Muhammad Amjad

Full-Stack Software Engineer | ASP.NET Core · Angular · Ionic | AI & LLM Integration

Based in Lahore, Pakistan | +92 314 4625820 | contact@muhammadamjad.dev

Open to relocation: Europe, UK, Ireland, USA, Australia, Gulf (GCC) | Open to remote roles

Portfolio: muhammadamjad.dev | linkedin.com/in/muhammad-amjad-dev | github.com/muh-amjad

PROFESSIONAL SUMMARY

Full-stack software engineer with 4 years building enterprise web and mobile software for **A+W Software GmbH** (Germany), the market leader in ERP, production and optimization software for the glass, window and door industry and part of Constellation Software. Delivers features end to end on a microservices backend with ASP.NET Core, Angular, Ionic, SQL Server and Azure DevOps. Brings AI into real products and team workflows: built an AI assistant that reads installation log files, highlights the issues and explains the fix to sales staff and customers on the spot, and uses AI for code reviews, CI/CD pipelines and daily coding. Designs LLM features so the model decides and tested code executes: schema-validated outputs, retries, logging and alerts. Has worked on site at the company headquarters in Germany. Open to relocation and remote roles.

TECHNICAL SKILLS

AI & LLM: LLM integration (OpenAI, Google Gemini, OpenAI-compatible APIs), AI chat assistants, AI agents, LLM-based log analysis, speech-to-text with speaker diarisation (AssemblyAI), embeddings and semantic search (pgvector), Retrieval-Augmented Generation (RAG), structured outputs with JSON Schema validation, prompt engineering, AI-assisted code review, AI coding assistants, workflow automation (n8n)

Software design & architecture: Microservices architecture, REST API design, object-oriented design, SOLID principles, design patterns, dependency injection, layered (N-tier) architecture, event-driven messaging (MQTT, SignalR), modular and plugin-based design, LLM application design (agent pattern)

Programming languages: C#, TypeScript, JavaScript, Python, SQL

Backend: ASP.NET Core (.NET 8, .NET 10), RESTful APIs, microservices, Entity Framework Core, SignalR, MQTT, Hangfire background jobs, ASP.NET Core Identity, FluentValidation, JWT with refresh-token rotation, BCrypt, Serilog, RFC 7807 Problem Details

Frontend & Mobile: Angular (signals, standalone components), RxJS, NgRx, Ionic, WebRTC (LiveKit), React, Next.js, Tailwind CSS, HTML5, CSS3, SCSS

Databases: Microsoft SQL Server, PostgreSQL (pgvector, full-text search), MySQL

Cloud & DevOps: Microsoft Azure, Azure DevOps, CI/CD pipelines, Docker, Docker Compose, Git, GitHub, Oracle Cloud, Vercel, Render, Neon, Cloudflare R2, networking and TLS configuration

Practices: Agile/Scrum, code reviews, integration testing (xUnit), end-to-end testing (Playwright), unit testing (Vitest), structured logging, error handling, monitoring and alerting, cross-time-zone collaboration

PROFESSIONAL EXPERIENCE

Contour Software (Constellation Software Inc.) – Lahore, Pakistan **Oct 2022 – Present**

Development team for A+W Software GmbH (Germany): ERP, production and optimization software for glass, window and door manufacturers

Software Developer **Nov 2023 – Present**

- Promoted from Associate Software Developer to Software Developer after 13 months (Nov 2023).
- **Built a custom AI chat assistant for installation support** that goes through installation log files, highlights the issues and explains the solution in plain language, so the sales team and customers can fix installation problems on the spot instead of escalating to support.
- **Applied AI across the delivery workflow:** AI-assisted code reviews on pull requests, AI support for building and maintaining CI/CD pipelines in Azure DevOps, and AI coding assistants in daily development.
- Leading development of the new Dispatch module, working with product owners and designers to define requirements and design wireframes.
- Designed and integrated a custom push-notification plugin on an MQTT broker, built as a standalone module and later embedded into the app's native code to handle background lifecycles and real-time events.
- Building module features with Angular, Ionic and ASP.NET Core, integrated with the existing backend microservices.

- Handling customer issues and enhancement requests, and coordinating with QA and DevOps on CI/CD practices and release quality.

Associate Software Developer **Oct 2022 – Oct 2023**

- Improved and maintained the microservices backend with ASP.NET Core and MS SQL Server: new features, query optimization and stable performance across multiple products.
- Developed and enhanced Angular and Ionic mobile applications, turning design concepts into clean, responsive interfaces.
- Helped create a new shared UI style library for consistent, maintainable components across the mobile app.
- Travelled to A+W headquarters in Germany to learn customer operations first-hand and gather product feedback.
- Worked daily with engineers, designers and product owners across time zones, using Agile/Scrum, Git and Azure DevOps for version control, code reviews and CI/CD.

PROJECTS

SmartMeetUp – AI Video Meeting Platform | smartmeetup.vercel.app **2026**

Angular 21, ASP.NET Core 8, SignalR, LiveKit (WebRTC), Hangfire, PostgreSQL + pgvector, AssemblyAI, Google Gemini / OpenAI-compatible LLMs, Docker

Video meetings that write their own notes. A browser-based video calling platform that turns every call into a recording, a speaker-attributed transcript, an AI summary with action items and decisions, and a searchable meeting history.

- Built one-to-one and group video calls on WebRTC (LiveKit SFU) with app-wide incoming-call ringing, adding people mid-call, in-call chat, online presence and live speaker highlighting over SignalR.
- Designed an event-driven post-meeting pipeline, triggered by LiveKit webhooks and run as Hangfire background jobs: recording to S3-compatible storage, speaker-diarised transcription (AssemblyAI), matching anonymous speakers to real participants, LLM analysis and embeddings.
- Every meeting produces an AI summary, key topics, action items with owners and due dates, decisions, speaking-time analytics and a follow-up email draft; the LLM layer is provider-agnostic (Google Gemini or any OpenAI-compatible API) and failed analyses can be retried.
- Hybrid search across all meetings combines PostgreSQL full-text and pgvector semantic search and links straight to the exact moment in a transcript, alongside an action-item tracker and meeting analytics.
- Secured with JWT refresh tokens, per-IP rate limiting and health endpoints; tested with xUnit integration tests (including the SignalR hub), Vitest and Playwright end-to-end tests that drive several browsers with fake cameras through complete calls; deployed with Docker on Vercel, Render, Neon, LiveKit Cloud and Cloudflare R2.

InsightIQ – AI Data Analysis Platform **2026**

ASP.NET Core 10, Entity Framework Core, PostgreSQL, Angular 21, OpenAI API

- Web app where users upload CSV files; it detects column types, generates bar, line and pie charts, and answers plain-English questions about the data.
- Found that sending sample rows to the LLM produced confident but wrong totals (100 of 50,000 rows); building an agent-pattern fix where the model returns schema-validated JSON that the API runs over the full dataset.
- JWT authentication with BCrypt, Serilog structured logging and RFC 7807 error responses; Angular 21 front end with signals, standalone components and an auth interceptor.

EDUCATION

BS Software Engineering (BSSE) **2018 – 2022**

Punjab University College of Information Technology (PUCIT), University of the Punjab, Lahore

CERTIFICATIONS

AI Automation: Build LLM Apps & AI Agents with n8n & APIs – Udemy **Dec 2025**

Complete A.I. & Machine Learning, Data Science Bootcamp – Udemy **Nov 2025**

LANGUAGES

English: B2, IELTS 6.5 overall (Listening 7.0 = C1) | **Urdu:** native