

# 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