

RAHUL KUMAR

Junior AI Engineer

Karachi, Pakistan | 932004rahul@gmail.com | linkedin.com/in/rahul-maheshwari932004 | github.com/RahulAi2004

SUMMARY

3rd-year AI undergraduate at SZABIST with hands-on experience building end-to-end ML pipelines, autonomous agents, and computer vision systems. Strong in Python, YOLOv8, RAG, and multilingual NLP. Elected Program Representative for the BS AI department; seeking a Junior AI Engineer role to apply expertise in LLMs, Computer Vision, and AI automation pipelines.

PROFESSIONAL EXPERIENCE

AI Automation Engineer | Technocas, Karachi

April 2026 – Present

- Engineered an automated project-management workflow within Wekan, eliminating manual task tracking and streamlining internal team operations.
- Architected and deployed an automated CRM system, minimizing human intervention across customer data pipelines.
- Designed serverless automation pipelines with LangChain and Zapier to ingest unstructured documents and trigger downstream API actions.

Selected Trainee | NAVTTC PMYSDP — Hosted at IBA Karachi

February 2026 – Present (3-Month Fully Funded Residency)

- Selected for intensive 3-month diploma in AI; applied coursework in CNN/RNN/ANN, MLOps, and production-grade deployment under IBA mentorship.

EDUCATION

Bachelor of Artificial Intelligence (BSAI) | SZABIST University, Karachi

Sep 2023 – 2027 (Expected) | Major: Data Science & AI Engineering | CGPA: 3.34

TECHNICAL PROJECTS

ZabLens — AI-Powered AR Indoor Navigation System | 1st Place & ML Comp Winner, ZabFest 2026

- Architected an end-to-end AR indoor navigation system for SZABIST 100 Campus combining fine-tuned **DINOv2 ViT-B/14** (98.3% test accuracy, 13-class custom dataset), **FAISS** vector search, **A* pathfinding**, and gyroscope AR overlay — integrated with **ZabGPT**, a campus RAG chatbot using ChromaDB + Groq Llama 3 for grounded query answering.

YOLOv8 Object Detection — IBA × Duality AI | Winner

- Engineered a custom YOLOv8 model for a simulated space-station dataset, achieving **mAP50 = 0.8675** with real-time inference via data augmentation and hyperparameter tuning.

Multilingual Smart Clinic AI — GDG Kolachi Hackathon

- Built a voice-enabled multilingual agent (Sindhi, Pashto, Urdu, English) with an ASR → LLM → TTS pipeline and safety checks; reduced system failures by **15%** during real-time inference.

Khifit — Gamified Fitness Application

- Engineered a gamified mobile fitness application promoting consistent health habits through challenge mechanics, streaks, and AI-personalized workout recommendations tailored to user activity patterns.

TECHNICAL SKILLS

Languages: Python (Advanced), SQL

AI/ML & GenAI: CNN, RNN, ANN, YOLOv8, Transformers, RAG, Agentic AI, FLAN-T5, Multilingual Chatbots, Prompt Engineering

Frameworks & Tools: NumPy, Pandas, Scikit-learn, PyTorch, LangChain, AutoGPT, Zapier

MLOps: CI/CD Pipelines, Data Preprocessing, Model Training & Validation, Hyperparameter Tuning, Feature Engineering

Domains: Computer Vision, NLP, Speech (ASR/TTS), Time-Series Classification

ACHIEVEMENTS & LEADERSHIP

- 1st Place & ML Competition Winner — ZabFest 2026 (SZABIST):** Awarded top position for ZabLens (AI-powered AR campus navigation system).
- Runner-Up, Evolve'25 Hackfest (AI/ML):** Built a customer-propensity model on 11M+ records achieving AUC 0.8793.
- Winner, Object Detection Challenge (IBA × Duality AI):** Custom YOLOv8 model, mAP50 = 0.8675.
- Program Representative (PR), BS AI, SZABIST:** Elected liaison between faculty and 100+ AI students; drives curriculum feedback and department-wide initiatives.
- Brand Ambassador, DataCrumbs:** Onboarded 300+ students into a specialized AI learning community through targeted outreach.

CERTIFICATIONS

- Python for Data Science, AI & Development — IBM (Aug 2025) • CI/CD — DataCamp (Jul 2025)
- Google Data Analytics — Google • Machine Learning Specialization — DeepLearning.AI
- In Progress:* Agentic AI with Python & Generative AI — Vanderbilt University • Agentic AI — Panaversity

LANGUAGES

English (Fluent) • Urdu (Native) • Sindhi (Conversational)