

Muhammad Abbas



+92 3034939373



toabbas@gmail.com



<https://abbas.com.pk>



<https://www.linkedin.com/in/toabbas>

Technical Summary

Results-driven IT professional with a strong track record of delivering high-quality solutions to complex business problems within scope, budget, and tight deadlines. Possesses extensive experience in software development, database design, IT support, technical communication, and mentoring. Quick to adapt to new technologies and project environments, with proven expertise in leading development teams and driving technical initiatives. Skilled in both hands-on development and strategic roles, with a focus on contributing to high-impact design, architecture, and technical leadership.

Certifications

- ✓ Coursera: Google Project Management Certification
- ✓ Coursera: Google Data Science Certification
- ✓ Coursera: Google Data Analytics Certification
- ✓ MCSD: Developing ASP.NET MVC 4 Web Applications
- ✓ MCSD: Developing Windows Azure and Web Services
- ✓ MCTS: Microsoft SQL Server - Business Intelligence Development

Microsoft Certifications Official Transcript URL:

<https://learn.microsoft.com/en-us/users/mabbas/transcript/de6ykbp1349k1m6>

Coursera learning profile Link:

<https://www.coursera.org/learner/abbas>

Technical Expertise Overview

- **Architecture & Engineering:** Cloud-native and distributed systems, microservices and event-driven architectures, Docker Compose, Apache Kafka, Apache Spark, domain-driven design (DDD), scalable system design, FinTech platforms, Healthcare systems (EHR, FHIR), CQRS pattern, Scalable containerized applications model
- **Leadership & Delivery:** Cross-functional team leadership, stakeholder and client communication, requirements elicitation, analysis, business-to-technical translation, solution ownership, technical mentorship, resource enablement
- **AI / ML & Intelligent Systems:** AI agents & LLM-based solutions, LangChain, LanGraph, Python, prompt engineering,



Web Applications



SharePoint® 2010, Application Development
SharePoint® 2010, Configuration
.NET Framework 4, Web Applications
.NET Framework 4, Windows® Applications
SQL Server® 2008, Database Development



SQL Server 2008

generative AI tools (ChatGPT, Claude AI, Cursor AI)

- **Backend Development:** FastAPI, Java Spring Boot, ASP.NET Core (v6+), RESTful Web APIs, microservices development, C#, Entity Framework Core, Dapper
- **Identity, Security & Compliance:** Rest & In-transit encryption, TLS implementation, OAuth2 implementation, Keycloak, IdentityServer, OAuth2, SAML 2.0, Single Sign-On (SSO), secure API design, WebSockets, asynchronous & real-time communication
- **Frontend & Mobile Technologies:** Angular, React, Next.js, React Native, Blazor Engine
- **CMS & Digital Experience Platforms:** Sitecore (v10.0+), Kentico CMS, WordPress, end-to-end CMS architecture & customization
- **Project & Process Management:** Agile delivery (Scrum, Kanban), project management, design patterns, end-to-end CMS, and platform delivery
- **Business Strategy & Thought Leadership:** Business process optimization, technical strategy, solution roadmap planning
- **DevOps & Infrastructure:** Docker, Kubernetes, CI/CD pipelines, cloud deployment strategies, infrastructure automation
- **Cloud Platforms & Distributed Runtime:** Microsoft Azure, AWS (EC2, S3), GitHub functions, Dapr (Distributed Application Runtime)
- **Databases & Data Management:** SQL Server (2014+), SSRS, PostgreSQL, MySQL, relational data modeling and optimization
- **Testing & Quality Assurance:** Selenium, automated testing, unit, integration & end-to-end testing, mocking, test strategy design

Experience

- ❖ Working as a Solutions Architect at **Adept Tech Solutions (Pvt) Ltd.**
November 2024 to Date (1year)

Job Description:

Lead the architectural design and technical execution of the organization's flagship data science platform, with a strong focus on scalable, distributed, and event-driven system architectures. Combine hands-on engineering with technical leadership across the full solution lifecycle, from architectural definition and system design through implementation, optimization, and ongoing evolution. Drive the development and integration of backend services, data processing pipelines, and user-facing components using Python, Java Spring Boot, Apache Kafka, Apache Spark, FastAPI, React, Docker Compose, and PostgreSQL, while ensuring architectural consistency, high performance, and long-term scalability.

