

# Mahdi Alayan

Beirut, Lebanon +961 78 991 475 mahdialayan2003@gmail.com linkedin.com/in/mahdi-alyan github.com/MahdiAlyan

## PROFESSIONAL SUMMARY

Backend engineer specializing in LLM integration and AI-powered systems. Shipped production platforms across healthcare, government, and enterprise domains — owning everything from data modeling to AWS deployment. Architected multi-agent AI systems and RAG pipelines using Django, OpenAI, and Gemini. Won a faculty-level best projects award. Rare combination of backend depth and applied AI engineering.

## WORK EXPERIENCE

**Neruos — Software Engineer Intern** Jul 2025 – Dec 2025

- Contributed to **N-Clinic**, **N-Municipal**, and **N-Fit** — 3 production systems serving healthcare, government, and fitness domains simultaneously.
- Built backend services with **Django REST Framework** (JWT auth, RBAC) and **React** frontends; optimized **PostgreSQL** schemas and queries.
- Deployed on **AWS** (EC2, S3, RDS, CloudWatch); containerized with **Docker**; integrated external AI APIs into production workflows.

**Numbase — AI Developer Intern** Jan 2026 – Feb 2026

- Led R&D on an **audio-driven avatar** system — AI pipeline animating facial avatars in real-time from audio input.
- Evaluated **Hugging Face** models for lip-sync and speech-to-animation; designed end-to-end inference pipeline and delivered proof-of-concept demos.

## SELECTED PROJECTS

**MediSynergy AI — 10-Agent Medical Advisory Platform** Python · LangChain · ChromaDB · Streamlit · Ollama · DeepSeek

- Built a multi-agent RAG system with 10 specialized agents (symptom analyzer, diagnosis assistant, emergency triage, medication expert, and others) coordinated by a meta-agent for complex case handling.
- Implemented full RAG pipeline — document ingestion, chunking, embedding, **ChromaDB** vector retrieval, and LLM synthesis — with support for both local (**Ollama**) and cloud (DeepSeek) LLMs.

**Tello Drone Controller** Python · Django · OpenCV · MySQL · JS

- Built a web-based interface for DJI Tello drones: real-time flight commands, live camera streaming via **OpenCV**, and automation workflows through a Django backend.

**N-Clinic — Multi-Branch Clinic Management Platform** Django · DRF · React · PostgreSQL · AWS

- Led full-cycle development of a clinic operations platform: scheduling, patient records, inventory, staff, and multi-branch accounting.
- Sole owner of requirements, data modeling, architecture, AWS deployment, and documentation — shipped into production.

**Nexus — Low-Code Software Builder Platform** Django · DRF · React · PostgreSQL

- Built a low-code platform for creating and managing modular applications; designed full backend architecture — data models, APIs, access control, and automation workflows.
- Awarded 2nd Place — Faculty Best Projects Competition.**

## EDUCATION

**BSc Computer Science** — Al Maaref University, Beirut Graduated Jan 2026 — **Award:** 2nd Place — Faculty Best Projects (Nexus)

## TECHNICAL SKILLS

**Languages & Frameworks:** Python, Django, DRF, JavaScript, React, Flask, HTML, CSS

**AI & Data:** LangChain, ChromaDB, OpenAI API, Gemini API, RAG Pipelines, Hugging Face, NumPy, Pandas, OpenCV

**Databases:** PostgreSQL, MySQL, SQLite, MongoDB

**DevOps & Cloud:** AWS (EC2, S3, RDS, CloudWatch), Docker, Linux (Ubuntu), Git, Postman, Jira

## LANGUAGES

Arabic — Native | English — Fluent