

Jawad Marji

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EDUCATION

- American University of Beirut (AUB), Electrical and Computer Engineering** *Sep 2023 - present*
- **GPA: 3.95/4.0**, consistently nominated on the Dean's Honors
 - Awarded 30% Merit Scholarship with early admission in recognition of outstanding academic performance.
 - Core Areas: AI Engineering, MLOps, Computer Vision, Data Engineering

PROFESSIONAL EXPERIENCE

- Majors.cc – AI & Tech, AI Technical Analyst** *May 2025 – Jan 2026*
- Built automated monitoring systems and redesigned AI architecture, reducing cost by 30% through caching optimization.
 - Designed and deployed chatbots on n8n, increasing response speed and accuracy, reaching a handle ratio above 85%.
 - Implemented automated chatbot deployment systems, reducing human error and accelerating deployment timelines.
 - Implemented a sentiment analysis workflow to classify user interactions, improving customer satisfaction insights.
 - Built a prompt-optimization pipeline benchmarking outputs against Golden Dataset to improve LLM reliability.

- AUB Vision and Robotics Lab, Research Assistant** *Sep 2025 – Dec 2025*
- Developed an assistive navigation system for visually impaired users, enabling reliable guidance in uncertain environments.
 - Implemented VLM-based perception and navigation pipeline on NVIDIA Jetson Orin for real-time scene understanding.
 - Optimized inference pipeline to run efficiently on the GPU, leveraging hardware acceleration and parallel processing.
 - Achieved end-to-end real-time performance with less than 5 seconds response latency.

- AUB Vision and Robotics Lab, Research Assistant** *Jan 2025 – May 2025*
- Contributed to Digital Twins research by developing solutions for simulation and automation using 6D pose estimation.
 - Implemented an automated pipeline to generate 50K+ synthetic images with reduced processing time.
 - Trained a neural network for 6D pose estimation to support scalable deployment in the Digital Twins project.

- Amazon Industry Program Competition, Software Development Apprenticeship** *May 2024 – Sep 2024*
- Led a team of 4 to design Trafero, a digital solution for Lebanon's public transportation sector management.
 - Guided backend and database development with FastAPI and PostgreSQL for secure, fast transactions.
 - Collaborated with Amazon professionals to enhance system architecture, functionality, and UX.

PROJECTS

- Control Systems, Modeling and Control of a 1-DOF Copter** *Sep 2025 – Dec 2025*
- Developed a full model analysis for a 1-DOF copter system using mathematical modeling and system identification.
 - Developed and tested controllers, achieving stable trajectory tracking validated through simulation and experimentation.

- Bio-Electromagnetics Engineering, RFID Design for Smart Bandages** *Sep 2025 – Dec 2025*
- Designed and optimized an RFID antenna for a smart bandage system, achieving high efficiency and performance.
 - Validated the HFSS electromagnetic model and SAR compliance, ensuring safe operation for wearable biomedical use.

- Signal and Systems, Signal Processing using Fourier Transforms** *Jan 2025 – May 2025*
- Analyzed and compared multiple Fourier transform techniques for signal processing applications.
 - Implemented the full workflow in MATLAB, including signal decomposition, filtering, and spectral analysis.

EXTRACURRICULAR EXPERIENCE

- AUB Robotics Club, Events Officer → Treasurer** *Sep 2024 – present*
- Directed budgeting and financial planning to optimize resources, ensuring sustainability of 15+ events.
 - Mentored 50+ students through lectures and workshops, improving their problem-solving skills.

- AI Journey, Founding Member** *Sep 2024 – present*
- Delivered lectures on AI and ML fundamentals to 30+ students.
 - Organized technical talks and networking events with industry experts from OpenAI and IEEE.

SKILLS & PERSONAL

Certificates: Machine Learning Specialization, Amazon Mentorship Program, Amazon Product Management Bootcamp

Languages: English (fluent), French (fluent), Arabic (native)

Skills: Research, Problem Solving, Analytical Thinking, Project Management, Leadership, Software Development.

Software & Tools: C++, Python, SQL, Linux, n8n, MATLAB, Simulink, LabView, Arduino, Blender, Unity, Verilog, Jira