

Mahmoud Ibrahim AbuAwd

AI & ML Engineer | Amman, Jordan

+962791034222 | [LinkedIn](#) | [GitHub](#) | Mahmoudabuawad08@gmail.com | [Portfolio](#)

Summary

AWS Certified AI Practitioner & Machine Learning Engineer with over 2 years of independent, hands-on experience in deep learning, covering computer vision, natural language processing, and generative AI. Proficient in Python, TensorFlow, and PyTorch, Scikit Learn, with a solid foundation in building and deploying end-to-end machine learning solutions. Experienced in working with synthetic data, model training, evaluation, and cloud-based deployment. Also skilled in embedded systems and hardware integration with Arduino. Actively seeking a Junior AI/ML Engineer role to contribute to impactful AI-driven innovations and continue developing technical expertise.

Education

Al-Balqa' Applied University — *Bachelor of AI and Robotics (2021-2025)* — GPA: 3.34 – *Very Good* — Jordan, Salt

Experience

Intern at Future Advance Internet Solutions — Oct 2024 – Feb 2025

- Completed hands-on training at the FAIS in Artificial Intelligence, Deep Learning, and Data Preprocessing techniques. Gained practical experience in data cleaning, transformation, and preparation for machine learning models. Able to apply these skills to build intelligent systems that improve decision-making, automate processes, and drive business outcomes such as increased efficiency, customer satisfaction, and sales growth.

Intern at Innovation, Creativity, and Entrepreneurship Center — July 2024

- Collaborated in a team-driven environment with professionals. Gained practical experience in 3D design using Fusion 360, Arduino programming, and robot assembly. Contributed to solving technical challenges effectively.

Skills

Programming & Tools: Python (TensorFlow, PyTorch, scikit-learn, OpenCV, NLTK, pandas), C++ (Arduino), Git, GitHub, Notion

Machine Learning & AI: CNN, RNN, NLP, Computer Vision, Model Evaluation (ROC-AUC, F1), Generative AI (GANs, Transformers, LangChain, RAG), Prompt Engineering

Data & Visualization: Data Preprocessing, Feature Engineering, Power BI, Excel, Matplotlib, Seaborn

Embedded Systems: Arduino (UNO, Nano, Mega), Circuit Design, Robotics, IoT, 3D Modeling (Fusion 360, Tinkercad)

Deployment & Cloud: Flask, FastAPI, Streamlit, AWS (Certified), Azure ML Studio, Docker

Languages & Soft Skills: Arabic (Native), English (B2), Teamwork, Communication, Pressure Handling

Key Projects

MedGAN-SynTumorClassifier: A GAN-based System for Tumor Type Prediction and Synthetic Data Generation from Medical Imaging (Graduation Project) – ([GitHub](#))

Developed and deployed a Flask web app that augments scarce brain-tumor MRI data with 12 GANs (Meningioma, Glioma, Pituitary) and classifies tumor vs non-tumor using a Vision Transformer—providing realistic images and accurate diagnostic support.

FluentWave: Web-Based Speech Transcriber - ([Github](#))

Speech-to-Text system using Word2Vec for semantic accuracy, deployed via Flask on a web interface for real-time audio-to-text conversion.

Price-Pilot Agentic System: End-to-End AI for SMB Retailers - ([Github](#))

Price-Pilot Agent is an end-to-end, multi-agent AI platform designed to help small and mid-sized retailers sell smarter, restock automatically, and deliver reliably—all through a single conversational interface.

Anomaly Detection in Network Traffic Using Isolation Forest and Deep Learning - ([Github](#))

Anomaly detection in network traffic using Isolation Forest and Deep Learning for real-time identification of intrusions and malicious activities.

DevInsight Agent: Autonomous AI for GitHub Repository Analysis - ([Github](#))

A local AI agent that clones GitHub repositories, analyzes their code quality, tech stack, and structure, then generates a detailed improvement report using LLMs.

Certifications and Courses

[AWS Certified AI Practitioner](#) — AWS (May 2025)

[Preparing Data for Analysis with Microsoft Excel](#) — Microsoft (March 2025)

[Harnessing the Power of Data with Power BI](#) — Microsoft (March 2025)

[DeepLearning.AI TensorFlow Developer Specialization](#) — DeepLearning.AI (Jan 2025)

[Deeplearning.ai Deep learning Specialization](#) — DeepLearning.AI (Sept 2024)

[Embedded Systems](#) — INJO (MAY 2024)

[Data science & Machine learning using Python](#) — the hope international (March 2024)

Research and Volunteering Activities

Research Papers

- **The Role of Artificial Intelligence in Improving the Criminal Justice System to Reduce Arbitrary Detention**
Explores how AI can enhance fairness and transparency in the justice system by identifying patterns of wrongful detention and mitigating bias.
- **MEDGAN: Advanced Medical Image Generation**
Presents a GAN-based approach to generate synthetic brain tumor MRI images, addressing data scarcity and boosting segmentation model performance.

Volunteering

- **IEEE – Volunteer (May 2024 – Jan 2025)**
Participated in college-level IEEE workshops and events focused on innovation and collaboration. Gained valuable teamwork experience and expanded my professional network.
- **Google Developer Group – Volunteer (Oct 2024 – Present)**
Support event promotion and community outreach through graphic design. This role has refined my creative skills and contributed to community tech engagement.