

Lana Saab

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EDUCATION

Lebanese American University (LAU), Beirut, Lebanon

CGPA: 3.58/4, Sept 2022 – May 2025

Bachelor of Science in Computer Science

Full USAID Scholarship

Related Courses: Introduction to Object-Oriented Programming, Objects and Data Abstraction, Computer Organization, Algorithms and Data Structures, Theory of Computation, Database Management Systems, Operating Systems, Web Development, Software Engineering, Parallel Programming, Mobile Applications, Computer Networks, Cloud Computing, Machine Learning

Mathematics Courses: Discrete Mathematics, Calculus 3, Probability and Statistics, Linear Algebra, Differential Equations, Abstract Algebra

CERTIFICATIONS/WORKSHOPS

- **Workshops by the Outreach and Civic Engagement Department at LAU** Sept 2022 – Oct 2023
HES Orientation Day 2, Computer Literacy Workshop, Time Management & Study Skills Workshop, Team Building & Conflict Resolution Workshop, Community Service Workshop, HES-C4 IDP Workshop, Anger & Stress Management Workshop, Power of Charisma Workshop, Communication & Negotiation Skills Workshop, Advocacy and Citizenship Workshop, Basic Studio Skills Workshop, Mind Mapping and Mental Health Workshop, Public Speaking Workshop, Health Eating and Weight Management Myths Workshop, Digital Marketing and Social Media World Workshop, Emotional Intelligence for Personal and Professional Success Workshop, Mentorship Introductory Workshop, Foundations of Starting an NGO
- **Certifications acquired**
 - Coursera Certificate (for Cybersecurity course): Play It Safe: Manage Security Risks Certificate
 - Coursera Certificate (for Cybersecurity course): Foundations of Cybersecurity Certificate
 - Certificate of Recognition from LAU Case Competition
 - Certificate of Attendance from LAU Case Competition
 - Certificates of Participation from MMKN NGO
 - Smart International Competition – 2017 Certificate
 - Certificates for participating in mental math competitions (national and international competitions)
 - Full Stack Development Internship Certificate from Finova Fintech Company
 - Accepted in Durham University for pursuing master's degree in Computer Science (Top University in the world and top 9 in UK)

EXPERIENCE

Full Stack Development Internship at Finova Fintech Company

May 2024-August 2024

- Gained hands-on experience in full stack development through diverse assignments, starting with a UX/UI design and progressing to full stack development:
- Collaborated closely with a supportive team, who provided guidance on server-side technologies and database management systems, enhancing understanding of backend processes.
- Developed user-centered design skills by working with a UX/UI expert, learning to create intuitive and engaging interfaces.
- Contributed to a comprehensive project for a cosmetics store, integrating frontend and backend technologies, which provided a holistic view of full stack development.
- Benefited from a collaborative environment that fostered skill enhancement and practical experience in web development.

PROJECTS

- **Leader and Member of Computer Organization Project**

Apr 2023

In this project, it was expected from the team to transform assembly language into a newly created language from our team. The team created new language that translates assembly language which is written in Lebanese language and the project was named "Barmij bel Lebne". The properties of BBL is that it's written in c#, it's an open source, it's community friendly and supports the Lebanese language and we covered for loops in the code.

- **Leader and Member of Database Management Systems Project**

Dec 2023

In this project, it was expected from the team to build a database for an NGO from zero (ER diagram, attributes, relations, mapping to Relational Database Schema, normalization...), starting with its logical design to transforming it into actual and complete database system using SQL and finally testing this database with at least ten complex queries and check for its validation. The project was about designing a database for a fictional NGO that supports SDGs.

- **Leader and Member of Software Engineering Project**

Jan 2024-Apr 2024

In this project, it was expected from the team to build a software system for a polyclinic, and we included in the system different types of clinics, pharmacy, laboratory, and AI empowered chatbot that provides personalized support, and an AI system that reschedules urgent appointments for patients. The project included different stages from specifying requirements, and then working on the system modelling and system architecture, and then came the testing phase and validation of the software production.

- **Leader and Member of Web Development Project**

Apr 2024

In this project, it was expected from the team to build a full website for a blog platform that includes both frontend and backend functionalities. The project featured secure user registration and authentication, allowing users to create accounts and log in to access the platform's features. Also, the team implemented comprehensive blog post management, enabling users to create, edit, delete, and publish posts with texts, images, and categories. Also, the admin dashboard was designed for managing user accounts and blog posts, ensuring efficient content oversight. Additionally, a user dashboard was created where users can sign up, log in, upload posts, and view their activity, enhancing the overall user experience.

