

# Tayyab Shahid

Senior Software Engineer

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## SUMMARY

Experienced Senior Software Developer with 8+ years of expertise in building scalable, high-performance applications using .NET Core (3.1-9.0), C#, ASP.NET, Angular, and the broader and .NET ecosystem. Skilled in applying architectural patterns like CQRS and Mediator to develop clean, modular microservices.

Hands-on with real-time systems using SignalR, WebSockets, and gRPC, along with high-throughput messaging via RabbitMQ and Redis. Proven success in modernizing legacy systems into resilient, cloud-native solutions hosted on Azure, demonstrating the ability to adapt to new technologies and the value of my experience in modernization.

My proficiency in full-stack development, utilizing React, Angular, TypeScript, and Tailwind CSS, enables me to deliver responsive and dynamic UIs. This comprehensive skill set reassures the audience of my ability to handle all aspects of a project, from front-end design to back-end functionality.

## SKILLS

### Backend Development:

.NET Core, C#, ASP.NET MVC, VB.NET, .NET Framework, Web API, C/C++, RESTful APIs, Entity Framework, LINQ, SQL Server, MongoDB, MySQL, RabbitMQ, gRPC, Redis, Multithreading, T-SQL, WCF, SOAP, CQRS, Mediator Pattern, Microsoft SQL Server, Azure SQL, JSON, XML, xUnit, NUnit, Elasticsearch, QA Testing, Manual Testing

### Frontend Development:

React.js, Hooks, Redux, Router, Angular.js, Vue.js, JavaScript, TypeScript, HTML5, CSS3, Tailwind CSS, Material UI, Bootstrap, jQuery, SPA, Wireframes, ES6, ES6+

### Cloud:

Microsoft Azure, Service Bus, Cosmos DB, Azure Cloud, Azure Functions, Azure AD, AKS, AWS Services, S3, AWS Cloud, EC2, Lambda, RDS, DynamoDB, GCP, Microsoft 365, IAC (Infrastructure as Code), Microsoft Office, Dataflow, ECM

### Architecture:

Microservices, Event-Driven Architecture, Clean Architecture, N-Tier Architecture, Serverless, Domain-Driven Design, Apache Kafka, Swagger/OpenAPI, Custom Logging, Exception Handling, Structured Error Tracking, Application Insights, API Documentation, SOA

### DevOps:

Azure DevOps, Jenkins, Docker, Kubernetes, Bitbucket, GitHub, Git, GitLab, CI/CD Pipelines, Terraform, Selenium, Postman, GitHub Actions, JIRA, Cucumber, DataDog, Grafana, E2E, HIPAA, Jest, QA Testing

## EXPERIENCE

### CTO

London Area, United Kingdom

#### Berks Technologies

05/2023 - Present

- Led and supervised four cross-functional development teams (30+ engineers) delivering scalable enterprise applications for the ECO4 and BERKS initiatives. Oversaw the full Software Development Lifecycle (SDLC), including requirement gathering, system architecture design, development, CI/CD deployment, and post-production support.
- Architected and developed enterprise-grade backend systems using .NET Core (ASP.NET Core) following Clean Architecture and Microservices principles. Implemented layered architecture patterns (Presentation, Application, Domain, and Infrastructure layers) to ensure separation of concerns, maintainability, and testability. Applied SOLID principles, dependency injection, and repository patterns to build loosely coupled and highly extensible systems.
- Designed and implemented RESTful APIs using ASP.NET Core Web API, ensuring secure, high-performance communication between services and frontend applications. Utilised middleware pipelines, filters, and custom exception handling to enforce consistent request processing and error management.
- Implemented Entity Framework Core (EF Core) for data access, leveraging Code-First migrations, LINQ optimization, and performance tuning techniques to ensure efficient database interactions. Designed scalable relational database schemas aligned with business and compliance requirements under ECO4 and Thames Valley Ins.
- Deployed and maintained OpenID Connect (OIDC) authentication and authorization mechanisms within .NET Core applications, integrating identity providers and implementing JWT-based authentication, Role-Based Access Control (RBAC), and secure token validation to protect APIs and microservices.
- Integrated third-party services such as Microsoft Outlook APIs and Twilio APIs within .NET Core applications, designing resilient service wrappers and background processing (using hosted services) to ensure reliable communication workflows including email automation, SMS notifications, and two-factor authentication (2FA).
- Designed scalable deployment architectures using containerization and environment-based configuration management to support development, staging, and production environments. Collaborated with DevOps teams to streamline CI/CD pipelines and ensure zero-downtime deployments.
- Provided architectural guidance, performed code reviews, and mentored developers to maintain coding standards and improve overall system performance. Acted as the primary technical escalation point, ensuring rapid issue resolution and continuous system reliability.
- Mentored junior developers, shared technical knowledge, and contributed to continuous improvement across the engineering team.
- Worked within Agile/Scrum environments, delivering features, enhancements, and bug fixes in fast-paced development cycles.

