

Ayoub Boukyoud

Software Developer | Backend & Full-Stack
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Open to fully remote roles | European & US-Eastern timezone overlap

Summary

Early-career software developer with hands-on experience building full-stack applications in React.js, FastAPI, Java and Spring Boot. Currently developing an HR ERP and an AI assistant built on Rasa and a RAG pipeline (LangChain, Gemini). Three internships delivering internal production tools. Comfortable with remote, asynchronous work: Git, Docker, and Agile delivery.

Technical Skills

- **Languages:** Java, Python, JavaScript (ES6+), PHP, C, VB.NET, SQL
- **Backend:** FastAPI, Spring Boot, REST APIs, Java Servlets, JDBC, PL/SQL
- **Frontend & Mobile:** React.js, Next.js, React Native, Zustand, HTML5, CSS3, Responsive UI
- **Databases & Caching:** Oracle Database, MySQL, SQL Server, Redis, schema design, query optimization
- **AI & Chatbots:** RAG (Retrieval-Augmented Generation), LangChain, Google Gemini API, Rasa, conversational AI
- **DevOps & Testing:** Git, GitHub, Docker, Docker Compose, CI/CD fundamentals, Linux (Ubuntu), Maven, pytest, JUnit, Selenium
- **Design & Methods:** OOP, Design Patterns, Software Architecture, UML, Merise, Agile/Scrum, code review

Professional Experience

Full-Stack Developer Intern Apr 2026 – Present
SIB (Solution Integrale Building) Kenitra, Morocco

- Building a bilingual (FR/EN) HR ERP managing personnel, payroll, leave, field attendance and material/equipment resources — React.js SPA over a Python FastAPI backend with 39 REST modules, a 1,400-line SQLAlchemy domain model and 80+ Alembic migrations.
- Built an HR assistant combining Rasa intent recognition with a Retrieval-Augmented Generation pipeline (LangChain, ChromaDB, Google Gemini) over internal HR data, with role-scoped retrieval so each user can only reach records their permission scope allows.
- Diagnosed a vector-search failure where roughly 10,000 near-duplicate records collapsed Chroma’s HNSW index; replaced approximate search with a cached exact-cosine implementation, restoring correct top-1 retrieval at millisecond latency.
- Automated candidate onboarding by extracting structured profiles from PDF CVs via the Gemini API, using OpenCV face detection to pull the applicant photo and remove manual data entry from hiring.
- Optimized bulk attendance and site-sync endpoints by eliminating N+1 query patterns, cutting hundreds of redundant MySQL round-trips per request; backed the system with 75 pytest suites.

Application Developer Intern Jul 2025 – Aug 2025
COPREF Kenitra, Morocco

- Built an internal desktop management application in VB.NET with a SQL Server backend.
- Designed the relational schema and implemented full CRUD interfaces for data entry and reporting.
- Optimized SQL queries and application logic, reducing report generation time by about 40%.

Web Developer Intern Jul 2024 – Aug 2024
SIB (Solution Integrale Building) Kenitra, Morocco

- Developed and maintained internal web applications supporting daily company operations, modeling modules in UML before implementation.
- Integrated MySQL databases, refactored existing code for maintainability and fixed reported bugs, working in an Agile team.

Projects

PortfolioBuild — [portfoliobuild.site](#) Live SaaS

- Multi-tenant SaaS that converts a PDF resume into a live portfolio site. Built and operated solo, end to end.
- AI CV extraction with strict schema validation and a local fallback path, on-server photo detection, and 12+ templates rendered to static HTML.
- Per-user subdomains with rate-limit-safe automated TLS and custom-domain DNS verification, subscription billing, and Google OAuth.
- **Stack:** FastAPI, SQLAlchemy, Celery, Redis, MySQL, Docker, Caddy, Oracle Cloud, React 19, TypeScript, Tailwind 4.

Education

Bachelor of Technology (DBT), Computer Engineering & Digital Governance 2025 – 2026
Ecole Supérieure de Technologie (EST) Kenitra, Morocco

BTS, Information Systems Development Sep 2023 – Jun 2025
Centre BTS Ibn Sina Kenitra, Morocco

Languages

Arabic: Native | **French & English:** Professional working proficiency