

ALI JOUMAA

+961 70789232 | alijoumaa2003@gmail.com | [LinkedIn Profile](#)

BEIRUT, LEBANON

EDUCATION

American University of Beirut

Beirut - Lebanon

Bachelor in Computer Science

Sep 2022 - December 2025

- Awarded USAID Scholarship.
- Placed on the Dean's Honor List.

GPA: 3.90/4.00

PROFESSIONAL EXPERIENCE

Java Backend Developer Intern - FOO

Beirut, Lebanon

Summer Internship

May 2025 - Aug 2025

- Strengthened core backend skills by learning Java Spring Boot usage in real-world industry applications, including caching mechanisms, Kafka communication, and Thymeleaf integration.
- Conducted in-depth research on JavaMelody, documenting its usage, integration steps, and performance monitoring benefits for production systems.
- Explored ISO 8583 and SWIFT MT/ISO 20022 standards, building simple applications to simulate integrations and understand end-to-end financial workflows.
- Implements POS transaction flow through a custom socket server to receive and process ISO messages.
- Transitioned to the Virtual Cards team, where I contributed to the integration of Episode Six APIs for digital card issuance and management.

Technical Projects

Final Year Project

Intelligent AI Tool for Customer Feedback and Social Dynamics Analysis

Sep 2025 - Dec 2025

- Developed an intelligent AI-powered tool to analyze customer feedback and internal social dynamics for strategic decision-making.
- Integrated NLP models and GenAI workflows using n8n and advanced prompt engineering.
- Created an interactive web platform for generating surveys, collecting feedback, and displaying automated analyses and KPI dashboards.
- Planning methodologies for data collection from diverse sources such as customer reviews, employee surveys, and internal communications.
- Strengthened proficiency in AI workflow engineering, prompt engineering, scalable PostgreSQL database design, automated data analysis, and full-stack prototype development.

Software Engineering

Pet Care & Community Platform - AllMyPet

Feb 2025 - April 2025

- Developed a full-stack web platform connecting pet lovers through features like adoption posts, community discussions, browsing pets by country, and vet-finder tools.
- Applied expertise in React and Spring Boot to develop a responsive and dynamic interface supporting user authentication, pet detail pages, and interactive reviews.
- Strengthened proficiency in full-stack development and Agile practices, focusing on scalable architecture, and iterative feature delivery.

Operating System

Extending the xv6 Operating System

Sep 2025 - Dec 2025

- Engaged in kernel programming by modifying and extending the MIT xv6 operating system.
- Added new system calls and user programs to enhance OS functionality.
- Conducted testing and documentation to ensure stability, correctness, and seamless integration of new components.
- Strengthened proficiency in operating systems concepts, C programming, and low-level system design.

Web Programming and Design

Social Media Website Development

Sept 2024 - Dec 2024

- Designed and implemented features such as secure user authentication, real-time chat, content sharing, and

activity tracking.

- Applied expertise in Node.js, HTML, CSS, and JavaScript to create a responsive, user-friendly, and scalable web application.
- Strengthened proficiency in modern web technologies, real-time communication systems, and full-stack development practices.

Computer and Information Security

Cybersecurity Simulation (Offensive, Defensive, and Audit Roles)

Sep 2025 - Dec 2025

- Conducted a hands-on security project simulating real-world cyberattacks and defenses using Kali Linux (attacker), Ubuntu server (defender), and monitoring dashboards (auditor).
- Applied defensive strategies including firewall configuration, server hardening, and intrusion detection tools.
- Deployed monitoring and auditing dashboards (Grafana) to detect anomalies, analyze logs, and track attack patterns.
- Strengthened skills in network security, system monitoring, and incident response within a virtualized multi-VM environment.

Machine Learning

Fraud Detection System

March 2025 - April 2025

- Built a high-performance fraud detection system using XGBoost on the IEEE-CIS Fraud Detection dataset from a Kaggle competition, achieving 0.971 ROC AUC and 0.859 PR AUC.
- Reduced dimensionality from over 400 features to approximately 200 through correlation analysis, feature importance evaluation, and automated engineering with Featuretools.
- Structured the project into feature selection, feature engineering, and model training phases, applying Deep Feature Synthesis to extract user-level behavior patterns.
- Strengthened proficiency in machine learning workflows, imbalanced classification techniques, and model evaluation.

Software Construction

Battleship Game Development

Sept 2024 - Dec 2024

- Developed an advanced, console-based version of the classic Battleship game in C language.
- Implemented two gameplay versions: bot vs. player and player vs. player, utilizing strategic algorithms to ensure the bot outperforms random moves.
- Demonstrated proficiency in software development practices by maintaining version control with **GitHub**, writing detailed specifications, and conducting program testing.

EXTRACURRICULAR EXPERIENCE

Offre Joie

Beirut- Lebanon

Active Member

Sept 2024 - Nov 2024

- Offre Joie is a humanitarian organization committed to fostering unity and providing aid to displaced individuals and families in Lebanon during the crises.
- Dedicated more than 100 hours to humanitarian efforts supporting displaced individuals and families.
- Contributed to the Call Center, Distribution and Assessment Team.
- Demonstrated adaptability, teamwork, and compassion in providing aid during critical times.

Dar Al-Aytam

Beirut - Lebanon

Community Based Internship

July 2024 - August 2024

- Volunteered over 120 hours to organize and lead a summer camp for children at the orphanage, demonstrating strong leadership, event planning, and time management skills.
- Planned and executed a variety of fun and educational activities, enhancing children's learning and enjoyment while fostering a positive environment.
- Supported the NGO's mission to provide a safe, educational space for children, utilizing organizational and interpersonal skills to ensure a smooth operation.

SKILLS & PERSONAL

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

Technical Skills: Office Package (Word, Excel, PowerPoint), Java, C, Spring Boot, Linux, HTML, CSS, React, Javascript, Node.js, MySQL, MongoDB, PostgreSQL, Git, Agile.