

Education

American University of Beirut (Lebanon): Bachelor of Engineering, Computer Science & Engineering, Minor in Mathematics

08/2021 - 05/2025

- Relevant Coursework: Data Structures & Algorithms, Design of Analysis & Algorithms, Theory of Computation, Programming Language Design and Implementation, Object-Oriented Programming, Machine Learning, Database Systems, Software Tools, Software Engineering.
- Scholarships: United Lebanon Youth Project Scholarship | ULYP, American University of Beirut Merit Scholarship and Qatar Scholarship.

Competitive Programming Contests

IEEEExtreme 17.0: Ranked 3rd nationally and in the top 3% internationally across 7091 teams and 16500+ participants.

10/2023

ACPC 2023: Qualified to the Africa and Arab Collegiate Programming Championship 2023.

09/2023

LCPC 2023: Ranked 3rd (Silver Medal) in the Lebanese Collegiate Programming Contest 2023 and qualified to ACPC 2023.

09/2023

Work Experience

Machine Learning Intern | Ubilite | Silicon-Vally Based semi-conductor company

06/2024 – Present

- Working on the development of a low-footprint machine learning model capable of face and speech recognition.
- Will use face and speech recognition algorithms, then look into the novel methods of neural network optimization, and finally work on the development on Ubilite's in-house solution.

Software Engineering Intern | Scopsis Company

06/2023 – 08/2023

- Used **Python Flask** to develop the backend and APIs of a logistics shipping web application and **SQLAlchemy** to develop its database.
- Developed a software that provides a secure internal platform for shipping company employees to log in with their designated roles (e.g., manager), allowing them to access and manage House Bill of Ladings (HBLs) and Master Bill of Ladings (MBLs) through a user-friendly interface, including the ability to add and remove entries from the database.

Introduction to Computation and Programming Using Python | Teaching Assistant

12/2022 - 01/2023

- Assisted students with course topics, such as: program efficiency, basic sort algorithms, recursion, graphs, classes, stacks and queues.

Projects

GPA Analyzer | Full Stack Project

06/2024

- Developed a web application using **Flask**, **SQLAlchemy**, and **JWT** for user authentication, allowing users to manage their courses and grades with features such as adding, deleting, and replacing grades.
- Utilized various **Python** libraries including **bcrypt** for password hashing, **Flask-Cors** for managing cross-origin resource sharing, and **marshmallow** for object serialization/deserialization, demonstrating a strong understanding of Python-based web development.

Financial Transaction Platform | Full Stack Project

04/2024

- Engineered a robust financial web application using **Flask**, **SQLAlchemy**, and **JWT**, incorporating features such as secure money transfers, offer trading, and comprehensive transaction statistics and charts.
- Utilized a suite of **Python** libraries including **bcrypt** for enhanced password security, **Flask-Cors** for cross-origin resource sharing, and **marshmallow** for efficient object serialization/deserialization, showcasing the ability to build secure and feature-rich web applications.
- Tested the APIs using **Postman**.

Ecommerce Website | Backend Project

11/2023

- Developed the backend and database using **Python Flask** and **SQLAlchemy**.
- Designed the backend of 3 services: Customers, Sales, Inventory.
- Tested the APIs using **Postman** and **Pytest**.

Automatic Lexical Analyzer and Context Free Grammar Analyzer | Systems Programming

02/2023

- Developed using **C++** to design the analyzers.
- Designed two programs for analyzing input token lists with regular expression-defined tokens and context-free grammars, performing various tasks like token-lexeme pairing, first/follow set calculation, symbol redundancy detection, and predictive parser assessment.

Hotels Booking Website | Backend Project

11/2022

- Developed the backend and database using **Python Flask** and **MongoDB**.
- Designed the backend of a booking website than allow several features, such as: sign up, sign in, search for rooms with filters and specifications, view all booked rooms, or get receipt after booking.

Extra Curricular Activities

President | IEEE Club Student Branch | American University of Beirut

09/2023 - Present

- Executed and managed 30+ events and lead the biggest club on campus, with 440 members, at the American University of Beirut.
- Maintained an effective relationship between all classes of CCE and CSE students, the IEEE cabinet, AUB faculty, and external companies.
- Won the "IEEE Best Student Branch Award" in Lebanon across 22 universities.

Treasurer | UNICEF Club Student Branch | American University of Beirut

07/2023 - 06/2024

- Participated in the club's volunteering events in community service, orphans care, patient kids care and elderly care.
- Managed the club's financials.

Vice President and Co-founder | ACM Club Student Branch | American University of Beirut

06/2023 - 11/2023

- Co-organized 10 competitive programming sessions (2 hours each), with around 20 attendees each.
- Co-Led a team of 10 in organizing a free online introductory Python programming course, attracting approximately 1000 interested participants, and successfully enrolling 250 individuals who passed the entrance exam. Course link: <https://shorturl.at/aotPS>

Skills & Languages

Software and Programs: C++, Python, Git, Postman, Pytest, HTML, JavaScript, React

IDEs: Visual Studio Code, Visual Studio, Spyder

Languages: English (Fluent), Arabic (Native)

Database: MongoDB, SQLAlchemy