# Hajar Kattaa

Computer and Communications Engineer

About

Beirut, Lebanon

+96171474256

in hajarkattaa

najarkattaa

Frontend

React.js Tailwind CSS

HTML CSS JavaScript

Next.js MUI Ant Design

Backend

Node.js Express.js

MongoDB SQL

Mobile

Flutter Dart

AI/ML

OpenAI LLMs (GPT-4)

CrewAl LLaMA 3

Al Model Training

Tools

GitHub Azure DevOps

Figma Azure Pipelines

Networking

CCNA Routing & Switching

Experience

**CME Offshore** 

Beirut, Lebanon

AI & Mobile Development Intern

• Developed Al-powered chatbot using Flutter (mobile) and Dart.

- Trained and integrated a Llama 3-based model using company intranet data via Hugging Face and GPT4AII.
- Built secure local storage with ISAR and implemented auth/profile flows.
- Collaborated with UI designer on Figma and used OOP architecture.

Imperium Code 12/2023 - 05/2024

Remote

Part-Time Software Engineer

- Handled data migration and transformation for a US-based client.
- Built technical diagrams and contributed to ERP systems.
- Automated testing via Python scripts.
- Contributed to CI/CD via Azure Pipelines.

Imperium Code 09/2023 - 12/2023

Remote

Software Intern

- Built configuration tool using Ngx-admin, Node.js, and MongoDB.
- Created Python-based visualization scripts.
- Collaborated on backend logic and agile development.

Open Source Projects

#### Obfuscation and Deobfuscation Using LLMs

01/2025 - 05/2025

07/2024 - 08/2024

Capstone project leveraging LLMs for multi-format code obfuscation and deobfuscation using a multi-agent system.

- Designed and implemented a multi-agent system using CrewAl and GPT-based models.
- Supported Python, JavaScript, and binary code formats.
- Improved readability and effectiveness over baseline GPT results.
- Engineered a functioning prototype with integrated automation and language parsing.

### **Pulmonary Disease Detection Web Platform**

11/2023 - 01/2024

Full-stack MERN application integrating ML for chest X-ray classification.

- Frontend with React, MUI, and Ant Design.
- Integrated ML model into Node.js/Express backend.
- Managed MongoDB-based data and prediction handling.

## Hire Harbor - Job Matching Platform

10/2023 - 12/2023

 $\label{eq:merror} \mbox{MERN stack job platform with matching engine and admin/user portals.}$ 

- Built responsive interfaces with React.
- Designed backend with Node.js and MongoDB.
- Integrated secure matching logic and UX design.

Education

#### Saint Joseph University of Beirut (USJ)

BE Computer and Communications Engineering

09/2021 - 05/2025