Charbel FAYAD

1302, Mastita, Byblos • 00 961 70-353-574 • charbelfayad64@gmail.com • LinkedIn • GitHub

EDUCATION

Lebanese American University (LAU): School of Arts and Sciences

Byblos, Blat

BS, Computer Science (Honors Program)

09/2021 - 06/2024

CGPA: 3.98, MGPA: 4 (High Distinction)

National Orthodox High School

Akkar, Halba

GPA: 3.8 (20th Place in Lebanese Baccalaureate)

07/2021

Languages: Arabic (Native), French (Full Professional Proficiency), English (Full Professional Proficiency)

EXPERIENCE

Software Integration Engineer – Murex

06/2024 - present

- Develop and maintain secure, scalable integrations between Murex and external systems using MuleSoft and Mule 4.
- Design, manage, and document REST/SOAP APIs to support integrating over 40 systems.
- Collaborate with stakeholders to gather requirements, define test scenarios, and deliver business-aligned solutions.
- Enhance efficiency through automation scripts, CI/CD Jenkins pipelines, and internal support tool development.

Machine Learning Research - Lebanese American University

03/2022 - 06/2024

- Developed a genetic programming algorithm to be incorporated in federated learning techniques.
- Designed a new algorithm to exploit population structure in evolutionary algorithms.
- Collaborated with researchers on an ensemble learning model inspired by network science.
- Technologies: TensorFlow, Keras, DEAP, networkx, numpy, pandas

Software Engineering Internship – NinjaCo

2023 - 3 months

- Designed a complex parser and an algorithm to use web-based visual programming on physical Arduino.
- Implemented CI/CD pipeline reducing release cycle times by 30%
- Technologies: NextJs, NestJs, Docker, MongoDB, Mongo Express, Minio, Maildev, Tailwind CSS, React Query, Blockly

Full Stack Software Engineer Internship _ Ajjerni.com

2022 - 3 months

- Developed and maintained an e-commerce web application using Next.js, Strapi, and PostgreSQL.
- Participated in code reviews and provided feedback to improve code quality.
- Technologies: NextJs, Strapi, Docker, PostgreSQL, Minio, Maildev, Tailwind CSS

PROJECTS

NinjaCo

03/2023

Created a Full Stack website, that enables kids to code Arduino and Html using visual programming in a fully customizable editor with a clean user interface. The platform uses a course-based enrollment system • <u>Live Preview</u>

Attractors Simulation 05/2022

Developed a fully customizable physics-based simulation of a deterministic chaotic system using JavaScript canvas context 2d, HTML and CSS. Hosted on GitHub pages • <u>Live Preview</u> • <u>Source Code</u>

Tourify 11/2022

Published a full stack mobile application that help tourist explore Lebanon. Frontend in Ionic Angular coupled with a PHP Backend with MySQL as Database. The application source code and preview are available • <u>Source Code</u>

TECHNICAL SKILLS

Programming Languages: JavaScript – Python – Java – TypeScript – Csharp – Rust – C – Dart – PHP
Frameworks / Libraries: React – NodeJS – Fast API – Flutter – React Native – Tailwind – NextJs – Flask – Strapi

Database: MySQL - Firebase - PostgreSQL - SQLite - MongoDB

SOCIAL SERVICES

Software Engineering Club Founder – LAU – Founded SE club at LAU, hosted workshops, and technical seminars. **Lab Instructor** – LAU – Operating System & Computer Programming, assisted students by explaining programming principles.