Mohamed Amine MACHERKI

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EXPERIENCE

Software Engineer, Sofrecom (Orange France subsidary) – Tunis, TN   Sep 2023 - PRESENT

   Project: DISCO- Digital platform for core commerce orchestration (IPCEI)

   Team Size: 50+ members across 4 countries

DISCO is a cutting-edge open-source digital platform focused on core commerce functionalities, developed as part of Important Projects of Common European Interest (IPCEI).

- Designed high-performance RESTful APIs in Java 17/Spring Boot with TMF Open APIs compliance.
- Applied CQRS & Event Sourcing patterns with Axon Framework for scalable 6-microservices architecture synchronized via Kafka streaming.
- Implemented test-first development using Bruno framework for unit testing and Implemented TDD/BDD methodologies, clean code practices, and comprehensive code reviews.
- Championed clean code principles, pair programming, and rigorous code reviews with SonarQube, Checkmarks Tool, and FindBugs for Java 17 validation.
- Optimized API response time from 3.6s to 0.5s, improving system efficiency by ~86%.
- Spearheaded the MVP development for the microfrontend part before its full implementation.
- Actively contributed to bug fixing, code reviews, and documentation for onboarding new team members.

   Key Achievements: ODA TMF Award winner at DTW23 **–** Reduced carbon footprint via eco-friendly tech solutions.

   Tech Stack: Spring Boot, React, Microfrontends, Microservices, Keycloak, Kafka, S3, Junit, Mockito, TDD, openshift.

R&D Engineer Intern (6 months), Sofrecom (Orange Innovation) – Tunis, TN   Feb 2023 – Aug 2023

- **SOFLEARN:** is a VR-based medical learning platform using AI and blockchain to create immersive training simulations.
- Co-developed with a medical university, reducing training costs by ~30%.
- Integrated Rental NFTs & smart contracts for 10+ simulated medical scenarios.
- Designed and implemented an AI-powered virtual tutor using NLP and ML, enabling real-time Q&A.

   Key Achievements: Presented the solution at Orange Innovation Day 2024

   Tech Stack: Virtual Reality, Blockchain, AI, Machine Learning, NLP, Smart Contracts, NFT, Unity, Oculus Quest 2

Web Developer Intern (2 months), Talan – Tunis, TN   Jun 2022 - July 2022
Ai Developer Intern (2months), Consultim-it – Sousse, TN   Aug 2022 - Sep 2022

EDUCATION

National School of Electronics and Telecommunications of Sfax   Jun 2023
Master's Degree in Computer Engineering and Telecommunications   Sfax, TN
Preparatory Engineering Institute of Monastir   Jun 2020
Undergraduate Degree in Pre-Engineering (Mathematics and Physics)   Monastir, TN

CERTIFICATIONS, SKILLS & INTERESTS

Programming: Java 8+, Spring Boot, React.Js, REST APIs, Python, TypeScript, JavaScript, Bootstrap.
Technologies: AWS, Azure, Kubernetes, Docker, CI/CD (Jenkins, Maven), Kafka, Elasticsearch, Keycloak, MongoDB.
Platforms & Tools: Linux, Jira, Confluence, GitLab, GitHub, Artifactory, openshift.
AI & Web3: Supervised & Unsupervised ML, MCP ,A2A , Computer Vision, NLP, Metamask ,Unity , Blender ,Oculus quest 2

Languages:

   ★ English (advanced)   ★ French (advanced)   ★ German (intermediate)

Certifications: Oracle Certified Pro(OCA) – Java 8– Score: 87%./ Professional Scrum Master™ I (PSM I)– Score: 85%.

- **Eco-design Training Certificate** – Certified in sustainable and energy-efficient software development practices.

- **PMI ACP Training Certificate** – Gained expertise in Agile principles, team collaboration, adaptive planning.

Interests: Visual arts enthusiast – Painter – Marathon runner