## EXPERIENCE

### Senior Software Engineer

London Area, United Kingdom

Thames Valley Insulation

03/2023 - 06/2025

- Designed, developed, and maintained scalable applications and backend services using C#, .NET Core, and ASP.NET Core.
- Architecture & Scalability: Applied DDD, Object-Oriented Design & Clean Architecture principles for a maintainable, scalable solution.
- Frontend & Backend Development: We built & supported the web app using ASP.NET Core and React, meticulously adhering to the best software practices, instilling confidence in the project's quality.
- Data Handling & SQL We established, meticulously analyzed, and monitored user requirements, leveraging EF Core and SQL to ensure efficient and reliable data management, instilling confidence in the project's technical capabilities.
- Architected Software Engineer: Addressed development challenges by utilizing NPM for efficient dependency management and workflow optimization.
- Implemented and troubleshooted enterprise-grade web applications using C#, .NET MVC, and SQL Server, optimizing performance and ensuring robust cross-browser compatibility.
- Assisted, motivated, and coached junior developers during agile sprints, improving team productivity and accelerating feature delivery by 25%.

### Software Engineer

Georgia, Remote

Credo Bank

02/2022 - 04/2024

- Developed and maintained scalable, low-latency backend systems for automated crypto trading bots using .NET Core.
- Integrated Binance REST and WebSocket APIs for real-time market data streaming, order placement, and portfolio management.
- Connected TradingView webhooks to trigger automated trade execution based on custom indicator strategies and alert conditions.
- Implemented robust risk management controls including stop-loss, take-profit, and dynamic position sizing. Designed efficient data pipelines for backtesting and performance analytics, ensuring high reliability, secure API key handling, and maintainable clean architecture.

### Software Engineer

Islamabad, Pakistan

Logic Powered Solutions

09/2021 - 12/2021

- Contributed to the delivery of projects alongside a team of engineers, supporting timely execution and maintaining development productivity. Designed, developed, and maintained the O3 Edge Desktop Application for real-time analytics and data ingestion, enabling improved industrial insights.
- Accelerated IoT workflow prototyping using Node-RED, enabling rapid validation of data flows and system integrations.
- Implemented industrial data ingestion by integrating Kepware Server with OPC UA / DA protocols, ensuring reliable machine-to-system communication.
- Developed MQTT-based messaging and a lightweight in-house service to support efficient IoT data exchange while reducing infrastructure overhead.
- Contributed to healthcare data integration by supporting SureSign VS4 device connectivity for vital sign monitoring.
- Assisted in improving business intelligence pipelines through Saned Utilities, enabling structured data processing and analytics.
- Supported CRM and enterprise integrations by connecting D365 with internal systems via SOAP and REST APIs, improving data synchronisation and automation.

