

# Mohamed Amine MACHERKI

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## EXPERIENCE

**Software Engineer**, Sofrecom (Orange France subsidiary) – 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

**National School of Electronics and Telecommunications of Sfax** 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