

ABOUT Backend & AI Developer specialized in Java, Spring Boot, PostgreSQL, and AI module integration. I design reliable, secure, and maintainable backend systems, from REST API architecture and database modeling to authentication, performance optimization, and deployment support. Autonomous, detail-oriented, and product-focused, I enjoy turning complex business needs into clean technical solutions while keeping strong attention to code quality, scalability, and user experience.

- SKILLS**
- Backend: Java 21, Spring Boot, REST APIs, Spring Data JPA, Hibernate, Maven
 - Databases: PostgreSQL, MySQL, SQL, Flyway, Redis, Caffeine Cache
 - Security: Keycloak, OAuth2/JWT, Spring Security, roles and permissions
 - AI: LLM, RAG, embeddings, prompt engineering, Ollama, Gemini, Groq
 - DevOps / Quality: Docker, Git, GitLab, Prometheus, Actuator, Testcontainers, k6
 - Frontend: Angular, React, HTML, CSS, REST API integration
 - Methods: Agile/Scrum, problem solving, autonomy, rigor, teamwork
 - Languages: Arabic native, French fluent, English fluent

- PROFESSIONAL EXPERIENCE**
- Backend & AI Engineer – Koog**
November 2025 – Present
- Built the backend foundation of a travel booking platform as the main backend reference within a team of 5 people.
 - Designed REST APIs and a PostgreSQL/JPA architecture covering users, listings, calendar, booking, payment, hotel, messaging, and notification modules.
 - Implemented a reliable booking engine with availability management, pricing, payments, expirations, cancellations, refunds, and double-booking prevention.
 - Developed and integrated advanced modules: Keycloak/OAuth2/JWT authentication, Koogy AI powered by LLM/RAG, Redis, caching, Prometheus/Actuator observability, and k6/Testcontainers testing.
 - Stack: Java 21, Spring Boot, PostgreSQL, Redis, Hibernate/JPA, Flyway, Keycloak, Docker, Prometheus, LLM/RAG.
- Full-Stack Developer Intern – Marsa Maroc**
March 2025 – September 2025
- Designed and optimized a port call management application to improve administration and operational efficiency.
 - Developed modules for ports, terminals, vessels, goods, and arrival notices, including status management and business rules.
 - Integrated an analytics dashboard, a chatbot, and secure authentication using Keycloak.
 - Technologies: Spring Boot, Hibernate, Angular, SQL, GitLab, Keycloak.

- EDUCATION**
- Master’s Degree in Computer Engineering, MIAE option**
École Marocaine des Sciences de l’Ingénieur – EMSI, Casablanca
September 2025
- Master’s Degree in Applied Artificial Intelligence**
Université Côte d’Azur, France
September 2025

- KEY ACHIEVEMENTS**
- Built Koog’s backend foundation around booking, payment, hotel, messaging, and notification modules.
 - Developed a reliable booking engine with availability, payment handling, and double-booking prevention.
 - Secured frontend/backend flows with Keycloak, OAuth2/JWT, and Spring Security.
 - Developed Koogy, an LLM/RAG-based AI module with multilingual support including Moroccan Darija.

- CERTIFICATIONS**
- IBM – AI Engineering Professional Certificate, 2025
 - AWS – Certified Machine Learning – Specialty, 2025
 - DeepLearning.AI – Machine Learning in Production, 2025
 - IBM – Machine Learning with Python, 2024
 - Google Cloud – Building Scalable Java Microservices with Spring Boot and Spring Cloud, 2024