

Hamza Elrhadiouini

Software Engineer, Full-Stack & Generative AI — Java / Spring Boot, Angular

hamelrhadiouini@gmail.com • +212 7 71 40 29 45 • linkedin.com/in/elrhadiouini-hamza • github.com/ELGHAD

PROFILE

Computer Science and Networks Engineer (EMSI), **Oracle-certified Java SE 17 Developer**, combining full-stack proficiency in the **Java/Spring Boot & Angular** ecosystem with hands-on expertise in **generative AI**. I can design modern distributed architectures from scratch and integrate AI copilots into business workflows. Motivated to join a dynamic team and tackle challenging technical problems, I am **available immediately**.

TECHNICAL SKILLS

Languages: Java, Python, TypeScript, JavaScript, PHP, SQL

Backend & API: Spring Boot, Spring Cloud, Spring Security, JPA/Hibernate, FastAPI, REST/OpenAPI, JWT, RBAC

Frontend: Angular, React, Next.js, Tailwind CSS

Generative AI & Data: RAG, LangChain, OpenAI, embeddings, TensorFlow/Keras, scikit-learn, NumPy, Pandas

Databases: PostgreSQL, pgvector, MySQL, Oracle DB, Redis

DevOps & Quality: Docker (Compose), Nginx, Git, GitHub Actions (CI/CD), AWS, Terraform, Maven

Architecture, Testing & Methods: Microservices, MVC, Design Patterns, UML, Scrum, JUnit 5, Mockito, Testcontainers

PROFESSIONAL EXPERIENCE

Final-Year Internship (PFE), Full-Stack & AI — ALTEN

Mar. – Sept. 2026

Internal AI copilot: Spring Boot/Cloud, Angular, FastAPI, RAG/LangChain, PostgreSQL/pgvector

Rabat, Morocco

- Designed and developed an **internal copilot** answering natural-language questions over **50+ PDF/DOCX documents**, with sourced answers and escalation to human support; delivered as a Docker Compose demonstrator and validated in staging.
- Built a **microservices architecture** (API Gateway, 4 business services, dedicated inference service); access secured with JWT and BCrypt, with **3-role RBAC** filtering sources at search time.
- Implemented the **RAG pipeline** (extraction, chunking, embeddings, semantic search, OpenAI generation): **98% correct answers** (manual evaluation, 50 questions), first token < 1.5s under test conditions.
- Built the **Angular** interface: streaming chat (SSE), document-management back office, and escalation-ticket tracking.

Full-Stack Developer (Freelance) — Sounds of Morocco

Oct. 2025 – Present

Web platform: Next.js 14, TypeScript, Strapi v5, Supabase/PostgreSQL

soundsofmorocco.com

- Designed and launched the music label's web platform (two-person team), from architecture to user interface.
- Automated the **CI/CD pipeline with GitHub Actions** and handled ongoing maintenance: SEO, performance, CMS updates, new features.

Internship (PFA), Back-End Developer — RATITEC

July – Aug. 2025

Energy project management platform: Java, Spring Boot, JPA/Hibernate, MySQL, Git, Scrum

Mohammedia, Morocco

- Developed **12+ REST APIs** in a two-person team, structured in layers (Controller, Service, Repository, DTO).
- Implemented billing (validation, generation, payment cycle, notifications) and the field-intervention module (statuses, history).

Internship (PFA), Full-Stack Developer — ALTEN

Aug. – Sept. 2024

Collaborative task-management application: Symfony, PHP, Twig, MySQL

Fès, Morocco

- Independently designed a collaborative web application: authentication, RBAC, dashboards, priorities and statuses, history and comments.

PERSONAL PROJECTS

eBank — Multi-tenant SaaS banking platform (Java, Spring Boot, React, MySQL): JWT authentication, roles, organization isolation, idempotent atomic transfers, automated tests, CI/CD, AWS deployment. *GitHub*

Traffic-Sign-Recognition — CNN (Keras/TensorFlow) for traffic-sign classification (43 classes, GTSRB) with data augmentation: **98.45% accuracy** on the official test set. *GitHub*

EDUCATION

State Engineering Degree, Computer Science & Networks (MIAGE) — EMSI, Rabat

2021 – 2026

Baccalaureate in Physical Sciences (Physics-Chemistry) — Al Maarif High School, Salé

2021

CERTIFICATIONS

Java SE 17 Developer (1Z0-829) — Oracle

2026

Generative AI for Developers — IBM / Coursera

2026

Full-Stack Java Developer, Spring & Spring Boot — Board Infinity / Coursera

2026

Oracle Database 19c Administration — Oracle

2023

LANGUAGES

Arabic — Native

French — Fluent

English — Professional