# Ahmed Amine Soualhi

Software Architecture Engineering Student



Tunis, Tunisie J Phone: +216 53969043 Email: soualhi.ahmedamine@esprit.tn

**Website:** ahmedaminesoualhi.me

# **PROJECTS**

#### • SOFIMA – Industrial Maintenance Management System (Full Stack Developer)

Developed and deployed a comprehensive maintenance management system for industrial operations with role-based access control and workflow automation. Successfully deployed to production on OVH VPS with complete infrastructure management.

- Backend: Spring Boot, Spring Security, JPA/Hibernate, JWT Authentication
- Frontend: Angular, TypeScript, SCSS, Responsive Design
- Security: Role-based authorization (ADMIN, MOULISTE, REGLEUR), JWT tokens
- Infrastructure: OVH VPS deployment, SSH server management, Docker containerization
- DevOps: Production deployment, Environment configuration, Domain management
- API: RESTful services with proper HTTP status codes and error handling
- Keywords: Cloud Deployment, VPS Management, SSH, Industrial IoT, Enterprise Security

### • BIAT – Legal Chatbot for Banking Sector (Solo Project)

Developed a legal chatbot for BIAT bank using Machine Learning and Deep Learning. The project included data collection, cleaning, model building (NLP/Deep Learning), web application deployment, and production rollout. Enhanced customer support by automating legal inquiries.

- Technologies: Python, Web Scraping, NLP, Deep Learning, Cloud
- Keywords: Chatbot, NLP, AI, Automation

#### • Maghrebia Assurance – Smart Insurance Management Platform (Team Lead)

Led a team to build a modular, AI-powered insurance platform for Maghrebia Assurance. Features included contract and claims management, fraud detection, payment prediction, and customer feedback analysis.

- Backend: Spring Boot, Spring Cloud; Frontend: Angular
- Infrastructure: Docker, Eureka, API Gateway; Security: Keycloak
- DevOps: GitHub Actions, Docker Hub; API: Swagger
- AI/ML: Fraud detection, Payment prediction, Feedback classification

#### • Project X – Micro Bank Credit Platform (Full Stack Developer)

Contributed to the design and redevelopment of a mobile-first micro-banking platform offering credit, loan tracking, and user onboarding services. The platform was initially developed with Scala and Flutter, then fully rebuilt using .NET technologies for improved scalability and maintainability.

- Backend: Scala (initial version), ASP.NET Core (final version), Entity Framework

- Frontend: Flutter (mobile app); Admin Dashboard: MIUI-based ASP.NET Razor Pages
- Architecture: REST APIs, modular service design
- DevOps: Docker, GitHub CI/CD
- Security: JWT Authentication, Role-based access control
- API: Documented with Swagger for developer collaboration
- Keywords: Microfinance, Credit Tracking, Scalable Architecture, Mobile Banking

#### • Tourist in Tunisia

SDL game in C, teamwork, dynamic allocation, pointer management, resource optimization, custom Arduino controller.

#### • On-Air

Radio station management app (C++), features: SMTP, SMS, dynamic statistics, database integration.

#### • Doorstep

E-commerce platform (JavaFX, Symfony) with delivery services, AI assistant for admin and clients.

# **PROFILE**

Software architecture engineering student specializing in distributed systems and microservices, with practical experience deploying scalable cloud solutions (AWS, GCP) and building CI/CD pipelines. Skilled at designing modular, resilient architectures, RESTful APIs, and deploying containerized applications using Docker and Kubernetes. I have led and contributed to projects and internships covering system design, development and production rollout. Seeking a role in software architecture to design and industrialize scalable, secure software systems.

# **SKILLS**

- Project Management, Teamwork, Leadership, Time Management
- Effective Communication, Public Relations, Critical Thinking
- Programming Languages: C , C++ , Java , PHP , JavaScript , typescript
- Languages: Arabic (Native), French (Fluent), English (Fluent), German (Intermediate)

## **EDUCATION**

- ESPRIT: Ecole Sup Privée d'Ingénierie et de Technologies Prépas intégré / cycle ingénieur
- Baccalauréat Math-Tech

## **WORK EXPERIENCE**

- Full Stack Developer (Freelance)
  Web development using Java, PHP, JavaScript.
- Stage formation humain et sociable, Devolution
- Stage d'immersion en entreprise, BIAT
- Stage d'ingenieur, Sofima Filters

## **CERTIFICATIONS**

- DevOps Essentials Google (Aug 2025). Cred ID: 17814957
- Oracle Cloud Infrastructure 2025 Certified AI Foundations Associate Oracle (Aug 2025)
- Google Cloud Computing Foundations Google (Jul 2025). Cred ID: 16925018
- Implement CI/CD Pipelines on Google Cloud (Skill Badge) Google (Jul 2025)
- Introduction to Containers, Kubernetes, and OpenShift Cognitive Class (Jun 2025). Cred ID: 6c2fe38db72c4e298e95b8d8492bbaa2
- Machine Learning with Python Cognitive Class (Jun 2025). Cred ID: 65e36c83799b4ce28f429c44e1134744
- Evaluation & Light Customization of Large Language Models NVIDIA (Jan 2025). Cred ID: M9kdR7yQQ5WiuvosdW\_R4g
- AWS Academy Graduate Cloud Foundations Amazon Web Services (Novembre 2024)
- Hashgraph Developer Course Certificate of Completion The Hashgraph Association (17 Octobre 2025)

#### INTERESTS

Emerging technologies, AI, Cloud Computing, DevOps, Video Games, Technical Reading