

MUSTAPHA EL HACHMI MAHTI

SOFTWARE ENGINEER

Toulouse, Occitanie, France | mustaelhachmimahti@gmail.com | 0750018388



PRESENTATION

Software engineer passionate about **full-stack development** and **artificial intelligence**. I combine technical expertise and product vision to create innovative, high-impact solutions. I continuously experiment with **emerging technologies** (RAG, MCP, NLP) and transform complex ideas into concrete products, from design to large-scale deployment.

PROFESSIONAL EXPERIENCE

Full Stack Software Engineer, Groupe Actual, Toulouse

September 2022 — September 2025

- **Web Development:** Design and development of complex React/TypeScript applications (50,000+ users) with advanced user interfaces and optimized state management.
- **Mobile Applications:** Cross-platform iOS/Android development with React Native/Expo (250,000+ downloads).
- **Backend Architecture:** Design of NestJS microservices with RESTful APIs, PostgreSQL/Redis data management
- **Performance & Scalability:** Optimization of web and mobile performance (+30% speed), implementation of caching solutions and real-time monitoring
- **Data Engineering:** BigQuery integration for business analytics and development of high-availability data pipelines

Stack: React, TypeScript, React Native, NestJS, PostgreSQL, Redis, GCP

Full Stack Developer, Groupe Bizness, Toulouse

January 2022 — August 2022

- **Microservices Architecture:** Development of event-driven architecture with multi-source aggregation APIs
- **Real-Time Applications:** Implementation of WebSockets and Server-Sent Events for collaborative interfaces
- **Database and API:** Development of APIs with SAP HANA database

Stack : Angular, NodeJS (NestJS), SAP HANA, GitLab CI/CD, Docker

Full Stack Developer, Société JUMP, Toulouse

May 2021 — July 2021

- **Automating E2E testing** with Selenium WebDriver, Cucumber JS, and Gherkin syntax
- **Developing custom Slack commands** with Bolt JS and NestJS
- **Creating automated workflows** to improve team productivity

Stack : Selenium, Cucumber JS, Bolt JS, NestJS, MongoDB, JWT, Slack API, Docker

Syntrix - Compliance & Anti-Fraud Platform (Co-founder & CTO)

July 2023

SaaS compliance platform (3 major clients). **Clients:** Al Fardan Exchange and law firms.

- **Backend Microservices:** NestJS architecture with FATCA/CRS modules and CoreBanking integration.
- **Web applications:** NextJS (React) interface for automated KYC portal and compliance tools.
- **Real-time systems:** Anti-fraud module with incident detection and automatic alerting.

Stack: React, NestJS, PostgreSQL, Redis, Kubernetes, Rabbitmq.

SKILLS

- **Web & Mobile Development:** React, TypeScript, React Native, NestJS, RESTful APIs, WebSockets
- **Artificial Intelligence:** NLP, Machine Learning, RAG, LangChain, OpenAI API, Automatic Classification
- **Backend & Data:** PostgreSQL, MongoDB, Redis, Elasticsearch, BigQuery, Microservices Architecture
- **DevOps:** Docker, CI/CD, Monitoring, Automated Deployments

FORMATION

- **Master Software Architect** | EPITECH Computer Science School, Toulouse (2023 — 2025)
- **Bachelor's Degree in Application Development & DevOps** | EPSI, Toulouse (2022 — 2023)
- **Associate Degree in Web & Mobile Development** | SIMPLON, Toulouse (2021 — 2022)
- **High School Diploma in Science & Technology** | IES Salvador Espriu, Girona, Spain (2017 — 2019)

LANGUAGES

Italian (Conversational), English (Fluent), French (Native), Arabic (Native), Catalan (Native), Spanish (Native)