YOUSSEF BOUTALEB

📞 +216 93147744 ✉ youssefboutaleb.info@gmail.com 📍 Sfax, Tunisia

in youssef-boutaleb 🌐 youssefboutaleb.github.io ⌨ youssefboutaleb Ⓜ youssefboutaleb.info

SUMMARY

I am a **Data Engineer** with over **2 years of experience** deploying, and optimizing enterprise-scale data ecosystems on **Microsoft Azure**. Proven expertise in building end-to-end **ETL/ELT** pipelines with **Talend** and **MuleSoft**, coupled with advanced infrastructure monitoring using **Datadog**. Seeking a **full-time Data Engineering** role to apply my expertise and continue growing professionally.

SKILLS

- **Data Integration & APIs:** Talend, MuleSoft, Apache Karaf
- **Cloud & Infrastructure:** Azure (VMs, App Gateway, Automation Accounts, Blob Storage, Azure SQL), CI/CD (GitHub Actions), SSL/TLS, IAM
- **Databases & Storage:** SQL Server, PostgreSQL, ActiveMQ, SFTP, SMB
- **Monitoring & Observability:** Datadog, Postman
- **Programming & Scripting:** Python, Java, SQL, PowerShell
- **Collaboration & Project Management:** Agile/Scrum, Atlassian(Jira, Confluence)
- **Expertise Domains:** E-commerce, Retail, Order Management

EXPERIENCE

JACQUEMUS — Data Integration & Operations Engineer   Aug 2024 – Present

- Designed and implemented end-to-end **Talend ETL pipelines and RESTful APIs** enabling seamless data integration across multiple enterprise systems such as **Salesforce** (e-commerce), **ORLI** (warehouse management), and the **Azure** (data platform).
- Managed and secured **Azure resources** by implementing IAM policies, SSL, and IP restrictions to maintain an organized and secure cloud environment.
- Deployed a real-time **Datadog monitoring solution** with custom dashboards and alerts, significantly reducing the **Mean Time to Detection (MTTD)** and enhancing observability and reliability across ETL pipelines.
- **Optimized Azure resource utilization** through automated scheduling scripts, saving approximately **€1,400 per month** while maintaining system reliability.
- Partnered with stakeholders to translate **functional requirements into scalable data transformation logic** and authored **comprehensive technical documentation**, including system architecture, data flows, and deployment/recovery plans.

OLIVESOFT — Data Integration Engineer   Feb 2024 – May 2024

- Implemented a fault-tolerant asynchronous integration using **MuleSoft API-led architecture** to connect **Salesforce Service Cloud** and the **Diduenjoy** Feedback Platform, ensuring reliable data delivery through robust error handling.

OEM ENGINEERING S.A.R.L — Data Analysis & Signal Processing Engineer   Jun 2022 – May 2023

- Implemented a real-time C++ signal processing **Savitzky-Golay filter** to reduce infrared data noise, achieving a **100× speedup** in preprocessing for metal classification.
- Developed and trained a **Random Forest classifier** for accurate metal classification, enabling near-instantaneous analysis.

PROJECTS

Custom YOLOv8 Model for Number Detection on Meters ⌨   2023
Designed and implemented a deep learning model for automatic meter number detection using **YOLOv8**, served through **FastAPI** and an interactive **Gradio** interface.

Image Colorization with Deep Learning ⌨   2023
Designed and implemented a neural network to automatically colorize grayscale images, focusing on feature extraction and realistic color mapping.

EDUCATION

Computer Science Engineer's Degree (EUR-ACE® Accredited)   2021 – 2024
National Engineering School of Sfax

Bachelor of Engineering (Mathematics and Physics)   2019 – 2021
Higher Institute of Applied Sciences and Technology of Mahdia

PUBLICATIONS

Secure and transparent energy management using blockchain and machine learning anomaly detection: A case study of the Ausgrid dataset Computers & Industrial Engineering 🗎   2025

Authors: N. Moumni, Y. Boutaleb, F. Chaabane, and F. Drira

Dual verification-based multimodal approach for reliable pothole and speed bump detection on embedded system Computers & Industrial Engineering   (In progress) 2025

Authors: S. Khemakhem, Y. Boutaleb, and W. Ouarda

CERTIFICATIONS

- MuleSoft Certified Developer Level 1
- MuleSoft Certified Developer Level 2 (In progress)
- Talend Data Integration Certified Developer
- Datadog Certified: Fundamentals
- Datadog Certified: APM & Distributed Tracing Fundamentals
- Datadog Certified: Log Management

TEACHING

- **Machine Learning** — Institute of Higher Commercial Studies of Sfax,   2024 – 2025
  Master's in Data Science (Year 2)
  Topics: Supervised & Unsupervised Learning, Gradient Descent, Clustering (K-Means), Model Evaluation
- **Data Engineering** — Institute of Higher Commercial Studies of Sfax,   2024 – 2025
  Master's in Data Science (Year 2)
  Topics: Big Data Ecosystem, Data Warehousing, ETL Processes, Synchronous & Asynchronous Data Flows

WORKSHOPS

- **Introduction to Competitive Programming**   2023
  Conducted a workshop on problem-solving concepts, data structures, and algorithm patterns , in collaboration with the **IEEE Student Branch** at **ENIS**.
- **Assembly Programming Workshop** 🎧   2023
  Conducted a Hands-on workshop exploring low-level programming with Assembly language, organized with the **Securinets Club** at **ENIS**.
- **Introduction to Python**   2022
  Conducted a beginner-friendly workshop covering Python fundamentals and practical applications (Building a console X and O game; Reading and visualizing CSV data with charts), organized with the **IEEE Student Branch** at **ENIS**.

LANGUAGES & COMMUNITY

- **Languages: English** (Full professional proficiency), **French** (Full professional proficiency), **Arabic** (Native).
- **Volunteer, Tunisian Red Crescent** Volunteered with the Houmt Souk Djerba branch during the COVID-19 crisis, helping organize aid distribution, assisting with crowd coordination, supporting elderly individuals, and participating in collecting and distributing essential supplies.