Muhammad Ibtesam

Backend Developer | Fintech & AI Systems
Islamabad, Pakistan

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Professional Profile

Backend-focused Computer Science student with experience in designing secure REST APIs, authentication systems, and AI-integrated backend services. Strong understanding of databases, scalable architectures, and production-ready system design. Interested in fintech systems and high-availability backend platforms.

Technical Expertise

Backend Development: FastAPI, Flask, Django, REST APIs
Security: JWT Auth, RBAC, Secure File Handling
Databases: MongoDB (GridFS), MySQL
Cloud & DevOps: AWS, Docker, Git, CI/CD
AI Integration: LLM APIs, Legal-BERT, Hugging Face Inference, TensorFlow
Programming: Python, C++

Professional Experience

Software Engineering Intern – Backend & AI Systems   Jul 2025 – Sep 2025
Eligence, NSTP, Islamabad

- Engineered secure REST APIs for an Online Dispute Resolution (ODR) platform.
- Designed JWT-based authentication and session management.
- Integrated AI-based recommendation engine using Legal-BERT embeddings.
- Implemented document processing pipeline with MongoDB GridFS and OCR.

AI & Backend Intern   Jul 2024
AIyin Inc (Remote)

- Developed FastAPI services supporting AI-powered features.
- Integrated model inference workflows into backend systems.
- Improved endpoint performance and reduced response latency.

Key Projects

Online Dispute Resolution (ODR) Platform
Fintech platform for dispute case management with AI-assisted settlement suggestions. Built secure APIs, JWT authentication, and MongoDB GridFS file handling.

AI Legal Chatbot
LLM-powered chatbot answering legal contract queries using Flask backend and Python integration.

Image Watermarking System
ML application for detecting, adding, and removing image watermarks for content protection.

File Compression Utility
C++ implementation of Huffman Coding algorithm for efficient file compression and storage optimization.

Language Translator Web App
Streamlit-based multilingual translator integrated with Google Translate API for real-time translations.

Education

BS Computer Science   2022 – 2026
National University of Sciences & Technology (NUST), Islamabad