

Muhammed Aqib Shahzad (Chattha)

Software Engineer building reliable systems for financial infrastructure.

Lahore, Pakistan
hello@aqibchattha.com
aqibchattha.com
github.com/AqibChattha

SUMMARY

I work on payment processing at i2c — real-time rails, ISO-20022 message handling, distributed batch workloads, caching architecture and database performance. Systems where correctness and availability are not negotiable.

EXPERIENCE

Software Engineer, i2c Inc.

JUN 2024 – PRESENT

Full-time · Pakistan · On-site

Backend engineering on payment and billing platforms — real-time rails, high-volume batch pipelines, caching architecture and database performance. Promoted from Associate Engineer to Software Engineer.

- Improved Credit Card Payment Distribution from 30–40 minutes per execution to 6–8 minutes, through range-based processing, card-hierarchy grouping, controlled batching and bounded parallelism.
- Implemented parsing and validation for US Federal Reserve FedNow ISO-20022 messages, and documented 3,000+ parameters with valid values and semantic descriptions.
- Worked on Payment Hub, enabling network integrations for financial institutions and FinTechs across Spring Boot microservices.
- Built a pending-payment scheduler and day-end reconciliation services for payment service providers.
- Extended CCPD and bucket distribution with un-adjustment logic for near real-time payment processing.
- Implemented platform-level concerns: rate limiting, AOP cross-cutting, schema validation and centralized configuration.
- Integrated agentic AI (Intello) and IBM Watson for automated customer service and real-time AMI event handling.
- Reviewed and refactored 800+ KLOC, improving structure, maintainability and performance.
- Wrote automated tests and agent-friendly context files for large web-based modules.

Java · Spring Boot · Kafka · Redis · JCS · Informix · SQL

Senior .NET Developer, ThinkerSteps Technologies

6 MONTHS

Full-time · United Arab Emirates · Remote

Enterprise jewellery management platform — performance, architecture and new business modules.

- Cut application startup time from 30–40 seconds to 5–10 seconds by reworking lazy loading and data access.
- Reduced application size 25–30% via reusable UI components and a unified POS module.
- Implemented KYC authentication and an end-to-end manufacturing module.

C# · .NET · MSSQL · WPF

Level 2 Seller, Fiverr

3 YEARS 8 MONTHS

Freelance · Remote

End-to-end software delivery for clients across 20+ countries.

- 100% completion rate over 3 years 8 months.
- Owned full project lifecycles — scoping, delivery and client communication.

C# · .NET · Java · Python · SQL

Teaching Assistant, University of Engineering and Technology (UET), Lahore

1 YEAR

Part-time · Lahore, Pakistan · On-site

Programming Fundamentals and Object-Oriented Programming labs.

- Ran hands-on lab sessions and guided problem-solving for undergraduate students.
- Clarified core OOP concepts and helped students implement practical assignments.

C++ · Java

RECOGNITION

1st Position — Stars of the Month

2026

i2c Inc.

Release 25.12 (Engineering) · also placed in the Top Ten

Outstanding Performance Award

2025

i2c Inc. · Annual General Meeting 2025

For work on Payment Hub, Agentic AI (Intello), CCPD and Bucket Distribution

Guest speaker — engineering careers and freelancing

2025

Quaid-i-Azam University, Islamabad

SELECTED ENGINEERING

Payment Distribution Engine

30-40 MIN → 6-8 MIN PER CYCLE

A credit-card payment distribution cycle taking 30-40 minutes per execution, rebuilt around range-based processing, card-hierarchy grouping and bounded parallelism.

Java · Spring Boot · SQL · Informix · [aqibchattha.com/work/payment-distribution-engine](#)

FedNow ISO-20022 Message Handling

3,000+ PARAMETERS, SPECIFIED AND VALIDATED

Parsing and validation for US Federal Reserve FedNow ISO-20022 messages, plus the parameter specification that made the implementation reviewable.

Java · Spring Boot · ISO-20022 · XML Schema · [aqibchattha.com/work/fednow-iso20022](#)

Payment Hub — Two-Level Cache

LOCAL JCS → REDIS → DATABASE

A two-level caching architecture that cut database dependency on the hot path while keeping a single, well-defined invalidation story.

Java · Spring Boot · Redis · JCS · Kafka · [aqibchattha.com/work/payment-hub-caching](#)

Billing Invoice Engine

MASTER → WORKERS → RAW FILES

A horizontally scalable master/worker pipeline for generating large billing RAW files, designed so throughput is a function of worker count.

Java · Spring Boot · SQL · Docker · [aqibchattha.com/work/billing-invoice-engine](#)

Enterprise Desktop App — Startup and Size

30-40 S → 5-10 S STARTUP, 25-30% SMALLER

An enterprise jewellery management platform that took over half a minute to open, traced to eager loading and duplicated UI, then rebuilt around lazy loading and shared components.

C# · .NET · MSSQL · WPF · [aqibchattha.com/work/dotnet-startup-optimisation](#)

TECHNICAL SKILLS

Java · primary	Java 8 / 11 / 21 · Spring Boot · Spring Cloud · Spring Batch · AOP · REST / HATEOAS · Microservices · Concurrency
Payments	ISO-20022 · FedNow · Network integrations · Reconciliation · Idempotency
Messaging & caching	Apache Kafka · Redis · JCS · Rate limiting
Data	Informix · MS SQL Server · MySQL · Oracle · MongoDB · SQL optimization
.NET	C# · .NET Framework / Core · ASP.NET · Entity Framework · MAUI Blazor · WPF / WinForms
AI-augmented	Agentic AI integration · IBM Watson · LLM APIs · Agent context engineering · Eval & validation
Other	Python / Django · C++ · JavaScript (React / Next) · NUnit · Selenium · Git · Maven · Unix CLI · LaTeX

EDUCATION

University of Engineering and Technology (UET), Lahore — Main Campus

SEP 2020 – MAY 2024

BSc in Computer Science · CGPA 3.106

Centralised Test for IT Graduates — Rank 227, 97.0 percentile

CERTIFICATIONS

- **SQL — Basic, Intermediate, Advanced** — HackerRank
- **Introduction to Cloud Computing** — Coursera
- **Introduction to Cloud** — AWS Academy
- **SEO · Freelancing** — DigiSkills