services to facilitate secure, scalable communication between client applications and the data access layer, following SOA principles for distributed systems.
- Developed complex SQL Server objects, including indexes, views, stored procedures, and functions, optimizing data access and manipulation for high-performance applications.
- Engaged in performance tuning at both the application and database levels to improve overall system efficiency.
- Managed version control and collaborative development processes using Git for source code management, including branching, merging, and maintaining codebase integrity.

**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 Details**

• B.Tech in CSE, Karunya university – 2016.