

ARTIFICIAL INTELLIGENCE ENGINEER · DATA SCIENCE EXPERT

King Abdullah Bin Abdulaziz Rd., 12445, Riyadh

□ (+966) 53-9935-783 | Sahmad786.writes@gmail.com | Aahmad786writes.github.io | Inahmad786writes | Inahmad786-writes

"Between noise and pattern, I find meaning. Between data and code, I build purpose."

Summary

Data Scientist & Al Engineer based in Riyadh with 3+ years of experience in NLP, LLMs, and Computer Vision, with expertise in GPT, BERT, and transformer-based architectures. Skilled in data mining, machine learning, and deploying models on AWS and GCP. Proven ability to fine-tune and scale Al systems using Python, TensorFlow, PyTorch, and MLOps tools, delivering business impact through risk modeling, fraud detection, automation, and analytics in real-world applications.

Education

GIFT University

Gujranwala, Pakistan

BACHELOR'S OF SCIENCE IN COMPUTER SCIENCE

2019 - 2023

- **Related Coursework:** Machine Learning, Artificial Intelligence, Natural Language Processing, Data Structures and Algorithms, Database Systems.
- · First Position in Final Year Project, received funding from Ignite for project development

Work Experience _____

Devster LabsIslamabad, Pakistan

ARTIFICIAL INTELLIGENCE ENGINEER

May. 2024 - Nov. 2024

- Developed and deployed AI chatbots that automated 70% of routine support queries, leading to a 15% boost in response efficiency and reducing customer support costs by 10%.
- Fine-tuned GPT-4 using QLoRA for domain-specific tasks; integrated with vector DBs (FAISS) for fast retrieval in RAG pipelines.
- Implemented CI/CD pipelines for ML models, enabling automated retraining and real-time performance monitoring with MLflow/Kubeflow.
- Optimized transformer models with quantization and multi-GPU on GCP, reducing latency by 15%.
- Optimized audio processing models for Sound Event Detection Systems, reducing processing time by 3%.
- Deployed Al-driven weapon and anomaly detection systems in real-world environments, leading to a 40% reduction in violence-related incidents.

GIFT University

Gujranwala, Pakistan

RESEARCH ASSISTANT & TENSORFLOW DEVELOPER

Feb. 2023 - Present

- Trained GAN sketch-to-image model on GPU, optimized for CPU/GPU deployment; achieved 80% accuracy beating benchmarks.
- Built risk prediction models with 85% accuracy, enabling early detection of defaults in academic finance studies.
- Developed a deep learning model using CNNs to analyze satellite imagery, achieving 85% accuracy in identifying poverty-stricken regions, and aiding in resource allocation for underserved areas, which helps targeted support and policy planning.
- Engineered and optimized zero-shot, few-shot, and chain-of-thought prompts for LLMs, as demonstrated in projects like TailorMade-AI and Multi-agent-Customer-Support-Automation, enhancing AI-driven decision-making and user interactions.

CodSoft Kolkata, India

MACHINE LEARNING INTERN - REMOTE

Oct. 2023 - Nov. 2023

- Used ResNet-based encoder and custom decoder for image captioning and explored YOLOv5 for object grounding.
- Boosted recommendation CTR by 25% via collaborative filtering, improving engagement on deployed platforms.
- Integrated machine learning models like ChatGPT, Dall-E, Gemini and others into real-world applications using Flask REST APIs for seamless web application interaction.
- Optimized data pipelines and preprocessing for sound event detection, improving real-time classification accuracy on GCP.

Publications

25th International Conference on Digital Image Computing: Techniques and Applications

Perth, Australia

LOCALLY-FOCUSED FACE REPRESENTATION FOR SKETCH-TO-IMAGE GENERATION USING

Noise-Induced Refinement

2024

• This paper introduces a novel approach for sketch-to-image generation, focusing on localized face representation with noise-induced refinement to enhance visual accuracy and realism.

International Conference on Innovation in Artificial Intelligence and Internet of Things

Jeddah, Saudi Arabia

LOCALLY FOCUSED MULTI-LEVEL FEATURES-BASED FRAMEWORK FOR POVERTY ESTIMATION

Submitted for Publication 2025

• This study proposes a novel multi-level feature extraction, fusion, and dual-attention mechanism framework for poverty estimation via satellite imagery.

