HOUDA BELHAD

Software Engineer & Data Mining

@ houda.belhad6@gmail.com ☎ +212 682 991 096 ⚲ Témara, Morocco
in https://linkedin.com/in/houda-belhadlinkedin.com/in/houda-belhad ⦿ github.com/HoudaBelhad

EXPERIENCE

Backend Intern — Assistant Technical Lead

Arimayi

🗓 May 2025 — August 2025

- Developed and supervised the backend of an educational support application (Java / Spring Boot).
- Organized sprints using Agile methodology; contributed to technical decisions.
- Collaborated with developers for code reviews and requirement compliance.

Network Administrator Intern

Netmar SARL

🗓 April 2023 — June 2023

- Integrated IPsec into the GMDSS system; ensured maritime network security.

Network Administrator Intern

Netmar SARL

🗓 June 2022 — July 2022

- Configured network switches (VTS / MRCC); maintained critical systems.

PROJECTS — BACKEND

Notes Management API + Auth

Java · **Spring Boot** · **JWT** · **PostgreSQL**

- Secure REST API, JWT, USER/ADMIN roles, JPA CRUD, Swagger, unit tests.

NOC — Nurse On Call

Spring Boot · **React.js** · **MariaDB** · **Microservices** · **Eureka**

- Home healthcare platform — microservices, Eureka, booking system, DevOps.

NursePatient Application

Java · **Spring Data JPA** · **Hibernate** · **H2**

- Console application: nurse scheduling, reservations, JPA/H2 persistence.

PROJECTS — DATA MINING & ML

Chronic Disease Detection

Python · **Scikit-learn** · **TensorFlow** · **Pandas**

- Classification for early detection of chronic diseases (medical data).
- Preprocessing, algorithm comparison (RF, SVM, NN) — cross-validation, F1, AUC-ROC.

Ship Detection — Satellite Imagery

Python · **YOLO** · **OpenCV** · **GDAL**

- Object detection on satellite images; geographic coordinate extraction via GDAL.
- Real-time YOLO + OpenCV post-processing; CSV/GeoJSON export.

Fake Article Detection — Fake News

Python · **LSTM** · **RNN** · **Keras** · **NLP**

- True/false classification with LSTM and RNN; NLP preprocessing (TF-IDF/Word2Vec).
- Comparison of Naive Bayes, Logistic Regression — precision/recall, confusion matrix.

OPEN SOURCE CONTRIBUTIONS

- Java/Spring Boot contributions: features, bug fixes, code reviews via GitHub.
- Unit testing and technical documentation with international developers.

EDUCATION

Master — Software Engineering and Business Intelligence

Mohammed V University

🗓 2024 — Present

Bachelor — Mathematical Sciences and Computer Science

Mohammed V University

🗓 2023

Associate Degree — Networks and Telecommunications

EST Salé

🗓 2022

LANGUAGES

Java, Python, SQL, Bash, JavaScript, C

FRAMEWORKS & TECHNOLOGIES

Backend Spring Boot, Spring Security, Spring Data JPA, REST APIs, JUnit, Mockito, JWT, Hibernate

Data Mining / ML TensorFlow, Keras, Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn, NLTK, YOLO, OpenCV, GDAL

Big Data Hadoop, MapReduce, YARN, Spark

DevOps & Tools Docker, Docker Compose, GitHub Actions, Maven, Git, GitHub, Linux, Bash

Databases PostgreSQL, MySQL, MariaDB, H2

CERTIFICATIONS

Cloud Computing Fundamentals — IBM, Dec. 2025
Databricks Fundamentals — Databricks, Nov. 2025
Data Analysis with Python — IBM, Mar. 2025
MapReduce and YARN — IBM, Dec. 2024
Hadoop 101 — IBM, Dec. 2024
Big Data 101 — IBM, Dec. 2024
Intro to Generative AI — Google Cloud, Sept. 2024

SOFT SKILLS

Problem-solving, Teamwork, Communication, Time management, Adaptability, Critical thinking, Autonomy, Coordination, Mentoring, Agile collaboration, Decision-making.