

# Rai Tabish

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## Skills

- Python | Java | C++ | Solidity | Go | SQL | Bash | HTML | CSS | FastAPI | React | Node.js | Express | Unity | ASP.NET
- PyTorch | OpenCV | Llama (2/3) | LangChain | Agentic AI | Deep Learning | NLP | GenAI | Statistical Modeling | Unsupervised Learning | PyMC3 | MLOps
- Docker | Git | CI/CD | Airflow | AWS | Azure | Web Scraping | OpenAI APIs | ETL Pipelines | Figma | Oracle | MongoDB | Neo4j | NoSQL | Blockchain | Kali Linux | OOP | Unit Testing
- English | Urdu | Punjabi

## Work Experience

### AI Developer

Technetium Labs, Islamabad

01/2025 - Present

- Working as an AI Developer focused on diffusion models, building robust AI pipelines, using Docker for scalable deployment, and developing FastAPI endpoints to integrate features into large-scale applications.

### Technology Program Intern

Knodemy, Islamabad

09/2024 - 01/2025

- **Designed, Developed, and Deployed** an in-house Learning Management System using the MERN stack (MongoDB, Express.js, React, Node.js) and AWS services, worked on automating the lecture delivery with AI avatars and integrating custom LLM.
- **Collaborated with students** to identify and address distractions by integrating a compiler and Scratch programming environment, thereby improving user engagement and the overall learning experience.

### CS Lab Demonstrator

FAST-NUCES, Islamabad

01/2022 - 03/2023

- **Conducted and managed** weekly lab sessions for over 50 students in the **Programming Fundamentals** (C++) course, ensuring a strong grasp of core programming concepts in a **Linux** environment.
- Received consistently positive feedback for **communicating complex topics** and providing **personalized support** — as a result, was invited to continue in the Fall session.

### Computer Vision Engineer

AVVA Dynamics, California

03/2023 - 01/2024

- **Designed and Developed an Advanced Surveillance System** integrating thermal cameras, telescopes, and standard cameras using OpenCV, and implementing object detection using YOLO.
- **Led a development team** for the Coin612 camera project, coordinating the seamless integration of hardware and software components. Ensured project milestones were met on time, resulting in a robust and reliable surveillance solution.

## Education

### Bachelor of Computer Science

FAST NUCES

Islamabad, Pakistan

09/2021 - 05/2025

## Projects

### DataKaleidos: GraphRAG for Data Exploration (FYP)

[LinkedIn](#)

06/2024

- Automated the creation of a dynamic knowledge graph using Llama 3, built a multi agentic system to scrape and generate useful data for LLM to generate knowledge graphs in Neo4j.
- Built a scalable ETL pipeline leveraging Apache Airflow to automate data extraction, transformation, and loading, streamlining data integration.
- Developed GraphRag to provide natural language querying capabilities, with the knowledge graph serving as its core data backbone.

### Multi-agent Customer Support Automation

[LinkedIn](#)

03/2024

- Developed an AI-powered customer support pipeline using CrewAI, integrating task-based agents for inquiry resolution and quality assurance.

<b>Blockchain Assistant</b>	<a href="#">GitHub</a>	11/2024
<ul style="list-style-type: none"> <li>Developed a lightweight, CPU-optimized assistant using a quantized Llama 2 model. The model is fine-tuned on a Blockchain book to answer domain-specific questions efficiently on devices without GPU support.</li> </ul>		
<b>CarKho</b>	<a href="#">GitHub</a>	04/2024
<ul style="list-style-type: none"> <li>Developed a car advertisement comparison platform using React that aggregates listings from multiple sources, allowing users to view and compare all available options in one place.</li> </ul>		
<b>SocioSphere: Society Management System</b>	<a href="#">GitHub</a>	12/2022
<ul style="list-style-type: none"> <li>Engineered an interactive Society Management System with ER diagrams, using SQL, Oracle, ASP.NET, CSS, and HTML.</li> <li>Integrated robust database concepts and advanced web programming to optimize society management and administration efficiency, following established design patterns.</li> </ul>		
<b>Real-time Image Detection and Recognition</b>	<a href="#">GitHub</a>	03/2024
<ul style="list-style-type: none"> <li>Built a real-time face detection and recognition system using OpenCV and face_recognition, capable of identifying known faces from webcam input.</li> <li>Optimized performance with frame resizing and dlib's HOG-based model, with optional GPU-accelerated CNN support for enhanced accuracy.</li> </ul>		

## Activities & Achievements

- Volunteer:** Assisted Knodemy in delivering computer lessons to underprivileged students in remote areas of Pakistan. (09/2024-01/2025)
- Dean's List - FAST NUCES, Islamabad (Spring 2025)**
- Organizer:** Led the organization of the 2023 university orientation for the incoming batch. (10/2023)
- Best Bait Bazi:** Awarded by Bazm-e-Paigham, Rawalpindi, with over 50+ colleges participating. (01/2019)
- Best Urdu Debater:** Inter-college competition on the topic "Education Builds the Nation." (05/2013)
- Head of Sponsorships- FAST Computing Society:** Led the sponsorship team for computing events and coordinated with companies for event collaborations. (01/2022-08/2023)
- Head Urdu- FAST Literary Society:** Oversaw the planning and execution of Urdu literature events. (08/2021-06/2023)

## Certifications

<b>AWS Essentials Specialization</b>	<u><a href="#">Amazon Web Services (AWS)</a></u>	In Progress
<b>Generative AI with LLM</b>	<a href="#">Coursera</a>	02/2025
<b>Machine Learning Specialization</b>	<a href="#">Stanford</a>	In Progress
<b>Understanding Microsoft Azure</b>	<a href="#">DataCamp</a>	08/2024
<b>Neo4j Fundamentals</b>	<a href="#">GraphAcademy</a>	08/2023
<b>Intermediate SQL</b>	<a href="#">DataCamp</a>	07/2024
<b>Google AI essentials</b>	<a href="#">Google</a>	04/2024
<b>Multi AI agents</b>	Google	04/2024