3rd International Conference on Energy, Power, Environment, Control and Computing

Gujranwala, Pakistan

SKETCH TO IMAGE SYNTHESE: HARNESSING DEEP LEARNING TECHNIQUES FOR REALISTIC VISUAL

2025

TRANSFORMATION

• Proposed a deep learning solution to transform black-and-white face sketches into realistic color images, addressing challenges in suspect identification. Submitted this work for AI applications in law enforcement.

Projects

Human Sketch-to-Face Conversion

2023

- Tech used: Python, Pytorch, GANs, CNN, Autoencoders
- Built a GAN-Autoencoder to convert sketches into realistic faces.

RAG-based Conversational AI Chatbot for Financial Advisory

2024

- Tech: Python, TensorFlow, Hugging Face, LangChain, OpenAl, CrewAl, AutoGen
- Developed a RAG-based chatbot for fintech, enhancing support efficiency—transferable to insurance customer service.

KnowYour.Al Company Intelligence Platform

2025

- Tech used: Python, CrewAl, LangChain, Groq, Chain-Of-Thought Prompting, FAISS
- Built CrewAl agents for autonomous company profiling and summarization, powering KnowYour.Al with a cross-functional team.

Watch2Give - AI-Powered DeFi Ecosystem

2025

- Tech used: LangGraph, OpenAl, Groq, Few Shot Prompting
- Developed LangGraph agents for donation routing, staking logic, and image validation in a gamified cross-chain platform.

Other Projects 2024

- Tech used: Python, Sci-kit learn, Pandas, Numpy, PyTorch, TensorFlow, CNN, RNN, SQL, Plotly
- Developed and implemented a variety of machine learning models, including:
 - Image Segmentation using U-net, FCN-8 architecture
 - Built a lightweight keyword spotting model using TensorFlow Lite for Microcontrollers.
 - Recommendation systems for personalized content delivery, resulting in a 5% enhancement in recommendation accuracy.
 - Time-series forecasting for stock price prediction.
 - Transformer Models for Language Translation.

Skills & Interests

Programming Languages Python, Java, C, C#, SQL, LaTeX

ML and DL Algorithms Supervised, Unsupervised, Reinforcement, CNN, RNN, LSTM, Transformers, GAN, Autoencoders

Natural Language Processing Tokenization, POS tagging, NER, Classification, Word2Vec, BERT/GPT, Hugging Face, SpaCy, NLTK Computer Vision Image Classification, Object Detection, Face Recognition, Sketch-to-Image, OpenCV, MediaPipe

Data Engineering Data Cleaning, Preprocessing, Feature Engineering, SQL, Pandas, NumPy, MLflow, Kubeflow, ETL

Frameworks & Libraries PyTorch, TensorFlow, Keras, Scikit-learn, FastAI, CrewAI, LangChain, Ilamaindex **Development Tools** Git, Docker, Jupyter Notebook, Google Colab, VS Code, REST APIs, Flask

Evaluation & Visualization F1-Score, Accuracy, Precision, Recall, Confusion Matrix, Matplotlib, Seaborn, Plotly, Power BI

Cloud & MLOps AWS, GCP, Vertex AI, BigQueryML, AutoML, MLflow, CI/CD

Soft Skills Problem Solving, Communication, Teamwork, Adaptability, Quick Learner, Attention to Detail **Languages** English (Fluent), Urdu (Fluent), Arabic (Basic – currently improving for professional use)

Licenses & Certifications

2025	MIT 6.S191: Deep Learning Specialization, by Alexander Amini & Ava Amini	MIT
2025	TensorFlow: Advanced Techniques Specialization, by Laurence Moroney	DeepLearning.Al
2024	TensorFlow Developer Professional Certificate, by Laurence Moroney	DeepLearning.Al
2024	Natural Language Processing Specialization, by Younes Bensouda Mourri	DeepLearning.Al
2023	2nd Runner Up: Al Driven Hackathon , PAK-UK Academic Bridge and hosted by Comsats University	Pakistan
2022	Machine Learning Specialization on Google Cloud, by Prof. Andrew NG.	Coursera