

OMAR AL ETHAMAT

AI & ROBOTICS ENGINEER

Eligible to work in the UK | omaralethamat@gmail.com | <https://omaralethamat.com/>

AI Engineer specializing in machine learning, deep learning, and computer vision, with experience in developing intelligent and robotics systems for real-world applications. Skilled in integrating software, hardware, and embedded systems to design and implement practical, end-to-end solutions. Experienced in translating complex technical concepts into functional systems through hands-on projects and problem-solving. Passionate about building innovative technologies and continuously expanding expertise in AI-driven applications.

AREA OF EXPERTISE

Machine Learning	Computer Vision	Embedded Systems	Reinforcement Learning
Deep Learning	Robotics Systems	Backend Development	Agentic AI

PROFESSIONAL EXPERIENCE

AI Engineer Intern, Orange Jordan . Internship Feb 2026 - Present

- Developed an end-to-end Speech-to-Text (STT) service, including model development, backend APIs, authentication (JWT), and production deployment
- Built and optimized scalable backend and data systems, including RAG pipelines, database integration, and large-scale data processing using Apache Spark

Embedded Software Engineer, AI-Rhim Sat . Part-time Nov 2025 - Present

- Developed embedded software for a satellite system, including programming the On-Board Computer (OBC) and handling data processing and communication functions
- Designed and implemented microcontroller-based systems for wildlife tracking devices, integrating hardware and software for real-world deployment

AI Engineer , Qynerva . Full-time April 2025 - Present

- Developed a multi-layer AI system for brain tumor detection from MRI scans, including segmentation, classification, and explainable AI with visual heatmaps
- Built an end-to-end platform integrating machine learning models, backend systems, and a chatbot for automated reporting and user interaction
- Implemented generative AI techniques to synthesize MRI data and address data scarcity for model training

Machine Learning Virtual Intern , Intern Intelligence . Internship Feb 2025 - March 2025

- Developed multiple AI-based projects across cybersecurity, NLP, and healthcare domains
- Built and evaluated machine learning models for real-world applications, including data analysis and deployment of simple web interfaces

NLP Engineer , High Yield Medicine . Freelance Feb 2025 - March 2025

- Built an NLP system for optimizing user queries in medical research platforms to improve retrieval accuracy
- Leveraged large language models and external APIs to enhance search results and automate research exploration

EDUCATION

B.Sc. in Artificial Intelligence and Robotics Oct 2022 - Oct 2026

AlBalqa Applied University

Software Engineering Program (Core Curriculum) Aug 2025 - Oct 2026

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- Project-based training in C/C++, system programming, networking, and software engineering

CERTIFICATIONS

Sequence Models DeepLearning.AI	May 2025
Neural Networks and Deep Learning DeepLearning.AI	May 2025
Back-end Programming for Web Applications Al-Balqa Applied University (BAU)	Apr 2025
Backend Development Course IEEE BAU CS (Computer Society)	Oct 2024
Azure Fundamentals Microsoft	Mar 2025
Certificate of Participation - 1st At University Rank IEEEExtreme	Oct 2024

SKILLS

AI:

- Machine Learning, Deep Learning, Neural Networks, Computer Vision, NLP, Generative AI, Fine-Tuning, Feature Engineering, Reinforcement Learning, Agentic AI

Programming:

- Python, C/C++, Java

Backend & Systems:

- Backend Development, REST APIs, System Design, OOP

Data & Analysis:

- Data Analysis, Databases, SQL, NoSQL

Tools & Technologies:

- Linux, Git, Docker, Apache Spark, Microsoft Azure

Embedded & Robotics:

- Embedded Systems, Microcontrollers, ROS, Arduino

Networking & Systems:

- Networking, System Administration, DevOps

PROJECTS

VisionPong — Computer Vision Game

- Built a real-time hand gesture-controlled game using computer vision techniques
- Implemented object tracking and interaction using OpenCV and MediaPipe

NetGuard — Network Intrusion Detection System

- Developed an AI-powered system for real-time network anomaly detection using machine learning
- Captured and analyzed network traffic to identify potential cyber threats

MiniShell — System Programming Project

- Developed a Unix-like shell in C supporting pipes, redirections, and process control
- Implemented process management and command execution functionalities