Zeina Ahmad Hammoud

zeinahammoud2005@gmail.com| LinkedIn: Zeina Hammoud | +961 81 285 026 | GitHub: zeinahammoud05

Education

American University of Beirut (AUB)   Beirut, Lebanon
B.S. in Computer Science; GPA: 3.66   *Expected May 2026*
Early Admission Merit Scholarship

Amjad High School-Beirut, Lebanon   Beirut, Lebanon
Lebanese Baccalaureate, General Sciences   *2008 – 2023*

Research Experience   June 2025-
September 2025

Urban-Analytica at SAIL — AI Bots Lab   *American University of Beirut, Beirut*

Undergraduate Researcher (Advisor: Dr. Fatima Abu Salem)

- Researched the role of **AI and social bots in amplifying hate speech and sectarian conflict** on social media platforms.
- Evaluated **AI-based counter-speech and moderation approaches**, including LLM-powered detection and response systems.
- Produced analytical writing linking **AI governance, digital ethics, and media literacy** in the MENA context.

Professional Experience   Jul 2025 – Aug 2025

Independent Experience-Freelance Collaboration
Web & Mobile App Development Support

- Assisted a freelance developer in building a **website and companion mobile app** for a real client project.
- Contributed to **UI adjustments, feature testing, and issue resolution**.
- Gained hands-on experience working on **real-world client requirements and deadlines**.

Projects

AUBEvents — Event Registration & Management Platform   2025
Python (Django), SQLModel, REST APIs, HTML/CSS/JS

- Collaborated with a **full-stack development team** to design and implement secure**, scalable backend architecture**.
- Developed **authentication and account management workflows**, including signup, email verification, login, and password reset.
- Integrated **JWT-based authentication, bcrypt password hashing**, and comprehensive **unit test coverage**.
- Built a **load-testing suite using Locust** and prepared backend APIs for **React/Next.js frontend integration**.

Dots and Boxes — Strategy Game   2025
C

- Developed a **terminal-based 1v1 strategy game** implementing core game logic and state management in C.
- Designed and implemented an **AI bot with multiple difficulty levels**, ensuring valid move selection and non-repetitive gameplay.
- Applied **algorithmic decision-making** (greedy and safe-move strategies) to simulate intelligent opponent behavior.

Airport Database Management System   2025

MySQL

- Designed a complete **Entity–Relationship Diagram (ERD)** and converted it into a **relational schema** following normalization principles.
- Applied **normalization (up to 3NF/BCNF)** to ensure data integrity and eliminate redundancy.
- Implemented **SQL operations** including table creation, constraints, and complex queries for data retrieval and management.

Additional Experience: Nov 2025

Linux Environment Setup
Linux/Ubuntu
- Installed and configured a Linux (Ubuntu) **development environment** to support Computer Science coursework and projects.
- Set up essential **development tools, compilers, package managers, and shell utilities** for C, Python, and web development workflows.
- Managed system configuration, permissions, and environment variables to ensure a **stable and efficient development setup.**

Extracurricular

IEEE Machine Learning Bootcamp   Dec 2025 – Jan 2026
Participant   *Beirut, Lebanon*

ACM QUANTUM Fundamentals   Jan 2026
                                                              Beirut, Lebanon

Participant

Technical Skills

Languages: Java, C, C++, Python, JavaScript, SQL
Frontend: React, HTML, CSS
Backend: Django, Node.js, Express.js, SQLModel
Databases: PostgreSQL, MySQL, MongoDB
Tools: Git, GitHub, Jira, VS Code
Operating Systems: Linux/Ubuntu