

Muhammad Talha Atif

Full Stack Engineer

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SUMMARY

Full Stack Engineer with 2+ years of production experience building distributed backend systems, full stack web platforms, and AI-integrated applications. Delivered enterprise Identity Governance infrastructure across 8+ Spring Boot microservices with Kafka event pipelines, gRPC inter-service communication, and compliance-grade audit infrastructure. Shipped a complete production social platform on Node.js and Next.js with zero-downtime infrastructure migration. Comfortable owning features end to end from database schema to UI layer with a consistent focus on system reliability, clean architecture, and engineering correctness.

WORK EXPERIENCE

Full Stack Engineer

[Intimec via MicroTechX](#) Remote

Dec '25 – Present

Owned the Access Portal end to end across Spring Boot microservices and the Next.js dashboard, and contributed to platform-wide architecture across audit, logging, and inter-service communication on a compliance-heavy Identity Governance platform.

- Migrated synchronous service-to-service communication from REST to gRPC reducing inter-service latency by 50% across Auth, Identity, and Access Portal workflows.
- Architected the generic rule-based engine assigning roles, entitlements, and access items to identities through grouped condition evaluation with CRON and event-based scheduling.
- Refactored the audit log schema to be PII-free, restoring compliance alignment without losing forensic traceability, and resolved a Spring AOP self-invocation bypass that was silently skipping audit advice on critical methods.
- Standardised the frontend theme, color system, and shared component library across the Next.js dashboard and documented the conventions that the team now applies to every new feature, eliminating UI drift across the platform.

Full Stack Engineer

[Digital Upgraders LLC](#) Remote

Sep '25 – Jan '26

Built and maintained backend APIs and frontend features for a production social platform serving photographers, videographers, and creative professionals across web and mobile.

- Cut feed load time from 3s to 700ms by fixing query structure, indexing, payload size, and caching bottlenecks across the production feed system.
- Fixed duplicate notifications by redesigning concurrent write flows with proper database transactions, restoring consistency across the notification system.
- Resolved Android, iOS, and Safari rendering issues by tracing client-side performance bottlenecks and restoring consistent cross-platform behaviour.
- Led a zero-downtime migration from AWS to Fly.io, reworking infrastructure, CI/CD, DNS, and service configuration on a live production platform.

PROJECTS

Moodly | AI Experience Booking Platform | [Demo](#)

- Designed a multimodal emotion detection pipeline processing voice recordings and facial images through separate classification models, routing results via an async message queue to a booking recommendation engine that selects experiences based on detected mood state.
- Built RESTful backend APIs for the full booking lifecycle and a cross-platform React Native frontend with one-tap booking flows, mood visualisation components, and a voice-command interface for hosts, all connected through a real-time event-driven architecture.
- Implemented strict input validation, secure authentication, and unit-tested business logic across all backend critical paths, while enforcing TypeScript-strict component architecture on the frontend to reduce edge-case bugs in production.

Memingo | Language Learning Platform | [Demo](#)

- Identified and resolved a critical leaderboard bottleneck where rankings were recalculated on every read request, replaced with a write-time precomputed cache, reducing API response time from 30 seconds to 90ms and eliminating the drop-off on the rankings screen.
- Built 9 interactive lesson format components on the frontend and a real-time object detection module on the backend that intercepts camera frames, runs item classification, and returns vocabulary and cultural context as a single structured API response.
- Integrated a conversational AI chatbot with session-aware context management and structured output parsing, delivering personalised learning recommendations that adapt based on the learner's progression state across sessions.

SKILLS

Backend Java, Spring Boot, Spring MVC, Spring Security, Spring AOP, Node.js, Express.js, NestJS, FastAPI, Python, REST APIs, gRPC

Frontend Next.js, React.js, React Native, TypeScript, JavaScript, Tailwind CSS, Shadcn UI, Framer Motion

Architecture Microservices, Event-Driven Architecture, Distributed Systems, Kafka, RabbitMQ, WebSockets

Databases PostgreSQL, MySQL, MongoDB, SQLite, Redis, Supabase, Firebase, OpenSearch

Security JWT, OAuth 2.0, RBAC, Rate Limiting, Spring Security, Input Validation

Cloud AWS (S3, RDS, EC2), Firebase, Supabase, Dokploy, Fly.io

DevOps Docker, GitHub Actions, CI/CD, Maven, Git

Tools Postman, Swagger, Stripe, VS Code, IntelliJ IDEA

AWARDS

Runner-up, App Development Hackathon (2025)

May '25

Organized by Punjab University

Ranked, ICPC Asia Topi Online Programming Contest (2024)

Nov '24

Organized by International Collegiate Programming Contests

EDUCATION

Bachelor's degree in Computer Science, University of Management and Technology – UMT *Oct '21 – Aug '25*