# Muhammad Zohaib Malik

#### **Technical Skills:**

Languages: JavaScript, TypeScript

Backend Technologies: Node.js, Express.js

Databases: MongoDB, Redis

DevOps & Cloud: Docker, Git, AWS (S2, S3)

#### Internship:

## DevelopersHub Corporation (Remote)

• Source Code

Backend Development Intern

- Successfully completed a six-week virtual internship focused on backend development.
- Implemented backend for an e-commerce application using Node.js and Express.js.

### **Projects:**

### File Storage

♠ Source Code

- Built a secure file storage system with user-specific directories using Node.js, Express.js, and Redis-based session auth.
- Enforced a limit of two active device logins per user via Redis session tracking.
- Integrated Google OAuth 2.0 for seamless third-party authentication.
- Used **Zod** for type-safe validation of inputs and API payloads.
- Implemented **soft and hard delete** for users and their files:
  - Soft delete flags data as inactive; hard delete removes it permanently.
- Added RBAC with Owner, Admin, and Manager roles:
  - Owner: recover soft-deleted users, hard delete any user.
  - **Admin**: logout users, soft delete only.
  - Manager: logout users only.

#### **Airline Booking**

• Source Code

- Built a scalable microservices-based backend for an airline booking system.
- Developed **Flight Service** for managing flights, routes, and availability.
- Created Booking Service for reservations and ticket management using MongoDB transactions.
- Enhanced performance with mongoose indexing.
- Used **Winston** for logging and **Zod** for request validation.
- Automated booking cancellation via a **cron job** after timeout.

#### **Education:**

PMAS Arid Agriculture University, Rawalpindi (Undergraduate)

2025