Muhammad Hassan

+92-335-1647331 • h.m241202@gmail.com • LinkedIn • Github

Education

National University of Technology	Islamabad, Pakistan
Bachelor of Engineering (Computer Engineering)	**2022-2026**
Concept College of Sciences	Rawalpindi, Pakistan
Intermediate (Pre-Engineering)	**2019 - 2021**

Professional Experience

National Engineering and Scientific Commission (NESCOM)	Islamabad, Pakistan

Pakistan's leading R&D organization in defense, robotics, and autonomous systems.

AI & Robotics - Intern	**July 2025 - Sep 2025**

- Worked on an autonomous UGV integrating ROS, LiDAR-based SLAM, and YOLOv8 computer vision for object detection and navigation.

Tech GIS PVT LTD	Islamabad, Pakistan

Geospatial solutions provider specializing in GIS data processing and spatial analytics.

AI Automation Engineer - Full Time	**July 2025 - Present**

- Develop AI-powered automation solutions, including real-time voice chatbots, RESTful APIs, and workflow orchestration using n8n, alongside 3D mapping and SLAM-based hardware projects.

LANCERS SOFTWARES PVT LTD	Rawalpindi, Pakistan

Leading software solutions provider specializing in web, mobile, and cloud technologies in Pakistan.

Backend Developer - Part Time	**Dec 2024 – July 2025**

- Developed and maintained the backend for a mobile application using Node.js, Express, and SQL databases.
- Implemented RESTful APIs, user authentication, notification systems, and robust middleware for secure and efficient operations.

AMAL ACADEMY	Rawalpindi, Pakistan

Education startup funded by Stanford University that teaches professional skills to students.

Career-Prep - Fellowship	**April 2024 – June 2025**

- Selected from 4,500+ applicants for Stanford-funded 3-month Amal Academy Fellowship to develop communication and leadership skills.

Projects

Trash Segregation UGV

Developed an autonomous trash segregation UGV as part of the ICAT Project at NUTECH.

Team Leader	**June 2024 – August 2024**

- Developed an autonomous UGV for trash detection using YOLOv8 and OAK-D, with a 5-DOF arm for waste sorting into categorized bins. Integrate ESP32, Raspberry Pi, and ROS for real-time control, perception, and system coordination.

AI Based Smart Attendance System

Developed a real-time facial recognition–based attendance system.

Solo Developer	**Dec 2024 - Jan 2025**

- Used YOLOv8 for face detection and ResNet (Keras-OpenFace) for face recognition, with automated face cropping and storage.

Certifications and Online Courses

COURSES

- Artificial Intelligence Program – PIAIC –Air University, Islamabad.	**Aug 2024 - Present**
- Mathematics for Machine Learning Specialization - Coursera	**April 2025 - Present**
- Introduction to HTML – Coursera	**April 2024**
- Introduction and Programming with IOT boards	**May 2023**

Skills

- **Frameworks:** Node JS , Express JS , React JS , FastAPI , Flask
- **Database:** MySQL , PostgreSQL , Redis
- **Languages:** Python , JavaScript , C++