MUHAMMAD USMAN AL HAQ

Software Engineer | Backend & Cloud (.NET / Azure) | DevOps & Infrastructure | Computer Science Senior @ FAST-NUCES

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PROFESSIONAL SUMMARY

Computer Science senior at FAST-NUCES focused on backend and cloud engineering with .NET and Azure. Built and deployed a multi-tenant platform on Azure Container Apps with database-level tenant isolation and a gated CI/CD pipeline, and completed two remote internships in .NET and full-stack development. ICPC Asia Regionalist. Looking for a part-time or internship role in DevOps, cloud or MLOps alongside university.

TECHNICAL SKILLS

Cloud & DevOps: Microsoft Azure (Container Apps, Key Vault, Managed Identity), Bicep, Docker, GitHub Actions (CI/CD, OIDC), Hangfire, OpenTelemetry / Application Insights, Vercel, Render, Aiven
Languages: C#, C++, Python, TypeScript, JavaScript, Kotlin, Java, PHP, SQL, HTML/CSS
Backend & Frameworks: ASP.NET Core 8, Entity Framework (EF) Core, Node.js, Next.js, React, JavaFX
Databases: PostgreSQL (Row-Level Security / multi-tenant), MySQL, SQL Server, MongoDB, Firebase Firestore, SQLite, Supabase
Tools & Platforms: Git/GitHub, Postman, Linux, VS Code
Concepts: Multi-Tenant Architecture, RBAC, RESTful APIs, MVC, Parallel & Distributed Computing, OOD, Agile

PROFESSIONAL EXPERIENCE

Software Intern | MikroStarTech *July 2026 – Oct 2026 | Remote*

- Three-month .NET internship under a tech lead, working in C#, ASP.NET Core 8 and Entity Framework Core. Built ServiceDesk as the main project and deployed it on Azure.

Full-Stack Intern | Sigma Evolution *June 2026 – Aug 2026 | Remote*

- Led deployment and integration for a hospital management platform built by a remote student team (React, Node.js/Express, FastAPI, MySQL): set up the repository, connected the frontend to both backends, and deployed to Vercel, Render and Aiven. Live at careinflow.co.
- Acted as senior intern: coordinated tasks across the team, reported progress regularly, and resolved integration bugs and merge conflicts in teammates' code.
- Wrote a GitHub Actions workflow that restarts and pings the free-tier Aiven database to prevent idle shutdowns.

Web Development Intern | Kuwait Kazmah Center *June 2025 – Aug 2025 | Hawally, Kuwait*

- Rebuilt the company website (kkc.com.kw) from the ground up in WordPress and Elementor, designing every page along with the header, footer, career and contact forms, and a custom loading animation.
- Set up the company's Instagram presence and produced its first posts and reels in Canva, along with other branding and marketing graphics.
- Built bilingual (English & Arabic) feedback forms and migrated company records to Microsoft Access, with queries for faster data retrieval.

FEATURED PROJECT: CLOUD & DEVOPS

ServiceDesk: Multi-Tenant IT Service Management Platform | *ASP.NET Core 8, Next.js, PostgreSQL, EF Core, Docker, Azure Container Apps, Bicep* | GitHub

- Enforced department-level tenant isolation in PostgreSQL with Row-Level Security, driven by JWT claims through an EF Core interceptor, so isolation does not depend on application-level filters.
- Implemented JWT authentication with refresh-token rotation and reuse detection, role-based access control, login rate limiting, and an audit trail that stores before and after snapshots of every ticket and asset change.
- Built SLA monitoring with Hangfire (five-minute scans across all departments), real-time ticket updates over SignalR, and Azure Blob attachments served through short-lived SAS links.
- Set up CI/CD in GitHub Actions: Playwright and Testcontainers tests against a real Postgres, Docker images pushed to a registry, staging deploys with health checks, and production behind manual approval. Authenticates to Azure with OIDC; infrastructure is defined in Bicep with secrets in Key Vault.
- Added OpenTelemetry and Application Insights tracing to the API, and built the frontend as a static Next.js export hosted on Vercel.

OTHER PROJECTS

FastPay: Enterprise Digital Wallet & P2P Ledger Ecosystem | *Java 17, JavaFX, Next.js 14, Supabase, PostgreSQL, TypeScript*

- Built a fintech platform with a JavaFX desktop client and a Next.js 14 web portal on an ACID double-entry ledger, with JWT auth and Postgres RLS.
- Delivered virtual budget partitions, P2P/Raast fund transfers, QR payment slips, and a searchable grid of 26+ utility billers.

Hybrid CPU+GPU Co-Execution for 2D Image Convolution | *C++, CUDA, OpenMP, AVX2 SIMD, Ubuntu*

- Implemented four 15×15 Gaussian convolution variants (sequential, CUDA, AVX2+OpenMP, hybrid CPU+GPU); found a 40% PCIe transfer bottleneck.

CineBook Pro: Cinema Ticket Booking Platform | *Next.js 14, MongoDB, NextAuth.js, TMDB API, Tailwind CSS*

- Built a cinema booking platform with seat maps, role-based admin panel, and TMDB movie import; secured with bcrypt, reset tokens, and JWT.

COMPETITIONS & ACHIEVEMENTS

- ICPC Asia Topi Regionalist 2025: represented FAST Islamabad at GIK Institute, clearing the qualifying round among top teams nationwide.
- Led a tree-planting initiative with the Red Crescent Society Islamabad (70+ trees).

EDUCATION

Bachelor of Science, Computer Science | FAST-NUCES *Aug 2023 – Present | Islamabad, Pakistan*
HSSC I & II, Pre-Engineering | International School of Pakistan *2020 – 2022 | Kuwait | Score: 957/1100 (FBISE)*

CERTIFICATIONS & LANGUAGES

Certifications: Essentials with Azure Fundamentals; Develop an ASP.NET Core Web App that Consumes an API; Strategic Analysis and Solution Design
Languages: English (Full Professional), Urdu (Native), Hindi (Professional), Arabic (Elementary)