# Alaeddine Ben Mahmoud

# SOFTWARE ENGINEERING STUDENT













## PROFILE SUMMARY

I'm Alaeddine Ben Mahmoud, a final-year Computer Science Engineering student at Esprit, specializing in Software Engineering with a strong focus on full-stack development. I'm eager to tackle challenges and explore innovative solutions in technology. I am currently seeking a 6-month internship to apply my skills and gain practical experience.

## EDUCATION

Private Higher School of Engineering and Technologies - ESPRIT

Software Engineering

2022 - 2025

Institut Préparatoire aux Études d'Ingénieur de Sfax-IPEIS

Preparatory cycle for engineering studies at IPES

2020 - 2022

## PROFESSIONAL EXPERIENCE

# Full Stack Web Developer 🔊

Orange

• Project:

• Company:

Event Management Platform

Description:

- · Contributed to the development of an Event Management Platform, focusing on various modules including participant registration, accommodation management, and workshop scheduling. Gained hands-on experience in full-stack development and project management.
- This project is intended for use in IEEE events, especially the upcoming TSYP edition.
- Technologies used: Express.js, React.js, Node.js, NoSQL, MongoDB, Redux

# **Full Stack Web Developer**

July, 2023 - August, 2023

July, 2024 - August, 2024

• Company:

- ProCAN, specialized in web development
- Project:
- Secure Application Framework Enhancement
- Description:
- Developed and integrated advanced authentication and authorization mechanisms using Spring Security, enhancing the security framework of the application and ensuring compliance with best practices and industry standards.
- Technologies used: Spring Boot

### **PROJECTS**

Website Link ALA Social-Media-app (personal project) Demo Link

Description: I developed and deployed the "ALA Social-Media-app," a social media platform where users can create profiles, follow others, and interact with posts through likes, comments. It features JWT authentication, React Query for data handling, and Cloudinary for media uploads, all styled with Tailwind CSS. The app includes real-time notifications, post creation and deletion, profile editing, and image uploads for an engaging user experience.

Technologies used: Express, React.js, Node.js, NoSQL, MongoDB, Tailwind CSS

**ERP application "CoConsult"** 

Demo Link

January, 2024 - May, 2024

Description: Design and development of the "CoConsult" web application, an HR platform dedicated to human resources management. It offers user-friendly tools to simplify recruitment, employee management, and performance tracking.

Technologies used: Spring Boot, Angular, TypeScript, Bootstrap

**DevOps Pipeline for Java Spring Application** 

September, 2024 - October, 2024

Description: Description: Built a fully automated CI/CD pipeline for a containerized Java Spring Boot application. Key tasks included:

- · Automated builds and tests using Jenkins, integrated with Maven, GitHub, and JUnit for unit testing.
- · Containerized application components (Spring Boot, Angular, MySQL) with Docker and managed multicontainer deployments using Docker Compose.

- · Set up code quality checks with SonarQube for static code analysis, enhancing security and maintainability.
- Managed artifacts by integrating a Nexus repository for version control of application deliverables.
- · Configured email notifications in Jenkins to streamline communication on build statuses and issues.
- Implemented continuous monitoring using Grafana and Prometheus for real-time performance tracking and alerting.

**Technologies used**: Jenkins, Docker, Maven, JUnit, SonarQube, Nexus, Grafana, Prometheus, Spring Boot, Angular, MySQL, Vagrant.

Web-Desktop application "INFINITYFARM" Demo Link

October, 2023 - December, 2023

**Description**: Design and development of the INFINITYFARM web application, a comprehensive solution for agricultural management, offering user-friendly tools to simplify farmers' daily tasks.

Technologies used: Java, JavaFX, Symfony, JavaScript, Bootstrap, HTML

• <u>Self-Driving Car</u> Demo link

Website Link

August, 2024

**Description**: Developed an interactive simulation where users train an Al car using neural networks and then race against it. The project features advanced car driving mechanics, real-time traffic simulations, and neural network visualization, all built with pure JavaScript.

Technologies used: JavaScript, HTML, CSS

• <u>Diabetes Prediction</u> Demo link

January, 2024

**Description**: I developed a robust SVM-based machine learning model using Python to accurately predict diabetes, achieving impressive accuracy and reliable predictions.

Technologies used: Python, SVM algorithm, Data Analysis

#### EXTRA-CURRICULAR ACTIVTIES

- Member at IEEE Esprit Student Branch (2022-present)
  - Parcipating in IEEEXTREME 16.0 (Ranked 268/ 986 in Tunisia): Problem Solving Competition
  - Participating in TSYP11 Tunisian Student and Young Professionals Congress)
    - Pitched an innovative solution, "esGreen," for the IAS Tunisia Technical Challenge. esGreen is a semidecentralized app designed to promote sustainable industrial growth by facilitating efficient product exchange between industries, with a focus on environmental sustainability and a circular economy. <u>Presentation</u>
  - Organizing committee member for Esprit RAS ROBOTS 2.0
- Competing in TCPC 2024 (Tunisian Collegiate Programming Contest) Details

# SKILLS

- Frameworks: Spring, Angular, NodeJS, ReactJS, MERN stack, Symfony, Next.js, .NET
- Languages: Java, Javascript, TypeScript, PHP, C++, C#, Python
- DevOps and CI/CD Tools: Jenkins, Docker, Maven, SonarQube, Nexus, Grafana, AWS EC2, GitHub Actions, Terraform
- Tools: Swagger, Postman, Git, Jira ,Firebase
- Databases: MySQL, MongoDB, NoSQL
- Methodologies: Agile (Scrum)
- Operating Systems: Linux, Windows
- Unit Testing: Jest , JUnit

#### LANGUAGES

English: B2Frensh: B2Arabic: Native

## CERTIFICATIONS

• AWS Educate Getting Started with Compute - AWS

October,2024

• Advanced Learning Algorithms – DeepLearning.Al on Coursera

August, 2023

• Machine Learning Introduction for Everyone – IBM on Coursera

August, 2023