

MOHAMED SALAH BEDOUI

Data Science & AI Engineering | Tunis, Tunisia

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ABOUT

Recent Software Engineering graduate (ESPRIT, 2026, With Highest Honours, 16.5/20) with hands-on data science experience across the full pipeline: ingestion, preprocessing, modelling, and deployment. Projects span satellite imagery, computer vision, LLM-powered apps, and cloud pipelines, built with Python, SQL, TensorFlow, and React.

EXPERIENCE

Remote Sensing Intern, Water Quality Monitoring Aug 2026 – Present
Modelis-France *Lagny-sur-Marne, France (Remote)*

- Hardened a satellite remote-sensing pipeline (Sentinel-2, Landsat) for water quality monitoring turbidity, suspended matter, chlorophyll resolving critical data-processing inconsistencies across sensors
- Reconstructed and validated a 2010-2024 historical time series on a hydroelectric reservoir against field measurements from published literature, documented system limitations with prioritized recommendations

Remote Sensing Intern Jan 2026 – Jun 2026
Modelis-France *Lagny-sur-Marne, France (Remote)*

- Built a data pipeline ingesting Sentinel-2 satellite imagery across Africa (GDAL, Rasterio, Python) with automated change-detection, serving results to a Vue3 dashboard
- Implemented a threshold-based change-detection algorithm for deforestation and flood monitoring, taking full ownership from design to deployment

AI Intern, Model Development Jul 2025 – Aug 2025
Exanodia *Lyon, France (Remote)*

- Developed and optimised deep learning models for industrial defect detection using TensorFlow and OpenCV
- Built image preprocessing pipelines improving training data quality for vision classifiers

Cloud & Data Processing Intern Jul 2024 – Aug 2024
IS Pillar *Nanterre, France (Remote)*

- Contributed to a payment monitoring system on AWS and Databricks; data ingestion tasks using PySpark and SQL

ACADEMIC PROJECTS

Smart AI Interviewer

- End-to-end LLM platform with ChromaDB vector retrieval, LangChain orchestration, embedding-based candidate scoring, and interactive interview UI

Farmwise, Agricultural Yield Prediction

- Built deep learning models for crop yield prediction and plant disease recognition, plus a fire detection module for early risk alerts
- Designed an intelligent farming assistant that recommends optimal crops per season using real-time weather API data

Customer Churn Prediction

- CRISP-DM methodology, Scikit-learn models, SHAP interpretability, and Flask deployment; demonstrates end-to-end DS workflow

TECHNICAL SKILLS

Programming: Python (advanced), R, SQL, Spark, C++, C# (.NET, basic), Java
ML / DL / AI: TensorFlow, PyTorch, Scikit-learn, OpenCV, LangChain, ChromaDB, RAG, n8n
Data Engineering: PySpark, Pandas, NumPy, MySQL, MongoDB
Frontend / Desktop: HTML5, JavaScript, React, Symfony, PyQt5, Qt (C++), JavaFX
Cloud & Deploy: AWS (S3/EC2/Lambda), Docker, Flask, Streamlit
Visualisation: Power BI, Matplotlib, Jupyter, VS Code

CERTIFICATIONS

AWS Academy Graduate, Cloud Foundations (Oct 2025) | Hashgraph Developer, The Hashgraph Association (Oct 2025)
Python AI: Smart Assistants & Computer Vision, Udemy (Jan 2026) | Cisco Learn-A-Thon 2026 (Apr 2026)

EDUCATION

Software Engineering Degree (With Highest Honours, 16.5/20), ESPRIT, Tunisia Jul 2026
Baccalaureate in Computer Science (Honours), La Soukra High School, Tunisia 2018 – 2021

LANGUAGES

Arabic (native) | French (B2) | English (B2)