

# EL ALJ MOHAMED

SOFTWARE ENGINEER

+212632717417 elaljooo@gmail.com Mohamed Elalj elaljo Larache, 142 Nejma

## PROFILE

Passionate about technology and programming, my education and hands-on projects have allowed me to develop strong skills in problem-solving, teamwork, and project management. I am constantly seeking new trends and technological advancements, and I am open to internship opportunities to apply my skills and contribute to the field of computer science.

## EDUCATION

**UM6P – 1337 MED**  
Digital Technology Architect  
2022 – 2025

## SKILLS

- Typescript
- C/C++
- Docker
- React.js
- Python
- MariaDB
- Javascript
- Flask
- Git / Github
- HTML/CSS
- API's
- Figma

## LANGUAGES

- Arabic** – Native
- English** – Professional
- French** – Professional

## EXTRACURRICULAR ACTIVITIES

- Representative** of School 1337
- Member** of the IRL association
- Media Manager** of the MSC1337 club

## ACADEMIC PROJECTS

### FLAI HUB

Development of a dynamic Formula 1 news web application using Next.js and TypeScript. The project involved integrating live news APIs, implementing team-specific news filtering with dynamic theming, and adding an interactive ChatGPT-powered assistant for article insights and related content. Focused on responsive design, user engagement, and seamless data interaction while following best practices for modern web development.

**Technologies used :** Next.js, TypeScript, CSS, OpenAI API, REST APIs

### CUB3D

Recreation of a retro FPS experience inspired by Wolfenstein 3D. Design of a 3D experience in a 2D maze using raycasting, with smooth controls, retro graphics, and interactive elements. Focused on performance optimization and gameplay immersion, while adding a personal touch to the classic FPS style.

**Technologies used :** C, Data Structures, Raycasting, Git

### INCEPTION

Design and implementation of a secure multi-service system using Docker for Nginx, WordPress, and MariaDB, orchestrated with Docker Compose. Service isolation, resource optimization, and secure communication setup. Implementation of DevOps practices to facilitate deployment, maintenance, and scaling of the system.

**Technologies used :** Docker, Docker Compose, Nginx, WordPress, MariaDB, Linux, Git

### PUSHSWAP

Development of an efficient sorting algorithm under constraints, with a limited set of instructions. Comparison and implementation of strategies (insertion, radix, etc.) to minimize the number of operations. Focus on performance, algorithmic logic, and low-level data management.

**Technologies used :** C, Sorting Algorithms, Valgrind, Git

### TRANSCENDENCE

Development of a complete web application in a team, combining an interactive interface (multiplayer Pong game, chat, social system) with a robust and secure backend. This project helped consolidate my skills in full-stack web development, software architecture, and agile team management.

**Technologies used :** javascript, HTML, CSS, Docker, Nginx, WebSockets

### Chatbot

Simple AI chatbot web app using Flask, Python, and OpenAI API with an HTML/CSS/JS frontend. Provides real-time, intelligent responses in a basic, user-friendly interface.

**Technologies used :** Python, Flask, Html, CSS, Javascript, OpenAI API