

Adeel Shahbaz

AI & NLP Engineer | Computer Vision | Generative AI

Rawalpindi, Pakistan | National Skills University, Islamabad

+92 347 3524310

wespreadelitenes@gmail.com

PROFILE

I am an AI & NLP Developer with a strong focus on building intelligent systems and solving complex computational challenges. My expertise spans across Machine Learning, Computer Vision, and Natural Language Processing, transforming raw data into impactful technological solutions.

My work revolves around developing innovative AI applications, ranging from real-time object detection systems like Sentinel Vision to end-to-end ML pipelines for predictive analytics. I also have deep experience in curating specialized datasets (such as LORU-ED) and deploying robust models to ensure high accuracy and performance. My ultimate goal is to leverage artificial intelligence to drive data-driven decision-making and create cutting-edge automated solutions.

EDUCATION

Bachelor's in Computer Science - Specialization: Artificial Intelligence

National Skills University, Islamabad, Pakistan | Sep 2023 - May 2026 (Ongoing)

NAVTTTC-AI (ML, DL & Communication)

AI Skill Bridge, Islamabad | Ongoing

TECHNICAL SKILLS

Languages	Python, C++ (Android deployment via Python-to-Kotlin port)
AI/ML	PyTorch, ONNX Runtime, scikit-learn, Hugging Face Transformers, Generative AI
NLP	Roman Urdu NLP Toolkit (first-of-its-kind), fastText, Custom Regex NER, Levenshtein Fuzzy Matching
Vision	YOLOV8/ Ultralytics, OpenCV, Kalman Filtering
Robotics	ROS, Gazebo, PX4, Raspberry Pi

PROJECTS

KhudiChat — Roman Urdu NLP Toolkit & Event Detection Pipeline

- Addresses a complete gap in Roman Urdu NLP tooling
- Dual-language routing via fastText; fully offline on-device Kotlin port
- Integrated with MobileBERT (ONNX Runtime) for English event detection

SentinelVision — AI-Powered Human & Drone Detection

- Real-time detection & tracking using YOLOv8 and OpenCV
- Multi-target tracking with trajectory prediction using DeepSORT & KalmanFiltering

LORU-ED - Roman Urdu Dataset for Event Detection

- First labeled Roman Urdu corpus for event detection NLP tasks.

Comparative Study: Loan Prediction

- multiple ML classifiers (Logistic Regression, Random Forest, SVM, XGBoost).

WORK EXPERIENCE

AXI Technologies — Trainee | AI / Machine Learning

Islamabad, Pakistan

- Hands-on training in AI/ML model development and deployment pipelines covering computer vision and generative AI.

AI Skill Bridge — Trainee | NAVTTTC

Islamabad, Pakistan