ADEEL IQBAL

AI/ML Engineer | Data Scientist

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GitHub | LinkedIn | Portfolio

EDUCATION

Bachelor of Electrical Engineering
Quaid-e-Awam University of Engineering, Science & Technology — Jan 2014 - Feb 2018

Intermediate (Pre-Engineering)
C&S Degree College — May 2011 - Aug 2013

CERTIFICATIONS

Artificial Intelligence & Data Science
Saylani Mass I.T. Training — Feb 2025 - Dec 2025

Agentic AI
Saylani Mass I.T. Training — Sept 2025 - Present

EXPERIENCE

AI/ML Intern
SaylaniTech — Nov 2025 - Present

SKILLS

- **Programming Languages:** Python
- **Libraries & Frameworks:** Pandas, NumPy, SciPy, Matplotlib, Seaborn, Scikit-learn, FastAPI, Flask, Streamlit, Gradio
- **Machine Learning & AI:** Machine Learning (ML), Deep Learning (DL), Natural Language Processing (NLP), Computer Vision, TensorFlow, Keras, PyTorch, OpenCV, SpaCy
- **GenAI & Automation:** Transformers, LLMs, n8n, LangChain, RAG Pipelines, Vector Databases, Generative AI
- **Databases & ORMs:** PostgreSQL, SQLite, SQLAlchemy, Supabase, Pinecone
- **Tools & Platforms:** Git, GitHub, AWS, Docker, Hugging Face, Vercel, Power BI, Kaggle, Jupyter Notebook, Google Colab, VS Code, Cursor, Antigravity

PROJECTS

Self-Driving Vision Core | Link

- Built real-time autonomous driving perception system using YOLOv8n-seg for road segmentation and YOLO11n for vehicle detection achieving 47.8% mAP@50 with 15ms inference time.
- Developed dual-model pipeline processing images, videos, and live camera feeds with CUDA-accelerated GPU inference and blue mask overlay visualization.
- Deployed production-ready FastAPI backend with REST endpoints supporting multiple input modes and interactive Swagger documentation for easy integration.

Next Word Predictor | Link

- Built text prediction system using recurrent neural networks achieving 50.9% accuracy with 2,783-word vocabulary for contextual word suggestions.
- Designed complete NLP pipeline handling text preprocessing, tokenization, sequence padding, and 50-dimensional word embeddings for semantic representation.
- Implemented model persistence with saved weights and tokenizer enabling real-time predictions with sub-second response time for production use.

AI CV Screening Agent | Link

- Automated recruitment workflow using n8n and OpenAI GPT-4o-mini processing job applications 24/7 with AI-powered candidate scoring (0-10) and experience validation.
- Built end-to-end pipeline integrating Gmail API, Google Drive API, and Google Sheets with automated PDF text extraction and intelligent job matching.
- Designed multi-position support system providing detailed candidate reasoning, requirement checking, and organized data management for HR teams.

Brain Tumor Detector | Link

- Developed medical imaging system using YOLO11n and SAM2 (Segment Anything Model 2) detecting brain tumors across 4 classes achieving 81.6% mAP@50 with 78.6% precision.
- Implemented two-stage pipeline combining YOLO11n object detection with SAM2 instance segmentation for precise tumor boundary delineation achieving 375ms inference time.
- Deployed interactive Streamlit application displaying confidence scores, bounding boxes, and color-coded segmentation masks with downloadable annotated results.

Face Denoiser | Link

- Trained CNN-based autoencoder with encoder-decoder architecture achieving 0.0013 MSE validation loss for removing Gaussian noise from facial images.
- Designed deep learning model with 333,955 parameters using convolutional layers, max-pooling, and upsampling achieving sub-100ms inference time with 1.27MB model size.
- Deployed Gradio web application on HuggingFace Spaces with instant processing and side-by-side comparison interface for uploaded images.

Spotify Music Recommendation System | Link

- Built a hybrid content-based recommendation system combining audio features similarity with popularity scoring, achieving fast real-time inference.
- Implemented advanced preprocessing with MinMax scaling and one-hot encoding, using cosine similarity for personalized music suggestions.
- Deployed an interactive Streamlit app with Spotify-inspired UI, featuring embedded track players and smart duplicate filtering.

PORTFOLIO & LINKS

- **Portfolio:** portfolio-adeeliqbal.vercel.app
- **GitHub:** github.com/adeel-iqbal
- **LinkedIn:** linkedin.com/in/adeeliqbalmemon

PERSONAL DETAILS

- **Location:** Karachi, Pakistan
- **Languages:** English, Urdu
- **Availability:** Intermediate