Muskan Aman

Electrical Engineer

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Electrical Engineering graduate (2026) specializing in deep learning for medical imaging. Built an EfficientNet-B3 hemorrhage detection pipeline achieving 97.4% AUC and 99.2% sensitivity on a local Pakistani CT dataset. Strong foundation in ML mathematics and optimization. Seeking a junior AI/ML role in healthcare technology.

EDUCATION

BS Electrical Engineering

Namal University, Mianwali

2022 - 2026 | 3.41

Courses

- EE-345 - Digital Signal Processing
- EE-475 - Introduction to Machine Learning
- MTH-123 - Linear Algebra I

SolarSync: IoT-Based Real-Time Microgrid Monitoring

EE-455 - Internet of Things

WORK EXPERIENCE

Junior Research Assistant

Center of Big Data and Artificial Intelligence

2024 - 2025

Role

- Maintained a centralized database of prospective partners, tracking engagement status and key contact details.

SKILLS

Python | C/C++ | PyTorch | TensorFlow | Scikit-learn | Pandas | Numpy | HuggingFace Transformers | OpenCV | Linux

PROJECTS

Assistive Brain Hemorrhage Detection for Early Diagnosis | Final Year Project

Role

Developed an EfficientNet-B3 pipeline for multi-label hemorrhage detection on CT scans, deployed as a low-cost clinical decision support solution in Pakistani government hospitals.

2025 - 2026

Achievements

- Achieved **97.4%** AUC and **99.2%** sensitivity on local Pakistani CT dataset; reduced false negatives from **29.2%** to under **2%**.
- Outperformed Wang et al. (2021) on sensitivity (**99.2%** vs **95.0%**).
- Deployed as low-cost clinical decision support for resource-constrained Pakistani government hospitals.

ORGANIZATIONS

Khwarizmi Science Society

Science Demonstrator

CERTIFICATES

Linear Algebra for Machine Learning and Data Science

DeepLearning.AI, Coursera

2025