

Muhammad Ammar Riaz

ammarriaz736@gmail.com | github.com/AmmarRiaz123 | +92 327 6536621

EDUCATION

Ghulam Ishaq Khan Institute (GIKI)

B.Sc. in Artificial Intelligence, 2nd Year

Topi, Pakistan

Oct 2022 – Present

PROJECTS

Autonomous Stock Forecasting MLOps Platform | *Next.js, FastAPI, Prefect, Hugging Face* Jan 2026 – Present

- Engineered an end-to-end MLOps pipeline using **Prefect** to automate data ingestion, model retraining, and deployment
- Developed a professional monitoring dashboard using **Next.js** and **FastAPI** to visualize data drift and model health
- Implemented an automated champion/challenger evaluation system that promotes the best-performing model (LSTM vs Transformer) to production based on live accuracy metrics
- Integrated **Slack webhooks** for real-time alerting on training failures or significant forecast deviation

Peky.pk – E-Commerce Website for Aluminum Foil | *Flask, Next.js, PostgreSQL* Jul 2025 – Aug 2025

- Developed a full-stack e-commerce platform for purchasing aluminum foil, collaborating with one teammate
- Implemented backend API using Flask and managed PostgreSQL database hosted on Railway
- Built secure authentication and user management with AWS Cognito, including login, registration, and session handling
- Integrated payment processing, order handling, and ensured secure transaction flows
- Coordinated with Next.js frontend to create seamless user experience for login, product browsing, and checkout

Football Manager DBMS App | *Flask, PostgreSQL, Supabase, Firebase* Mar 2025

- Created a full-stack football team manager web application with data on players, matches, injuries, and transfers
- Designed and hosted the PostgreSQL database on Supabase with a real-time backup on Firebase
- Built dynamic frontend using HTML, CSS, and JavaScript, and implemented Flask-based RESTful backend
- Supported full CRUD functionality with undo operations and separate views for coaches, players, and admins

Roman Numeral Classifier | *Python, TensorFlow, CNN, OpenCV* Apr 2025

- Built a CNN to classify handwritten Roman numerals from I to X
- Preprocessed images using OpenCV and trained the model using TensorFlow/Keras
- Deployed and tested the model with real-time predictions

Drone Path Planning System | *Python, A*, matplotlib, Tkinter* Feb 2025

- Implemented 3D path planning using the A* algorithm to find shortest paths through obstacles
- Used matplotlib and mpl_toolkits.mplot3d for interactive 3D visualization of routes

EXPERIENCE

SiberKoza / 3FT — Blockchain Voting System

Backend Intern

NASTP-Rawalpindi

Jun 2025 – Aug 2025

- Developed Flask-based backend APIs for an anonymous blockchain voting platform
- Implemented CNIC verification by using OCR to extract and cross-validate identity data
- Integrated deep-learning facial recognition pipelines for face-CNIC matching
- Worked in a small team building secure multi-step authentication workflows

Association for Computing Machinery (ACM), University Chapter

Member and Event Organizer

Topi, Pakistan

Oct 2022 – Present

- Helped organize two ICPC programming contests and an International Coding Competition
- Organized a Speed Programming Competition to promote quick algorithmic thinking
- Coordinated SoftCom, an ACM-run event with hackathon and Capture The Flag (CTF) modules
- Managed planning and logistics for hackathon and CTF cybersecurity challenges

TECHNICAL SKILLS

Languages: Python, C/C++, Java, JavaScript, SQL (PostgreSQL), HTML/CSS

Frameworks: FastAPI, Flask, Next.js, TensorFlow, Keras, Prefect

Tools: Git, Docker, Supabase, Firebase, Hugging Face, AWS Cognito, OpenCV, pandas