

Abdul Rify

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SUMMARY

Backend dev with experience in Java, Spring Boot. I build REST APIs, integrate third-party APIs, and develop real-time applications with a focus on clean and reliable backend systems.

PROJECTS

PitWall – F1 Live Intelligence Platform Java, Spring Boot, React, WebSocket, Groq AI

Streamed live Formula 1 telemetry by integrating the OpenF1 API with a 30-second polling interval, broadcasting driver positions and timing data to a React frontend via WebSocket. Integrated Groq LLM to generate contextual race strategy insights during live sessions and aggregated official F1 highlights from YouTube in real time. Deployed frontend on Vercel and backend on Render – [Live Demo Link](#).

PulseFlow – Event-Driven Analytics Java, Spring Boot, RabbitMQ, Postgres, Redis, WS, React

Built a backend analytics platform that ingests events via REST API, processes them asynchronously through RabbitMQ with dead-letter queue handling, and caches real-time statistics in Redis. Implemented JWT auth, rate limiting, and paginated filtering, then streamed live updates to a React dashboard via WebSocket. Wrote unit tests for core services and validated asynchronous event processing. Fully containerized with Docker Compose for one-command deployment.

Anvil – Distributed Job Processing Java, Spring Boot, Spring Security, JPA, PostgreSQL, Redis

Built a Spring Boot job orchestration platform with JWT auth, role-based access control, and a centralized state machine enforcing job lifecycle transitions with audit logging. Used a strategy-pattern handler interface to decouple job logic from the queue/worker layer, tested with JUnit. Applied Flyway migrations and a layered controller-service-repository architecture throughout. Implemented exponential-backoff retries and a dead-letter queue to handle failed job executions gracefully.

EXPERIENCE

Backend Engineering Trainee – FlyRank AI Remote

Selected for FlyRank AI's Backend AI Engineering track, focused on AI-powered applications, backend development, API engineering, and modern software engineering practices.

Teaching Assistant – Object-Oriented Programming FAST National University

Selected by faculty to assist in an OOP course of around 50 students. Conducted sessions, helped students debug code, and graded assignments and exams over one semester.

EDUCATION

2023 – 2027 BS in Computer Science, **FAST National University**, Karachi GPA: 3.38 / 4.0

SKILLS

Programming Languages	Java, C#, C++
Backend & Web	Spring Boot, JSP/Servlets, REST APIs, React, JavaScript, HTML, CSS
Databases	MySQL, PostgreSQL, MongoDB, SQLite
Messaging & Caching	RabbitMQ, Redis
Tools & Build	Git, GitHub, Docker, Maven
Other	WebSocket

ACHIEVEMENTS

- Dean's List, FAST National University (SGPA 3.5+) – 2 semesters.