



Mohamed Ali Trabelsi

Fullstack & AI Engineer

Address: La Soukra, Ariana, 2073

CAREER OBJECTIVE

Accomplished Software Engineer with 3 years of experience in building SaaS and AI-native solutions. Proven track record in spearheading complex legacy migrations and engineering multi-agent AI systems. Proficient in the JavaScript ecosystem and Python-based LLM and RAG orchestration.

PROFESSIONAL EXPERIENCE

Fullstack Software Engineer | [Netisse Services](#)

February 2025 – Present

- Spearheaded the full migration of a +10 year old Perl-based geospatial pipeline to a modular Node.js architecture, ensuring 100% parity across a corpus of 500+ production SVG floor plans. Engineered a deterministic geometry engine using Linear Algebra, Computational Geometry and heavy Regex processing to convert architectural floor plan SVGs into structured JSON used by a 3D map engine.
- Architected a resilient hybrid mobile platform (Ionic 8 / Angular 19 / Cordova) to replace a legacy AngularJS app, maintaining backward compatibility for a heterogeneous fleet of rooted 7+ Android tablet models (API levels 23 through 31) with remote control and access via ADB & SSH. Developed custom native Java Cordova plugins to add compatibility for low-level system integrations for Android 10+

Technologies: Angular 19, Ionic 7, AngularJS, Cordova, Node.js, Perl, MySQL, Java (Android SDK), Socket.IO, adbkit, SSH tunneling, Android Shell, 3D Rendering, Regex, XML/XPath, Canvas API, Three.js

Fullstack Software Engineer | [Navero](#)

October 2024 – February 2025

Worked on AI-native hiring platform enabling recruiters to automate candidate screening, assessments, and decision support through LLM-driven workflows. Built asynchronous LLM processing pipelines for automated candidate assessment and CV scoring workflows, integrating multi-provider LLM SDKs.

Technologies: TypeScript, JavaScript, Python, FastAPI, PostgreSQL, Next.js, React, Prisma, Supabase, Redux, FastAPI, Pydantic, RabbitMQ, Redis, Docker, multi-provider LLM SDKs, GCP (storage, cloud run)

Fullstack Software Engineer | [EmyeHR](#)

September 2023 – October 2024

Engineered a multi-agent AI ecosystem integrated with the Slack, MS Teams and the main SaaS app, featuring secure sandboxed environments to process data and generate interactive HR plots on demand. Built an AI-powered survey engine, ESCO-integrated Job Postings module, Leave Management System, Annual Meetings Module. Supervised two interns on LLM fine-tuning and RAG optimization projects.

End-of-studies Intern, Fullstack Developer | [EmyeHR](#)

February 2023 - May 2023

Designed and implemented FlexiSpace, an office management platform featuring a drag-and-drop layout designer and AI-driven scheduling optimization powered by OptaPlanner. Developed a suite of integrated solutions for parking and carpooling, using n8n for workflow automation and Socket.io for real-time updates.

Technologies: Angular, Typescript, Nodejs, PostgreSQL, n8n, Java, Quarkus, OptaPlanner, Socket.io, Python, LLMs, RAG, Custom Elements, Shadow DOM, SaaS, Docker, Linux, Git, Jira, Agile, SCRUM

Backend & AI Engineer | [Sagy.ai](#)

May 2023 - September 2023

Collaborated on a multi-tenant AI-powered knowledge base platform across multiple data sources. Worked on multi-model AI orchestration and LLM routing, built high accuracy RAG based on ChromaDB. Integrated with external connectors (Slack, Notion, Teams). Managed full-lifecycle Docker environments.

Technologies: Python, Django (DRF), JavaScript, TypeScript, Next.js, React, Docker, Nginx, Gunicorn, Redis, PostgreSQL, ChromaDB, LLMs, Azure (VMs, AI models, Blob Storage), External APIs (Slack, Notion, Teams)

Backend & AI Engineer | [Qinsights.ai](#)

April 2022 - September 2022

Led RAG performance improvements through optimized retrieval, chunking, and citation-grounded workflows, and integrated multi-model AI pipelines for chat, theme extraction, sentiment analysis. Owned end-to-end Docker infrastructure (dev/test/prod) with containerized services, automated migrations.

Technologies: Python, Django, PostgreSQL, pgvector, RAG, Vector Search, LLM, Azure (VMs, AI models, Blob Storage), Redis, WebSockets, Docker, CI/CD, Uvicorn, Jira, SCRUM, Agile

Fullstack Developer | [Westic Logistics](#)

May 2021 - September 2021

Collaborated on a logistics platform across React (web), React Native (mobile), and Node.js (backend). Built and integrated shipment/location features with OpenStreetMap using Leaflet / React-Leaflet.

Technologies: React, React Native, Expo, Node.js, Express.js, MongoDB, Mongoose, REST API, OpenStreetMap, Leaflet, React-Leaflet, Geolocation, JWT, Axios, React Query, Formik, Yup, Docker, PM2

Backend Developer Summer Intern | [LoDeep.com](#)

June 2020 - September 2020

Developed the backend of a recommendation system for suggesting study buddies, course materials, and club activities using a system based on hybrid user-based and item-based collaborative filtering.

Technologies: Node.js, Express, Python, Flask, MongoDB, Git, GitHub, Data Warehousing, ETL process

Freelance Full Stack Developer | [Freelancer.com](#)

August 2019 - September 2021

- Winning Percentage Calculator for the game of Bacarat using probabilistic algorithms.
- Travel agency website remake using React and Node.js with admin portal.
- Movie download portal with integration to multiple drive provider APIs.
- Quiz app for teachers using Vue.js, Express, MongoDB, and Google Sheets API.

Technologies: JavaScript, React, Vue.js, Svelte, HTML, CSS, Node.js, MongoDB, Google APIs (Drive, Sheets), Cloud Disk APIs, JWT, OAuth, Java, Android Studio, Git, Github, Heroku, Firebase

EDUCATION

Tunis Business School, Tunis, Tunisia | September 2023

Bachelor's degree (BSBA), Major in Information Technology, Minor in Business Analytics

LANGUAGES

English : Professional

French : Professional

Arabic : Native

CONTACT

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