AHSAN HAFEEZ

Email | Phone | GitHub | LinkedIn

Computer Science Student — Focused on Backend & AI Systems

EDUCATION

BSCS | Dawood University, Karachi — CGPA: 3.57 (Nov 2022 – Jun 2026)
XII (Pre-Engineering) | Bahria College — 88% (2022)

DEVELOPMENT SKILLS

- Backend: Node.js, Express, Flask
- APIs & Auth: REST, JWT
- Databases: PostgreSQL, MySQL, MongoDB, Prisma
- Cloud & Storage: Cloudinary, Supabase, Render
- Containerization: Docker
- Monitoring & Logging: Winston, Morgan
- System Programming: Linux Driver Development

PROGRAMMING LANGUAGES

- **Python** — DSA Repository
- **C / C++** — Game Programming, OOP Projects
- **Java** — DSA Repository
- **Assembly** — Assembly Projects

EXPERIENCE

Flask API Developer | NRPNIC (Formaty) — Jul – Sep 2024
- Engineered a containerized document-processing pipeline that parsed HTML input, generated LaTeX code, and compiled dynamic research paper PDFs using Docker.
- Designed scalable queue-based execution handling and isolated environments for reliability and performance.

Java Developer | Arcana Info — Aug – Sep 2024
- Developed multiple projects ranging from core Java to Spring Boot microservices, integrating MySQL and secure REST APIs.

PROJECTS

Cognisite (In Progress)
Technologies: Python, LangChain, LangGraph, Docker, Next.js, Prisma, GCP
Description: AI-powered website builder that generates full-stack applications from prompts, designs, or URLs. Uses multi-agent orchestration, and automated CI/CD deployments to AWS, Render, or Vercel.

EduMarket – Multi-Instructor Course Platform
Technologies: JavaScript, Node.js, Express.js, Prisma, Supabase, Stripe, Next.js, Cloudinary, JWT, BullMQ
Description: Full-stack marketplace supporting instructor onboarding, course creation, assignments, quizzes, certificates, and course recommendations. Built scalable notification queues, bulk upload handling, and interactive dashboards.

VideoTube – Video Streaming Backend
Technologies: JavaScript, Node.js, Express.js, MongoDB, Cloudinary, ffmpeg, JWT, Winston, Morgan
Description: Scalable video streaming backend supporting adaptive HLS encoding, playlists, likes, comments, and subscriptions. Built community feed APIs using aggregation pipelines for recommendations and pagination.

Health Harbour – Android App
Technologies: Java, SQLite
Description: Healthcare app providing e-services for medicine orders, lab test booking, and doctor consultations with offline caching and optimized database access.

NetProto – Android App
Technologies: Java, SQLite
Description: Movie discovery platform with categorized listings, detailed view pages, and local data storage using SQLite for performance optimization.