### Dot Net Developer

Gujrat, Pakistan

Xprosol

04/2020 - 08/2021

- Worked closely with multiple engineering teams to support coordinated delivery across departments, contributing to alignment and technical consistency across large-scale projects.
- Improved TalkEHR performance by identifying and resolving critical defects and latency issues, significantly enhancing system responsiveness and user experience. Implemented NCache Server to improve application scalability and optimise data caching.
- Developed Avaya call recording services and integrated them with the Angular Fox Rehabilitation Portal, strengthening communication tracking and documentation.
- Supported team growth by assisting with technical onboarding and knowledge sharing across teams including Fox, TalkEHR-Dev, Support, Optimisation, and DevOps.
- Provided ongoing technical guidance to ensure code quality, system stability, and effective collaboration.
- Refined 20+ products and APIs, including the Employee Global Portal and a widely adopted EHR system used by 40k+ providers across 70+ medical specialities in all 50 U.S. states.
- Deployed LogRocket for real-time issue tracking and maintenance, accelerating the resolution of user-facing problems. Developed and upheld the Patient Helpdesk System, leading to improved user support and query resolution processes.
- Introduced structured code review processes and conducted coding standards training, raising code quality and development consistency across teams.
- Contributed to talkEHR development by augmenting multiple modules and leading the technology migration from .NET to .NET Core 3.1, along with Angular version upgrades, assuring improved system performance and maintainability.

### Web Designer

Gujrat, Pakistan

Internussoft

01/2018 - 03/2020

- Designed and developed responsive, user-focused websites, translating business requirements into clean, visually engaging web interfaces. Focused on usability, performance, and cross-browser compatibility to deliver consistent and scalable web solutions.
- Delivered multiple responsive websites for freelance and market-based clients, meeting functional, branding, and usability requirements.
- Improved user experience and accessibility through clean layouts, intuitive navigation, and performance-focused design practices.

## PROJECTS

### Custom CRM for Energy Installer & UK Government Schemes-MVP

**Role:** Lead Developer & System Architect

**Tech Stack:** CRM Development · Multi-Platform Optimization · REST API · ASP.NET Core · React · SQL · EF Core · Azure · Cosmos DB · Azure Service Bus

- Developed a custom CRM platform for a UK energy installation company managing government schemes such as ECO4 and GBIS.
- The system streamlines lead management, customer onboarding, installation scheduling, and compliance documentation.
- Built with secure JWT authentication and role-based access control, it includes an eligibility checker, job tracking, document verification, and an analytics dashboard.
- Designed as a scalable SaaS-ready platform to help installers manage projects efficiently and ensure scheme compliance.

### Inventory Management System

**Role:** Senior Full Stack Developer

**Tech Stack:** Inventory Management · Microsoft SQL Server · Store Management Reporting · Purchase Orders · ASP.NET Core · React · Angular · SQL · EF Core · Bitbucket · Design Patterns

- Built a web based Inventory Management System with RBAC to manage products, suppliers, warehouses and purchase orders across multiple locations.
- The platform enables real time stock tracking, low stock alerts, supplier management, purchase order processing and inventory reporting to improve operational efficiency.

## ERP

**Role:** Senior Software Engineer

**Tech Stack:** ASP.NET Core · ASP.NET MVC · Microservices · SQL · Oracle · EF Core · Enterprise Resource Planning

- This is basically a product of company which is an E.R.P based system and contains multi clients according to their requirements.
- It is a login based and roles based system which contains modules like Accounts, Chart of Accounts, Customers/Supplier, Items Details, Sale, Purchase, Stores, Vouchers, Cheque Payment/Receive/Deposit, Logs, HRM, CRM, Sms, Email, Reports etc.

## HRMS

**Role:** Senior Full Stack Developer

**Tech Stack:** ASP.NET Core · React · MySQL · Microservices · Azure VM · Azure Service Bus · Azure DevOps · Unit Testing · AJAX

- Designed and developed various modules of HRMS.

### Scholarship ERP System

**Role:** Senior Full Stack Developer

**Tech Stack:** ASP.NET Core · React · MySQL · Microservices · Azure VM · Azure Service Bus · Azure DevOps · Unit Testing · AJAX

- ERP system for school management system to get latest information on scholarships available.

## EDUCATION

### Bachelor of Science (B.S.) in Computer Science

COMSATS University Islamabad

Islamabad, Pakistan

2016 - 2020

### Masters in Software Engineering

Kingston University

London Area, United Kingdom

01/2022 - Present

## LANGUAGES

English (Native)