

Hussien Harb | Computer Engineer

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Objective

Aspiring Computer Engineer with a strong focus on Python programming and expertise in Artificial Intelligence (AI) and Machine Learning (ML). Skilled in developing and deploying machine learning models, data analysis, and implementing AI-driven solutions. Seeking a challenging role to leverage technical skills in building innovative and impactful applications in the field of AI and data science.

Education

Beirut Arab University, Lebanon, August 2022-May 2026

Bachelor in Computer Engineering

Internship

- **IP Engineering Pro – ERPNext & Frappe Development Intern** | 2-Month Internship
 - Developed and customized ERP solutions using ERPNext and the Frappe Framework to meet client-specific business requirements.
 - Designed and built custom business applications, integrating workflows across company departments
 - Collaborated with cross-functional development teams to implement software solutions aligned with customer requirements.
- **Rafik Hariri University Hospital, Beirut – IT & Mobile Development Intern** | from Jun 2025 to July 2025
 - Developed an Android mobile application as part of the hospital's digital services initiative.
 - Configured and managed network infrastructure in the hospital's IT department, including server setup and host interconnection.

Projects

Car Rental Management System

- Developed a Python-based car rental management system, demonstrating proficiency in object-oriented programming.
- (OOP) and full-cycle software development.
- Implemented features such as vehicle availability checking, booking management, rental history, and email notifications.
- Designed for scalability, with future integration plans for a GUI or database backend.

Bank Account Management System

- Designed and developed a scalable banking system with robust database handling.
- Implemented core features like financial transaction handling and security services.
- Practiced relational-databases and software engineering fundamentals with Java and SQL.

Array Driver Module

- Implemented every essential array function such as insertion, deletion, searching, and sorting with the most optimized time complexity.
- Used best algorithms for sorting (quick sort, merge sort) with $O(n \log n)$ time complexity.
- Optimized searching functions with binary search achieving $O(\log n)$ time complexity for sorted arrays.
- Designed an array resizing function with an amortized $O(1)$ time complexity for dynamic arrays.
- Handled edge cases and ensured the highest efficiency in all implemented array operations.

Our Final Year Project: The Green Gaurdian:

- We made a fully automated mobile robot, designed to detect and pick up garbage in a ceirtain environment.

- Each robot is responsible for collecting and classifying garbage into organic and non-organic and storing it in separate bins carried on its body
- The robot provides its information (components processing,temp and status of bins if filled and its functionality) to the web dashboard where authorized people can manage and control the robot

Technical Skills

- **Programming Languages:** C++, Java, Python (NumPy, Pandas, Matplotlib), C
- **Machine Learning Frameworks & Libraries:** TensorFlow, PyTorch, OpenCV, Model Training
- **Core Concepts:** Object-Oriented Programming (OOP), Data Structures, Algorithms
- **Development Tools:** Git, Github, Visual Studio Code, Visual Studio Community, Eclipse, Pycharm
- **Problem-Solving:** Competitive programming, Algorithm optimization
- **Other Skills:** Debugging, Code Review

Interpersonal Skills

- Fast Learner
- Displined and Organized
- Team worker
- Strong Communicator
- Able to convey ideas clearly
- Ability to manage multiple tasks simultaneously

Hobbies

I like doing sports (football, GYM), hiking, Horseback Riding

Languages

Arabic (Native) | English (Fluent)