

Nujud Almaleki

Computer Science Graduate

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SUMMARY

Computer Science graduate specialized in Artificial Intelligence, and a graduate of the AI Model Building & Development Bootcamp at Tuwaiq Academy. Developed multiple end-to-end AI solutions across computer vision, NLP, and data analysis, including work at Saudi Aramco where I built an HR analytics dashboard. Passionate about building practical, high-impact AI systems.

EDUCATION

AI Models Building & Development Bootcamp

Tuwaiq Academy, Riyadh

Nov 2025 – Jan 2026

- Hands-on training focused on developing AI projects using Machine Learning, Deep Learning, Computer Vision, and NLP.
- Utilized professional development tools and environments, including Streamlit, GitHub, VS Code, and Google Colab.
- Worked on weekly team-based projects simulating real-world AI use cases.

Bachelor of Computer Science

King Abdulaziz University (KAU), Jeddah

Aug 2020 – May 2025

- GPA: 4.89 / 5 - Excellent with first honors.
- Specialized Track: Artificial Intelligence

EXPERIENCE

University Internship Program

Saudi Aramco, Dhahran

June 2024 – Aug 2024

- Built an HR dashboard using Power BI to ease the visualization of employee data and recruitment information.
- Presented the dashboard after its publication on the platform to provide an overview of its design and how it is used.
- Prepared reports and met with my supervisor weekly to track progress.

SELECTED PROJECTS

EMAD: Intelligent Architectural Compliance Assistant – Tuwaiq Academy

Jan 2026

- An AI-based system that analyzes architectural floor plans and checks compliance with the Saudi Building Code.
- Developed the compliance engine and validation logic based on the Saudi Building Code.
- Designed the information-retrieval pipeline (OCR, chunking, BM25) to extract regulatory clauses used as evidence.

MUTQIN: AI-Based Identity & Professional Photo Generation System – Tuwaiq Academy

Jan 2026

- Built an end-to-end computer vision pipeline combining detection, segmentation, and enhancement models for identity and professional photo generation.
- Trained and fine-tuned MobileNet backbone models to validate ID requirements.
- Successfully tested the system on a real-world ID renewal scenario (Absher-compatible output).

MARSAD: AI-Powered Satellite Image Analysis For Urban Forestation – Graduation Project

Sep 2024 – May 2025

- Led a team to develop a web app for urban forestation, integrating AI-powered object detection and segmentation models.
- Collected, annotated, and augmented satellite image datasets.
- Designed and implemented the AI pipeline using two YOLO-based models, achieving 67% recall and 60% precision after extensive experimentation.

NLP-Based Review Sentiment & Rating System – Tuwaiq Academy

Dec 2025

- Implemented full NLP pipeline including preprocessing, vectorization, and embeddings.
- Built sentiment classification model (84% accuracy).
- Developed rating regression model with MAE = 0.48.

Cataract Detection and Segmentation System

Nov 2024 – Dec 2024

- Built a CNN-based classification model achieving 96% accuracy.
- Fine-tuned a Mask R-CNN model for cataract segmentation, achieving 89% AP.

Daily Sales Forecasting (Time-Series) – Tuwaiq Academy

Dec 2025

- Built and compared SARIMAX and LSTM models for daily sales forecasting.
- Engineered temporal features and achieved best performance with LSTM, outperforming SARIMAX (MAE = 384).

CERTIFICATES

Advanced Artificial Intelligence Course - King Abdullah University of Science and Technology (KAUST) Focused on Computer Vision and practical tools for deep learning.	May 2023
Introduction to Artificial Intelligence Course – KAUST Covered fundamentals of AI, including Calculus, Linear Algebra, Machine Learning, and Deep Learning.	Mar 2023

SKILLS

Programming Languages	Computer Vision	Data & Deployment Tools	Soft Skills
Python, Java, SQL	YOLO, OpenCV, CNNs	Streamlit, Power BI,	Teamwork, Leadership,
Machine Learning	NLP & Information Retrieval	Pandas, NumPy	Creativity, Analytical Thinking,
Scikit-learn, Regression, Classification	Text Preprocessing, Vectorization, Embeddings,	Version Control	Communication
Deep Learning	Sentiment Analysis, OCR, Chunking, BM25	Design Tools	
TensorFlow, PyTorch, LSTM		Figma, Canva	

TECHNICAL PARTICIPATIONS & COMPETITIONS

Cloud Catalyst: GEN AI Hackathon – AWS & Manara	Jan 2026
GIS Day – KAU	Nov 2024
DTEDUHACK2023 AI for education – Prince Sultan University (PSU)	Sep 2023
IEEEExtreme 16.0 Programming Competition – IEEE	Oct 2022

VOLUNTEERING & LEADERSHIP

Publicity Member – IEEE Female Branch, KAU: Designed booth visuals and interactive materials.
Media Member – AI Club, KAU: Designed weekly social media content.
Trainer – Microsoft LSAC Bootcamp: Delivered a Power BI visualization workshop.

LANGUAGES

Arabic – Native	English – Fluent
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REFERENCES

Available upon request