# Aboubakr Ketoun

AI Software Engineer | Full-Stack & ERP Developer

Casablanca, Morocco | aboubakrketoun@gmail.com | +212 656530924 | aboubakrketoun.codes linkedin.com/in/aboubakrketoun | github.com/Aboubakr-KETOUN

## **Professional Summary**

AI-focused Software Engineer with hands-on experience in full-stack and intelligent systems development. Skilled in designing scalable architectures, integrating ERP platforms (SAP, Odoo), and deploying AI-powered automation pipelines using FastAPI, .NET, and Azure AI. Passionate about building production-grade solutions that bridge AI, cloud, and enterprise systems.

#### **Core Skills**

- AI Development: RAG pipelines, NLP, recommendation systems, model deployment
- Full-Stack: React/Next.js, TypeScript, Node/FastAPI, .NET backend development
- Cloud & Data: Azure AI, Supabase, PostgreSQL, MongoDB Atlas
- ERP Integration: SAP B1 Service Layer, Odoo module development and ORM
- Software Design: SOLID, Factory, Adapter, Repository, Strategy patterns; structured logging idempotency

#### Education

**Université Côte d'Azur**, Master's Degree in Applied Artificial Intelligence (*Double-degree track* — *current academic year*)

10/2025 - Present

• Focus: Machine Learning, Deep Learning, Agentic AI, NLP Engines

Moroccan School of Engineering Sciences (EMSI), Software Engineering Degree in Computer Science and Networks

09/2023 - Present

• Coursework: Software Architecture, Network Architecture, SOLID Principles, Software Quality, Web Development, Cloud Computing, Artificial Intelligence

**Specialized Institute of Applied Technology (ISTA)**, Specialized Technician in Full-Stack Web Development

2021 - 2023

• Developed skills in modern front-end and back-end frameworks, database systems, and version control.

#### **Experience**

#### Freelance AI Software Developer – Remote

10/2023 - Present

- Built Agentic AI workflows and RAG-based retrieval systems; implemented recommendation components using KNN.
- Engineered full-stack platforms with Next.js, TypeScript, and React Native Expo; integrated Clerk SSO and real-time sync.
- Automated communication and support pipelines using WhatsApp Cloud API, Twilio, and Slack integrations.
- Implemented payment and PM integrations (Stripe, PayPal, Jira) and delivered CMS solutions with automated reporting.

## Full Stack Software & SAP Developer, Zalar Farms – Casablanca, Morocco

07/2025 - 10/2025

- Helped Architecturing a local-first desktop application (Electron + React Native Expo Web) with offline-first sync and auto-draft saving for production order workflows.
- Took part of Designing PostgreSQL schema and caching to reduce SAP load and enable offline operations.
- Built a multi-ERP integration backend (.NET 8) using Factory pattern for dynamic connector selection; integrated with SAP B1 Service Layer.
- Implemented automated synchronization (Quartz.NET, 5-min intervals) for production.
- Developed Python ETL scripts for initial data migration and incremental sync, and applied logging (Serilog).

#### CMMS & Power Apps Developer, OLA Energy – Remote

- Replaced a static Excel inventory with a VBA-driven dynamic system enabling unlimited article entries per movement.
- Built VBA automation (email notifications, PDF export) and cascading dropdowns for robust data entry.
- Architected SharePoint as central hub and developed Power Apps mobile solution for field operations across 1,200+ stations.
- Created Power BI dashboards to provide executive insights across 17 subsidiaries and improved operational visibility.
- Enhanced UX and role-based workflows to reduce training time and operational errors.

## Odoo ERP Developer, ITSHORE - Casablanca, Morocco

07/2024 - 09/2024

- Designed custom Odoo modules for supermarket operations: stock, cash registers, HR, and customer service.
- Modeled system architecture with UML diagrams to formalize processes and module interactions.
- Implemented backend logic with Odoo ORM (Python) and custom XML views for user interfaces.
- Automated stock workflows (purchases, transfers, receipts) to reduce manual errors and improve throughput.

## Full-Stack Developer, STE Mondial BS – Casablanca, Morocco

03/2023 - 04/2023

- Implemented Fabric Heaven e-commerce platform using Laravel (backend) and ReactJS + Vite (frontend).
- Built RESTful APIs with Laravel Sanctum for secure authentication and session management.
- Developed responsive UI features (carousels, auth forms) and integrated Axios and React Router for SPA behavior.
- Implemented database schema and Eloquent models for product catalog and user management.

# **Community Involvement**

## Google Developer Groups (GDG) on Campus - EMSI Casablanca

2024 - Present

- Web Dev and Design Lead; facilitated technical workshops and co-organized hackathons.
- Mentored peers and ran hands-on sessions on web development and AI topics.

# **Technologies**

**Programming Languages:** C, C++, C#, Java, Python

Web & Frontend: HTML, CSS, JavaScript, TypeScript, React, Next.js, React Native Frameworks & Backends: FastAPI, Express.js, Flask, Django, Laravel, Spring, ASP.NET

Databases: PostgreSQL, MySQL, MariaDB, Oracle, MongoDB Atlas

ERP & Enterprise: Odoo, SAP B1 Service Layer

Cloud & Platforms: Azure AI Foundry, Azure ML, Azure DevOps, Supabase, Neon, TiDB

Tools & PM: Git, GitHub, GitLab, Jira, Slack, Notion, Power Apps, Power BI

## Certifications

- ORACLE: APEX Cloud Developer Certified Professional
- Microsoft: Develop Generative AI Apps in Azure AI Foundry &
- Microsoft: Copilot Foundations &
- Microsoft: Virtual Networks in Azure 🔗
- Meta: React Basics &
- HKUST: Software Design and Project Management &
- HKUST: Modeling Software Systems using UML &
- Johns Hopkins University: The Unix Workbench &
- Microsoft: Office Specialist Excel 2016 🔗
- IBM: People and Soft Skills for Professional and Personal Success &