- **Leader and Member of Parallel Programming Project**

Dec 2024

In this project, it was expected from the team to parallelize the sequential code for convolutional neural networks using 3 parallel implementations: MPI, OpenMp, and CUDA. So, the team worked on parallelizing the layers of CNNs which are convolutional layers and fully connected layers using Lenet5. The team also parallelized augmentation and normalization using these parallel implementations and the results showed successful work with efficiency in terms of time and speedup.

- **Leader and Member of Mobile Applications Project**

Dec 2024

In this project, it was expected from the team to build a fully functional mobile application. So, we decided to build an application for an NGO that was initiated by a group of USAID students, and which is "Youth For Lebanon". During the war, a group of USAID students started this NGO to assist the displaced families, and it reached thousands of people. So, the team and I decided to do a mobile version for this NGO's website: youthforlebanon.info, and we didn't stop here. The mobile version was an advanced one, as we added a section to USAID students as they are the only ones who could log in to this part which was designed for fulfilling their volunteering hours. Thus, they could get their volunteering forms from this app by fulfilling the number of hours required by volunteering with "Youth For Lebanon". This application was successful and it gained attention from the USAID family.

- **Research Paper - Machine Learning**

Jan 2025-Present

In this project, it was expected from me to work on publishing a new research paper to a topic of my choice. I chose "classifying the types of dyslexia using an accurate and robust ml model". This is a new contribution, and I've been done with writing the majority of the paper, and now moving towards implementing the model and displaying the results.

- **Capstone Project (Final Year Project)**

Jan 2025-Apr 2025

In this project, I developed a dorms website: "Cozy Corner" for students seeking a comfortable housing experience. So, I created a supportive ecosystem for students seeking university dorms, provide mental health support and accessibility to counseling services, and improve student living experiences with roommate matching and room management. The features in our website aren't found in other dorm websites. The website combines different features including: **roommate matching system (machine learning system), dining services (with catering events and meal planner),**

gamification page (memory card game) to relieve stress for students, feedback & maintenance systems, counseling services, and others. Our matching systems for roommates will be a good step toward enhancing dorm's life!

EXTRACURRICULAR ACTIVITIES

Smart International Competition	Sep 2017
- Achieved first place internationally in Thailand against students from different countries	
- Shared in the national competition and achieved second place	
- Awarded other certificates	
Active member in LAU Clubs: Red Cross Club, Computer Science Club, Fashion Club, Biotechnology Club, Mathematics Club, Data Analytics Club	Sept 2022 – Oct 2023
Community services with Lebanese Red Cross LAU	Sept 2022- Dec 2022
Community services with MMKN NGO	May 2023-Present
Community service with Lebanese Vegan Social Hub NGO	Oct 2022-May 2025
Usher on orientation day for welcoming HES students	August 2023
Usher on the Open Day at LAU for welcoming new LAU students	Sept 2023
Mentor in HES Mentorship Program (under the USAID Scholarship)	Sept 2023-May 2025
Completed 2 hours of tutoring students with USAID (tutoring las 203: Sustainable Energy Course)	Oct 2023
Tutoring calculus 3 course	March 2024
Tutoring English courses	March 2024
Tutoring Database Management Systems, Software Engineering	Oct 2024-May 2025
Assisting USAID advisors in office work	Sept 2024
Community Services with "Youth For Lebanon"	Oct 2024-May 2025
Research Assistant (Graph Theories)	Oct 2024-Present
Presented a Workshop by LAU: "Shared Stories...Shared Strengths"	Nov 2024

KEY SKILLS

- **Languages:** English and Arabic (fluent), French (basic), Italian (basic).
- **Soft Skills:** Leadership, Time management, Communication, Conflict resolution, Critical and analytical thinking, Problem solving, Collaboration abilities
- **Technical Skills:** Microsoft Office (Word, Excel, Power Point & Outlook), Android Development
- **Programming languages:** Python, Java, C, HTML, CSS, JavaScript, PHP, React Native, React Typescript, Node js
- **Database Skills:** MySQL, Mongoose Database
- **Operating System:** Windows, Linux