Collaborate closely with cross-functional stakeholders to align architectural decisions with business objectives, delivering robust, efficient, and future-ready data solutions.



SharePoint® 2010, Application Development
SharePoint® 2010, Configuration
.NET Framework 4, Web Applications
.NET Framework 4, Windows® Applications
SQL Server® 2008, Database Development



SQL Server 2008

- ❖ Worked as a Principal Software Engineer at **AT Technologies (Pvt) Ltd.**

March 2022 to November 2024 (2 years, eight months)

Job Description:

In AT Technologies (Pvt.) Ltd, I established the .NET department to provide Sitecore version 10 services to partner healthcare institutions. To achieve this goal, I selected and trained ten resources, leading them in performing the required development tasks on the Sitecore experience platform. The team played a pivotal role in line with the organizational goal of developing high-performing Sitecore development teams.

Also established and managed the QA, UAT, and production environments on the AWS EC2 cloud and Amazon S3 services.

- ❖ Worked as a Senior Software Engineer at **Calrom (Pvt) Ltd.**

March 2018 to March 2022 (4 years, one month)

Job Description:

During my tenure at **Calrom (Pvt) Ltd.**, I was actively involved in software development and automation testing for the company’s flagship airline ticketing solutions, which are used by over 80 top airlines worldwide. I contributed to the development of two main products in the aviation sector: **ITR**, which focuses on domestic ticketing for up to 10 passengers, and **GROUPS**, a solution tailored for group bookings with a minimum of 10 passengers. My role involved ensuring the reliability and efficiency of these solutions through the development and rigorous testing of these processes.

- ❖ Worked as a Principal Software Engineer at **NextBridge (Pvt) Ltd.**

August 2014 to February 2018 (3 years, six months)

Job Description:

At NextBridge, I supported US clients through the full development lifecycle, including requirements gathering, project management, architecture, development, and deployment. I also consulted on nopCommerce and WordPress CMS, gaining experience in configuring hosting environments on Windows Azure and Amazon EC2.

- ❖ Worked as a Systems Architect at **Instant IT Solutions.**

November 2011 to May 2014 (3 years 6 months)

Job Description:

Engaged in client communication and requirement gathering for ongoing projects, contributing to development efforts using SharePoint 2010, ASP.NET, and Sitecore at Instant IT Solutions. Additionally, it led to the development of the company's in-house CMS product, TekCMS, which was designed and implemented using ASP.NET MVC 4 and leveraged the latest available technology stack to deliver a modern and scalable product.



SharePoint® 2010, Application Development
 SharePoint® 2010, Configuration
 .NET Framework 4, Web Applications
 .NET Framework 4, Windows® Applications
 SQL Server® 2008, Database Development



SQL Server 2008

- ❖ Worked as a Principal Software Engineer at **Future Now Technologies.**

June 2008 to November 2010 (2 years and 4 months)

Job Description:

Developed social media web applications and a dynamic framework for creating, saving, and loading page layouts with client-side data entry. Also customized DotNetPanel for a hosting client using VMware images and provided ongoing maintenance and technical solutions for web applications hosted on their servers.

- ❖ Worked as a Senior Software Engineer at **Systems Ltd.**

April 2007 to May 2008 (1 year, one month)

Job Description:

My responsibilities included assisting with estimation, participating in the logical design phase, and contributing to finalizing the product architecture and development. I collaborated closely with senior developers and architects to ensure design decisions aligned with business requirements. This involvement provided me with a deeper understanding of scalable application structures and effective development practices.

