

YASSINE SELMI

Senior Full-Stack & Mobile Engineer (React / Next / Angular / Node / Nest / Docker , Kubernetes / AI & Agents Integration)

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PROFILE

Senior Fullstack Engineer with 6+ years building production web and mobile applications, and hands-on experience shipping **AI-powered** features into live products - **LLM** agents, **Model Context Protocol (MCP)** servers integrated with Claude, voice assistants, and **AI-driven OCR**/document automation. Strong end-to-end ownership across **React/Next.js** frontends, **Node/Express/NestJS** backends, and **React Native** mobile apps, with production DevOps experience (**Docker**, **Kubernetes**, **CI/CD**). Fluent French and English, native Arabic.

CORE SKILLS

AI & LLM Integration: LLM Agents, Model Context Protocol (MCP), Claude API integration, Voice Assistants, AI-powered OCR / Document Automation

Frontend: React, Next.js, TypeScript, JavaScript, Tailwind CSS, HTML5/CSS3

Backend: Node.js, Express, NestJS, FastAPI, Python

Mobile: React Native, Expo, Augmented Reality (AR) integrations

Databases: PostgreSQL, MongoDB, MySQL

Cloud & DevOps: AWS, GCP, Docker, Kubernetes, CI/CD (GitHub Actions), Prometheus, Grafana

Testing: Jest, Mocha, Chai, Selenium (test automation)

Languages: French (fluent), English (professional), Arabic (native)

PROJECTS

Muhtawa AI (Content AI) - AI-Powered Content Creation Platform for Social Media

- Built an **AI-powered** platform helping content creators plan and generate content for LinkedIn, YouTube, and Shorts/Reels.
- Developed the frontend with **React/Next.js** and the backend with **PostgreSQL**, integrating an **AI/LLM** engine to power content generation; live at <https://muhtawaai.pro>.

Savvy AI - AI-Powered Personal Finance Platform

- Built an **AI-powered** platform to track income and expenses and forecast future financial standing, with an integrated **AI/LLM** assistant for financial insights.
- Developed the frontend with **React/Next.js** and the backend with **PostgreSQL**; live at <https://savvyai.pro>.

Lift & Learn AI - AI-Powered Bodybuilding Education & Workout Planning App

- Built a web app that teaches users bodybuilding anatomy and nutrition fundamentals, then uses **AI** to generate and continuously adapt personalized workout plans.
- Developed with **React/Next.js**, Prisma, and **PostgreSQL**; live at <https://liftlearnai.pro>.

Zaplet - Smart POS & Intranet Platform for F&B Retailers

- Designed and built a smart POS system and internal intranet for food & beverage retailers, including a publicly accessible space for customers to browse and interact with the business.
- Built the web frontend with **React** and **Tailwind**, and a companion mobile app with **React Native** for on-the-go operations.
- Enabled **real-time communication** across the intranet, both internally between staff and externally with customers, using **WebSockets** for instant updates.
- Integrated push notifications to keep customers and staff informed in real time.
- Implemented Google Sign-In and Sign-Up via **OAuth2** for fast, secure authentication.
- Developed the backend API with **NestJS** and **PostgreSQL**; the application has been containerized and deployed with **Docker**, live at <https://zaplet.pro>.
- A test account is available for review: email test@gmail.com, password testtest2026.

EXPERIENCE

Senior AI and Mobile Engineer - SMARTECH EAM Experts | Jan 2025 - Jul 2026

- Designed and integrated **LLM-based AI** agents into a B2B enterprise asset management application built with **React Native** and **Expo**, powering core user workflows and adding **voice-driven**, hands-free interaction.

- Built and deployed **Model Context Protocol (MCP)** servers integrated with Claude, giving the **AI agent** secure, structured access to external tools and business workflows - early hands-on experience with **agentic AI** infrastructure.
- Developed backend APIs in **Python** and deployed them on Maximo (IBM's EAM platform), extending core asset-management functionality for enterprise B2B clients.
- Refactored a legacy codebase into a modular architecture and redesigned the **UX/UI**, improving maintainability and user satisfaction.
- Reduced application bundle size and optimized build configuration, improving load times and release speed.
- Implemented a **CI/CD** pipeline (GitHub Actions) and end-to-end API tracing, improving deployment reliability and observability.
- Built real-time **AR asset-scanning** features for field operations; optimized core validation algorithm from $O(n \times p)$ to $O(1)$ for enterprise-scale datasets.
- Mentored interns, providing technical guidance and support throughout their end-of-studies projects.

Senior Full-Stack JavaScript & Mobile Engineer - Unfrauded | Dec 2023 – Oct 2024

- Led a **UX/UI** overhaul by translating Figma designs into production-ready components with **NativeWind (Tailwind CSS for React Native)**, improving visual consistency and the overall user experience.
- Integrated **AI-powered OCR** to automatically detect and extract document content, and **AR** features to assess vehicle damage post-accident, for insurance-industry clients.
- Built responsive **React** frontends and cross-platform **React Native** mobile apps for insurance workflows.
- Designed and built RESTful APIs and backend services with **Node.js** and **Express**, connecting mobile clients to server-side systems.

Senior Full-Stack JavaScript & Mobile Engineer - Coral-io | Aug 2022 – Nov 2023

- Built cross-platform mobile applications (**Expo / React Native**) for photographers, including camera capture and QR-scanning features.
- Developed backend APIs with **Node.js/Express** and integrated test automation to ensure performance and stability across devices.

Full-Stack Angular/.NET & Test Automation Engineer - Edligo | Feb 2022 – Jul 2022

- Built responsive UI features for a talent-analysis platform using Angular, **TypeScript**, and .NET backend services.
- Set up **automated test coverage** with Selenium and structured test reporting.

Full-Stack JavaScript & DevOps Engineer - ATS-Digital Dev | May 2020 – Jan 2022

- Built **React** frontends and **Node.js/Express** APIs for **Insideboard**, a change management platform.
- Contributed to a microservices architecture on **Kubernetes/AWS**, with **MongoDB**-backed services and **CI/CD** pipelines.
- Implemented gRPC-based communication between microservices for fast, reliable synchronous service-to-service calls.
- Introduced Kafka messaging for asynchronous microservice operations, decoupling services and improving system resilience and scalability.
- Added **Prometheus/Grafana** monitoring and custom metrics; covered services with **Jest/Mocha** unit and integration tests.

EDUCATION

Software Engineering - ENSIT 2017 – 2020

Engineering Prep School - IPEIM 2015 – 2017

EARLIER EXPERIENCE (INTERNSHIPS)

- ATS-Digital Dev - Full-Stack **React**/Symfony, end-of-studies internship (Nov 2019–May 2020): HR module of **Insideboard**, a large SaaS platform, Elasticsearch-based search optimization.
- Factory 619 - Full-Stack JavaScript internship (Jul–Aug 2018): dashboard app with **React**, **Node.js/Express**, Firebase.
- Robox Agency - Unity game developer internship (Jul–Aug 2017): PC game using Leap Motion, .NET & C#.

REFERENCES

Mohamed Dkandej: CEO, Smartech EAM Experts - mskandaji@smartech-tn.com

Amine Ben Miled: CEO, ATS-Digital Dev - amiled@ats-digital.com

Mehdi Chibouni: CTO, ATS-Digital Dev - mchibouni@ats-digital.com