

ABDALLAH EL BACHA

Software Engineer

CONTACT INFO

abdallah.bacha3@gmail.com 

+96176373128 

Beirut, Lebanon 

[linkedin.com/in/abdallah-bacha](https://www.linkedin.com/in/abdallah-bacha) 

EDUCATION

Computer and Communications
engineering diploma

Saint Joseph University of Beirut
(USJ) - ESIB

2019 - 2024

Beirut

High school diploma

General Science

Le Lycée National School

2004 - 2019

SKILLS

C++ and C#

Java

PHP

Python

SQL

HTML / CSS

JavaScript

Web Frameworks: Laravel, Angular

CERTIFICATIONS

CCNAv7: Introduction to Networks

CAREER OBJECTIVE

As a software engineer, I am committed to staying current with industry trends and continuously enhancing my IT skills. With a self-motivated and collaborative approach, I thrive in both team environments and independent projects. I am eager to leverage my passion for software development to contribute to your company's success. I am particularly interested in gaining hands-on experience in developing scalable, well-documented code while learning from your team of talented engineers.

WORK EXPERIENCE

Internship

Cirrus, an ITG company

Jun, 2023 - Aug, 2023 / Beirut, Lebanon

- Collaborated with a team to enhance the functionality of Cirrus' internal system.
- Developed backend features using the Laravel framework, improving system performance and reliability.
- Implemented frontend enhancements using Angular, enhancing user experience and interface design.
- Gained exposure to DevOps practices, including Docker, Azure Kubernetes Service (AKS) and CI/CD Pipelines, to streamline development workflows and deployment processes.

PROJECTS

Final Year Project: Privacy Preservation of Genome Data Analytics using Homomorphic Encryption

- Engineered a cloud-based genomic data storage solution with Homomorphic Encryption, achieving an increase in data security and faster access times.
- Developed disease detection algorithms analyzing encrypted genomic data, enhancing data privacy.
- Configured Azure for cloud storage, improving data retrieval efficiency, while leveraging SageMath for cryptographic tasks, ensuring reliability.

Multidisciplinary Project: Ostraca Image Processing Tool

- Created an application that enhanced legibility of Phoenician ink inscriptions on Ostraca, increasing research efficiency by 30%.
- Designed and implemented image processing algorithms using C#, .NET Framework, and AForge.NET for features like grayscale conversion, noise reduction, sharpening, and thresholding.

Machine Learning

- Implemented logistic regression classification to predict heart failure in patients based on clinical and demographic variables.
- Utilized k-means clustering to segment mall customers based on spending habits and preferences.
- Developed a Convolutional Neural Network (CNN) deep learning model to classify bird species from images.

All Booked Up

- Developed a user-friendly website facilitating donation of used books, benefiting underprivileged students.
- Built with .NET Core MVC, leveraging CSHTML for the UI.
- Enabled user sign-ins for seamless donation or book retrieval.

Weather Live

- Developed a desktop weather application that provides real-time weather updates for any selected city.
- Created using python and tkinter interface along with object-oriented programming.
- Using specific weather API to receive live information about the current weather for a city.