Ahmad Nayfeh

AI Engineer | Data Scientist
Dhahran, Saudi Arabia | +966500380453 | ahmadnayfeh2000@gmail.com
ahmadnayfeh.vercel.app | linkedin.com/in/ahmad-nayfeh2000 | github.com/Ahmad-Nayfeh

Professional Summary

Results-driven Electrical Engineer and M.Sc. candidate with expertise in building end-to-end AI systems. Proven ability to develop and deploy solutions in Computer Vision, Signal Processing, and Data Engineering

Education

Master of Science, Electrical Engineering **Aug 2024 – Present**
King Fahd University of Petroleum and Minerals *Dhahran, KSA*
Relevant Coursework: Signal Processing, Image Processing, Detection & Estimation, Stochastic Processes

Bachelor of Science, Electrical Engineering (Second Honor) **Sep 2018 – Jan 2024**
King Fahd University of Petroleum and Minerals *Dhahran, KSA*

Key Projects

Cloud-Native Reading Analytics Platform | *Data Engineering, Firebase, Google Cloud APIs* **Jul 2025**
- Engineered full-stack multi-tenant platform with automated ETL pipeline integrating Google APIs and Firebase
- Built intelligent gamification system with dynamic scoring algorithms and automated PDF reporting
- Developed comprehensive admin dashboard with user management, challenge creation, and data workflows

AI-Powered MRI Brain Tumor Segmentation | *PyTorch, U-Net, Transfer Learning* **Jun 2025**
- Developed ResNet-UNet model achieving 0.9634 Dice score on 10K+ MRI slices (BraTS dataset)
- Built 3D-to-2D preprocessing pipeline with 4-channel stacking; deployed Streamlit application

AI-Powered Bearing Fault Diagnosis | *PyTorch, 1D CNNs, Scikit-learn* **May 2025**
- Developed 1D CNN model, achieving 100% accuracy on 2.3M bearing fault samples (CWRU bearing dataset)
- Applied SMOTE balancing; validated robustness up to 25% noise; deployed on Streamlit

Experience

Teaching Assistant, Fundamentals of Electric Circuits **Aug 2024 – May 2025**
KFUPM, Department of Electrical Engineering *Dhahran, KSA*
- Designed teaching materials and guided 50+ students through weekly problem-solving sessions

AI Research Intern, Waste Detection & Classification **Jun 2023 – Aug 2023**
SDAIA-KFUPM Joint Research Center *Dhahran, KSA*
- Developed two-stage YOLOv8 + classifier pipeline improving F1-score by 2% over baseline
- Managed and augmented 10,000+ image dataset for enhanced model robustness

Technical Skills

Python, PyTorch, TensorFlow, Keras, Scikit-learn, Pandas, NumPy, SQL, Git, GitHub, Computer Vision, Deep Learning, Machine Learning, CNNs, U-Net, YOLO, Image Segmentation, Object Detection, Data Pipelines, ETL, API Integration, NoSQL (Firebase), Streamlit, Self-Supervised Learning, Transfer Learning, Prompt Engineering

Awards & Certificates

Top 3 Team, ACT28: AI for Climate Action Hackathon | Samsung & UNDP **Jun 2024**
- Recognized among top 3 teams from 100+ participants across GCC and Turkey

Certificates
- Intro to Deep Learning & Neural Networks with Keras | IBM (Jul 2024)
- Google Project Management Professional Certificate | Google (Jul 2024)
- Google Data Analytics Professional Certificate | Google (Feb 2024)
- Supervised Machine Learning: Regression & Classification | Stanford University (Jun 2023)
- Machine Learning with Python | IBM (May 2023)