

JIHAD A. MOBARAK

+961 81 701 175 ◇ Beirut, Lebanon ◇ jihadmobarak7@gmail.com ◇ [LinkedIn](#)

Applied machine learning engineer with experience across AI and data engineering—specializing in agentic systems, end-to-end pipelines, and dependable API serving. Committed to responsible deployment; focused on building AI that is robust, transparent, and maintainable at scale.

EDUCATION

BEng in Computer Science and Engineering, American University of Beirut (AUB) 2022 - 2026

Relevant Coursework: Algorithms and Data Structures, Machine Learning, Neural Networks, Theory of Computation, Operating Systems, Computing Network and Services, Programming Languages, Software Engineering, Agentic Systems, Intro to LLMs

International Baccalaureate Diploma Programme, GreenField College - Beirut, Lebanon 2020 - 2022

SKILLS

Technical Skills Languages: Python, C/C++, SQL, Java
ML Frameworks: PyTorch, scikit-learn, TensorFlow
Data: NumPy, Pandas; preprocessing & feature engineering
LLMs & Agents: Prompt engineering; RAG; agent orchestration (LangChain/LangGraph)
Deployment: REST APIs, Docker, Linux; Git
Databases: SQL Server, PostgreSQL
Tools: VS Code, Postman, OpenAPI, Prisma Studio, n8n, Supabase

EXPERIENCE

Data Science Intern — Monty Mobile, Beirut Dec 2025 – Present

- Optimized HR CV-screening chatbot by replacing RAG with GraphRAG (n8n + Neo4j); improved retrieval performance and latency.
- Building Text-to-SQL workflow using fine-tuned local LLMs (DeepSeek, SQLCoder, Llama) to generate queries from database schemas for an internal Avatar project.
- Trained LSTM with cell/user embeddings and displacement-target framing on cell-tower CDR data (53 users, 28 days), reducing mean displacement error by **48%** (126 m to 67 m).

Webmaster — IEEE AUB Student Branch, Beirut Dec 2024 – May 2025

- Maintained and updated the branch website (events, workshops, initiatives); improved navigation and accessibility.

Full-Stack Developer — Integrated Digital Systems, Beirut May – Aug 2024

- Built ASP.NET Core Web APIs + SQL Server; HTML/CSS/JS/AJAX UI used by internal portals.

Software Developer Intern — Cloud Gate Consulting, Beirut Apr – Jun 2023

- Shipped Django features (admin/auth, CBVs) with PostgreSQL; added basic pytest coverage.

PROJECTS

- CAIA Clinic**: full-stack multi-agent clinical system; patient-chat workflows, appointment sync, real-time transcription, and SOAP note drafting.
- ThroughWi (FYP)**: Wi-Fi tomography with ESP32/AX210 capturing CSI/RSSI; walk-and-map pipeline produces 2D/3D indoor maps flagging walls, utilities, and occupants.
- Text-to-SQL**: fine-tuned LLMs to convert natural-language questions into SQL; AST-based evaluator for query correctness.
- CancerScope**: breast-cancer subtype classifier; end-to-end pipeline ($\approx 1.5k$ samples, 600+ features); RF and MLP with stratified CV.
- Caching Proxy Server**: HTTP/HTTPS proxy with LRU cache and concurrent request handling.

LANGUAGES

English (Fluent) · *Arabic* (Native) · *French* (Elementary Proficiency)

ADDITIONAL INFORMATION

Kuwait: Valid Transferable Residency Permit (Iqama); born and raised in Kuwait, 16 years of residence, including secondary schooling through Grade 11; immediate family currently based in Kuwait.

Achievements: UCMAS Abacus Mental Arithmetic Grand Level Student (Kuwait, 2018).