

# 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

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

SKILLS

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

TECHNICAL PARTICIPATIONS & COMPETITIONS

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

VOLUNTEERING & LEADERSHIP

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

LANGUAGES

<b>Arabic</b> – Native	<b>English</b> – Fluent
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REFERENCES

Available upon request
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