Professional Projects

Name: **Ascend Technologies:** Java Spring Boot / Fast API / Python / Kafka
Tools: IntelliJ IDEA 2025 / Docker Engine
Database: Postgres DB

Description:

A data privacy & synthetic data generation platform: High Quality Synthetic Data Generation Through Data DNA, Ascend introduces the groundbreaking concept of Data DNA, which extracts data insights without storing the actual data and can replicate high-quality and hallucination-free synthetic data at scale that mirrors exactly the properties of the original production data without compromising legal, privacy, security, governance and data quality.

Name: **CRCLS**
Technologies: .NET Core 8 / Web API / JWT
Tools: Visual Studio 2022 / Microsoft Azure
Database: DBMS SQL Server 2022
URL: <https://crcls-main-geebf9e6f0hfcngf.centralus-01.azurewebsites.net/>

Description:

CRCLS is a beautifully crafted, secure home-sharing web platform that enables users to showcase their homes to a select group—family, friends, and close associates—through vivid photo galleries, engaging descriptions, and streamlined invitation processes. As a **CRCLS Host**, you can highlight the



SharePoint® 2010, Application Development
 SharePoint® 2010, Configuration
 .NET Framework 4, Web Applications
 .NET Framework 4, Windows® Applications
 SQL Server® 2008, Database Development



SQL Server 2008

ambience and comfort of your space, inviting memorable experiences while maintaining full control over access. The intuitive UI guides users through showcasing, inviting, and sharing, all within a trusted network.

Name: **Swift Skin & Wound**
Technologies: .NET Core 9 / Microservices
Tools: Visual Studio 2022 / Microsoft Azure
Database: MS SQL Server 2022
URL: <https://swiftmedical.com/solution/>

Description:

Swift Skin and Wound is a cloud-based platform that securely stores wound images and patient data, enabling real-time synchronization and remote access. It integrates with FHIR APIs to manage patient and organizational resources, supporting clinical workflows for visiting staff, such as nurses, who can capture and upload patient images to monitor healing progress. The platform also supports interoperability with external Electronic Health Record (EHR) systems, such as AdvancedMD, through the Qvera interface engine, ensuring seamless data exchange across healthcare systems.

Name: **AMS**
Technologies: .NET 8 / Microservices
Tools: Visual Studio 2022
Database: MS SQL Server 2022
Responsibilities: Development
URL: <https://web-qa.enhancehealth123.com/>

Description:

The Agency Management System is a SaaS-based solution tailored for agencies in the insurance industry. Built on a scalable microservices architecture, the platform utilizes modern technologies including .NET 8, Cosmos DB, and Microsoft Azure. Designed to support the operational needs of insurance agencies, AMS delivers robust performance, flexibility, and cloud-native reliability, streamlining and managing core agency processes.

Name: **Circle Health Group**
Technologies: Sitecore 10.0
Tools: Visual Studio 2019
Database: MS SQL Server 2022
Responsibilities: Development
URL: <https://www.circlehealthgroup.co.uk/>

Description:

This application was developed using Sitecore version 10 for Circle Health Group, the UK's largest private hospital network. The platform supports their comprehensive healthcare services, including advanced neurological and musculoskeletal rehabilitation, as well as pathway management. Additionally, it facilitates the Group's international operations, including clinic services in China, by delivering a consistent and dynamic digital experience.



SharePoint® 2010, Application Development
 SharePoint® 2010, Configuration
 .NET Framework 4, Web Applications
 .NET Framework 4, Windows® Applications
 SQL Server® 2008, Database Development



SQL Server 2008

Name: **Aviate / Groups**
Technologies: ASP.NET MVC 5
Tools: Visual Studio 2019
Database: MS SQL Server 2019
Responsibilities: Development
URL: <https://www.travelinnovationgroup.com/>

Description:

Aviate generates tickets for 80+ airlines in its system. The list includes the world's top airlines, such as Emirates, Etihad, and Lufthansa. **The Groups system has been** delivered to American Airlines, British Airways, Qantas, Iberia, and Finnair. Both products communicate with GDS to generate quotes, create bookings, and issue tickets for clients. Both products also support travelers, booking agencies, and operator management. The product source is well-managed and configured to support different airlines. It is also divided into multiple layers to handle cross-API calls from other Global Distribution Systems (GDSs). Both products support all five major Global Distribution Systems (GDS) systems.

