

Zeinab Mounir Abo Hamdan

Lebanon | +961 81 082 468 | zma51@mail.aub.edu | [LinkedIn](#) | [GitHub](#)

PROFESSIONAL SUMMARY

Recent Computer Science graduate from the American University of Beirut (AUB) with strong foundations in full-stack development, data science, and applied machine learning. Experienced in building end-to-end web platforms, integrating AI/LLM features, and delivering real-world software solutions across internships and academic projects. Proficient in React.js, Node.js, Python, PostgreSQL, Supabase, and modern DevOps practices. USAID scholarship recipient and Dean's Honor List awardee motivated to deliver scalable, impactful technology solutions.

EDUCATION

B.Sc. Computer Science — With Distinction | *American University of Beirut (AUB), Beirut, Lebanon* Aug 2022 – Spring 2026

- USAID (HES) Scholarship Recipient
- Dean's Honor List — multiple semesters

INTERNSHIP EXPERIENCE

Full Stack Developer Intern | *Tawasoul — Jbeil, Lebanon*

Jun 2026 – Jul 2026

- Contributed to backend development of an AI-powered interview practice platform built on Large Language Models (LLMs).
- Designed and managed the application database using Supabase (PostgreSQL), including schema design, RLS policies, and relational modeling.
- Built and integrated RESTful backend APIs using Hono.js (lightweight TypeScript web framework) to support AI-driven interview features.
- Developed frontend components and pages using Astro.js, contributing to a performant, SEO-friendly user interface.

Mobile Application Developer (Academic Intern) | *Ministry of Youth and Sports — Lebanon* Jan 2026 – Jun 2026

- Collaborated with a student development team to design, implement, and test features for an official government mobile application.
- Contributed to application functionality, UX design, and system integration in a real-world governmental environment.
- Applied skills in mobile development, software engineering, and cross-functional teamwork.

Volunteer Intern | *Al-Jalil Welfare Association — Lebanon*

Jun – Aug 2024

- Contributed to the development of a Monitoring & Evaluation website for NGO reporting.
- Supported community events, children's engagement programs, and designed technical documentation.

PROJECT EXPERIENCE

Zeitoun Restaurant Website — WordPress Personal Project |

Jun 2026

- Built and deployed a fully responsive bilingual (Arabic/English) restaurant website using WordPress, PHP, HTML, CSS, and JavaScript.
- Customized themes and implemented responsive design principles, ensuring cross-device compatibility.
- Integrated WPForms for reservation/contact functionality and Elementor for drag-and-drop page building.

Volunteering Platform — Full-Stack & Data-Oriented System (Final Year Project) |

2025 – 2026

- Designed and developed a full-featured web platform supporting volunteer registration, activity coordination, and NGO management.
- Focused on system architecture, data modeling, and accessibility for community organizations.

CampusLink — University Clubs Platform |

2024

- Built a full-stack platform for club discovery, registration, and event management using React.js, Node.js, and MySQL.
- Delivered responsive UI components and RESTful APIs; collaborated in Agile sprints with GitHub code reviews.

CVision — AI Resume Critique Tool |

2025

- Built a Streamlit interface for an LLM-powered resume evaluation tool with structured scoring and visual feedback dashboards.
- Contributed to PDF parsing, prompt engineering, testing, and GitHub documentation.

Brain Tumor Segmentation — Machine Learning |

2025

- Developed an end-to-end MRI brain tumor segmentation pipeline using CNN-based U-Net architecture.
- Evaluated model performance with Dice score and IoU metrics.

Alzheimer's Disease Early Detection — Data Science & ML |

2026

- Built a machine learning model for early-stage Alzheimer's detection using EEG/biomedical data.
- Performed data preprocessing, feature extraction, EDA, and evaluated using accuracy, precision, recall, and ROC curves.

Emotion Detection Mobile App — AI & Mobile Development |

2026

- Designed and developed a mobile application detecting human emotions via AI analysis of voice, facial, and text input.
- Built end-to-end app including UI, backend integration, and real-time prediction features.

Hospital Management Database |

2024

- Designed a normalized relational database for hospital operations covering patients, appointments, departments, and medical records.
- Implemented SQL queries, constraints, and relationships ensuring data integrity and efficient reporting.

TECHNICAL SKILLS

Languages: Python, Java, C, C++, JavaScript, TypeScript

Frontend: React.js, Next.js, Astro.js, HTML, CSS, Tailwind CSS, Elementor

Backend: Node.js, Express.js, NestJS, Hono.js, RESTful APIs, Streamlit

CMS & Web: WordPress, PHP, WPForms, Theme Customization, Responsive Design

AI & LLMs: LLM Integration, Chatbots, OpenAI API, Gemini API, Prompt Engineering

ML & Data Science: CNNs, U-Net, Image Segmentation, Model Evaluation, pandas, NumPy, scikit-learn

Databases: PostgreSQL, Supabase, MySQL, MongoDB, SQL, ER Modeling, Data Integrity, RLS Policies

DevOps & CI/CD: Git, GitHub, GitHub Actions, GitLab CI/CD, Docker, Vercel, Render, XAMPP

Systems: Linux, xv6, Kernel Threads, MLFQ Scheduling

UI/Design: Figma, UI/UX Implementation, AI Design Tools

Soft Skills: Leadership, Fast Learner, Problem-Solving, Time Management, Teamwork, Communication, Adaptability

VOLUNTEER & LEADERSHIP

Team Leader — Community Service Project (CSP) | AUB, Beirut

2022 – 2026

- Led and coordinated a scholarship-required community service team; organized tasks, facilitated communication, and ensured timely delivery.

Semester Volunteer — Various NGOs |

Fall 2022 – Present

- Completed 30+ volunteer hours per semester across health, education, refugee support, and community development initiatives.

AWARDS & CERTIFICATIONS

- Entrepreneurship and Job Readiness Certificate (2025)
- Environmental Awareness Workshop Certificate (2025)
- Social Media Bootcamp — DOT Lebanon (2024)
- USAID Workshops: Human Rights, Stress Management, E-Portfolio, Taxes (2023–2024)
- AUB Workshops: Health, Environment, Psychology, Women in Data Science

LANGUAGES

Arabic: Native **English:** Fluent