

Muhammad Awais

Full Stack Developer | Scalable Web Systems

Email: awaisrasheed68@gmail.com | Phone: +92313-333-1636

Links: [GitHub](#) | [LinkedIn](#) | [Portfolio](#)

Skills

Languages: TypeScript, JavaScript, Java

Backend: Spring Boot, NestJS, Node.js, Express.js, gRPC, REST APIs, Authentication (JWT, OAuth2)

Frontend: Next.js, React.js, Tailwind CSS, TanStack Query

Databases: PostgreSQL, TimescaleDB, Redis

Infrastructure: AWS (EC2, S3), Docker, Railway, Vercel, CI/CD

Architecture: Distributed Systems, Microservices, Modular Monoliths, Event-Driven Systems

Tools: Git, Linux, Prisma, Grafana

Work Experience

Duekoo

May 2026 – Present

Founder & Lead Engineer

- Built a **production-grade language learning platform** with gamified progression and real-time user state tracking.
- Designed a **modular NestJS backend architecture** with Guards, Interceptors, and DTO-based validation.
- Engineered a **PostgreSQL schema optimized for user progress tracking and session management**.
- Implemented secure authentication using **JWT + NextAuth** with role-based access control.
- Reduced backend latency by **60% using in-memory caching and optimized data access patterns**.
- Built **event-driven workflows** for asynchronous processing (e.g., certificate generation).
- Developed a **high-performance Next.js frontend** with optimized rendering and state handling.
- Deployed and managed production system on **Railway**, handling environment and scaling configuration.

Power Bridge (PVT) Ltd

2022 – Present

Remote Web Developer

- Led development of the company's web platform using modern JavaScript frameworks.
- Collaborated with stakeholders to translate business requirements into technical solutions.
- Optimized performance based on **Core Web Vitals**, improving cross-device usability.

Freelance Software Developer

2021 – Present

Remote Full Stack Developer

- Delivered full-stack web applications for international clients using Node.js and React.
- Automated business workflows via API integrations and custom backend logic.

Featured Projects

Duekoo Web Application

[\[WebLink\]](#) | [\[SystemDesignLink\]](#)

- Production SaaS platform for structured language learning with real-time progress tracking.
- Designed and implemented a full-stack system using NestJS, Next.js, and PostgreSQL.
- Focused on scalable backend design, authentication flows, and user progression system architecture.

Project Aether - MVP

[\[WebLink\]](#) | [\[GithubLink\]](#)

- Engineered an industrial-grade, highly concurrent global network monitoring engine to track URL availability, HTTP status, and temporal latency degradations.
- Architected a dual-protocol system utilizing REST (Jakarta Validation) for user operations and a high-speed gRPC (Protocol Buffers) telemetry spine for internal worker-node communication.
- Leveraged Java Virtual Threads (Project Loom) and asynchronous HttpClient to process massive concurrent network pulses without exhausting OS-level platform threads.
- Designed a time-series data architecture using PostgreSQL and TimescaleDB Hypertables, employing Composite Primary Keys to guarantee query efficiency across millions of logs.

Patient Management System

[\[GithubLink\]](#)

- Built a **microservices-based healthcare system** using Spring Boot with clear service boundaries.
- Implemented **gRPC communication** for efficient inter-service data exchange.
- Used **Apache Kafka** for asynchronous event processing and system decoupling.
- Integrated **Redis caching** to improve performance of frequent queries.
- Containerized services using **Docker** with local and cloud deployment setups (AWS/LocalStack).

Power Bridge Web Portal

[\[WebLink\]](#)

- Developed a performance-focused corporate website with modern UI/UX principles.
- Built modular frontend architecture for scalable feature expansion.

BloomTech – Asylum Data Platform

[\[WebLink\]](#)

- Built an interactive data exploration platform for analyzing asylum case decisions.
- Implemented dynamic visualizations (charts, heatmaps) to display trends and regional insights.
- Integrated frontend with APIs to fetch and render real-time data-driven insights.
- Enabled users to export reports and datasets for external analysis.
- Migrated application to Next.js to improve performance and routing efficiency.

Education

BloomTech (USA)

Jan 2025 - Feb 2026

Full Stack Web Development Bootcamp

Completed intensive training in full-stack development (React, Node.js, APIs, databases)

Built real-world applications with focus on performance and scalability

Govt. College & University Faisalabad (GCUF)

Oct 2020 - Sep 2024

Bachelor's in Computer Science