Name: **FoodEquipCo**
Technologies: ASP.NET MVC 5
Tools: Visual Studio 2015
Database: MS SQL Server 2016
Responsibilities: Product Management & Development
URL: <http://www.foodequipco.com/>

Description:

Food Equipment Co. supplies food service equipment for supermarkets, hotels, hospitals, and restaurants. My core responsibility was to automate the company's order fulfillment process. To accomplish this task, I developed a Windows service that monitored every order posted by customers on the NopCommerce platform and applied predefined business rules. It used the QBO API to create purchase orders and made online invoices and sales receipts in QuickBooks. It also had well-applied support for the UPS/SpeedFreight API, which facilitated the booking and shipment of products related to orders, ensuring every order was completed. It also addressed delays in any step and sent timely notifications and reports on the different states of every order to support staff and higher management.

Name: **Marcos Order**
Technologies: ASP.NET MVC 5
Tools: Visual Studio 2013
Database: MS SQL Server 2014
Responsibilities: Product Management & Development
URL: <https://www.marcosorder.com/>

Description:

Marcos Order was an order management system developed for Marco's Pizza Online Systems LLC. It facilitated building pizza online according to



SharePoint® 2010, Application Development
 SharePoint® 2010, Configuration
 .NET Framework 4, Web Applications
 .NET Framework 4, Windows® Applications
 SQL Server® 2008, Database Development



SQL Server 2008

the client's taste and mood. The system enabled them to order it from any store nearby. After the user placed the order, the appropriate store was notified to start backing up and made arrangements to deliver it to the customer within the specified timeframe.

Name: **Project Predict**
Technologies: ASP.NET MVC 5
Tools: Visual Studio 2013
Database: MS SQL Server 2014
Responsibilities: Product Management & Development
URL: <http://www.projectpredict.com>

Description:

Project Predict, as its name suggests, was a prediction system for investing in property and construction businesses. It contained very complex formulas and entry forms for property projection. The system's significant beneficiaries were builders, constructors, town planners, banks, and loan-providing institutions.

Name: **TekCMS**
Technologies: ASP.NET MVC 4
Tools: Visual Studio 2012
Database: MS SQL Server 2012 R2
Responsibilities: Leading & Product Management
URL: <http://109.228.29.123/Backend>

Description:

The company's core product was a web application type of CMS/Website builder, which contained the facility for on-the-fly layout building and user management. This product aimed to combine the latest features not presented in any of the peer products currently available on the market; the main competitors of this product include Sitecore, Telerik Sitefinity, Wix.com, and WordPress. The architecture defined in the product could serve thousands of requests within significantly less time.

Name: **LoanVantage**
Technologies: ASP.NET 3.5
Tools: Visual Studio 2008
Database: SQL Server 2008
Responsibilities: Development
URL: <http://www.govansoft.com/LoanvantageH>

Description:

Loan Vantage was an end-to-end digital loan origination platform developed to simplify and unify the lending process while ensuring robust risk management. The platform consolidates all key stages of the loan lifecycle—including application, underwriting, approval, and monitoring—into a single, cohesive system. By integrating these functions, Loan Vantage provides a seamless and user-friendly experience for both borrowers and lenders, thereby enhancing efficiency and consistency throughout the lending workflow.



SharePoint® 2010, Application Development
 SharePoint® 2010, Configuration
 .NET Framework 4, Web Applications
 .NET Framework 4, Windows® Applications
 SQL Server® 2008, Database Development



SQL Server 2008

- Qualification**
- M.I.T. (Master of Information Technology)
 - *The Virtual University of Pakistan*
 - B.C.S. (bachelor's in computer sciences)
 - *University of the Punjab, Lahore, Pakistan*

References



<http://www.linkedin.com/in/toabbas>



SharePoint® 2010, Application Development
SharePoint® 2010, Configuration
.NET Framework 4, Web Applications
.NET Framework 4, Windows® Applications
SQL Server® 2008, Database Development



SQL Server 2008