



Aymane MAGHOUTI

DATA ENGINEER | BIG DATA | IA SOLUTIONS

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📅 23 years old

🔗 aymane-maghouti.github.io

PORTFOLIO

🌐 @aymane-maghouti

🐙 @aymane-maghouti

LANGUAGES

English

Full professional proficiency

French

Full professional proficiency

Arabic

Native proficiency

HARD SKILLS

Langages & Frameworks

Python - FastAPI - SQL - Java

Databases

MySQL - PostgreSQL - SQL Server
- Mongo DB (NoSQL)

Big Data & BI

Hadoop (Hive, Hbase) - Spark -
Kafka - Snowflake - DBT - Airflow -
(SSIS/Power BI) - Qlick - Excel -
Talend

Cloud

- **GCP**: BigQuery, Cloud Storage, Google Cloud Dataflow
- **Azure**: ADLS, ADF, Databricks, Synapse Analytics

Functional Skills

ETL/ELT - Data Modeling - Data
Visualization - DB Optimisation

AI & Data Science

Machine Learning - Deep Learning
- LLM - RAG - MLOps - Model
Deployment

Tools & Methods

Git - Docker - Kubernetes -
Postman - Agile - Scrum

COLLABORATION

Sol Plaatje University (South
Africa) | 07/30/2025

Guest speaker in Data
Engineering: Big Data,
architectures, and AI integration.

Sol Plaatje University (South
Africa) | Jan. - Avril 2025

Collaboration on a hybrid-cloud
application for sign language
recognition.

Master's student in Data & AI (M2), specializing in Data Engineering & Big Data, with hands-on experience in ETL/ELT pipelines, monitoring systems, and decision-making dashboards. Currently seeking a 5–6 month end-of-study internship starting January 2026 in Data Engineering, Big Data, or Artificial Intelligence.

WORK EXPERIENCE

Data Consultant

From February 2025 to September 2025 INWI Casablanca, Morocco

- **Design and deployment of real-time pipelines** based on Kafka and Python for ingesting incoming data streams, performing temporary CSV storage, and automatically generating files integrated into the Data Warehouse (over 500k events every 15 minutes).
 - **Development of SSIS workflows** (with unit testing and integration testing) capable of processing more than **50 million rows per day**, reducing execution time from **2 hours to 4 minutes**.
 - **Storage optimization** through partition-based purge strategies, reducing processing duration from 6 hours to under one minute and freeing up 350 GB of disk space per month.
 - Implementation of an SSRS monitoring system ensuring the traceability and 99% availability of ETL jobs, storage processes, and system performance indicators.
 - **Design of Power BI dashboards** for the Quality department, delivering real-time visibility into ADSL, Fiber, and 4G services, ultimately improving operational responsiveness and customer satisfaction.
 - **Maintenance of technical documentation** and application of quality standards to ensure maintainability and reliability.
 - **Active participation in the Agile (Scrum) framework**: contributing to sprints, daily meetings, reviews, and backlog management via Jira, ensuring incremental deliveries aligned with business needs.
- Stack**: SQL Server, SSIS, SSRS, Power BI, Kafka, Python, Jira, Scrum.

Data & AI Engineer Intern

From June 2024 to September 2024 Shiftbricks AI Hoceima, Morocco

- **Automation of the collection and ingestion of Moroccan legal documents** using Python scripts connected to Azure Blob Storage, ensuring secure and centralized data storage.
 - **Development of AI pipelines** that transform raw documents into structured JSON files, significantly improving data quality and usability.
 - **Integration of semantic embedding pipelines** to enable intelligent search and contextual text indexing within a RAG (Retrieval-Augmented Generation) framework.
 - **Automated orchestration of more than 5 Airflow DAGs**, reducing manual processing time from 2 hours to 15 minutes while achieving 99% reliability.
 - **Design of a web-based validation application** that streamlines human review, reducing verification time by a factor of 6 (2h → 20 min).
 - **Work within an Agile (Scrum) environment**, with iterative deliveries and continuous collaboration across AI, data, and product teams.
- Stack**: Azure (Blob Storage, Document Intelligence, OpenAI), LLM, PostgreSQL, CosmosDB (MongoDB API), Python, Airflow, FastAPI, React.js, Docker, Git, Jira.

Data Analytics Intern

From July 2024 to September 2024 ONCF Rabat, Morocco

- **Development of an automated Python pipeline** orchestrating the loading of more than **10 million records per day** into a BigQuery Data Warehouse, ensuring scalable and high-performance cloud ingestion.
 - **Design of an optimized star schema**, reducing query latency by **60%** and enabling efficient multidimensional analysis through dbt.
 - **Creation of interactive dashboards** connected to BigQuery, integrating business KPIs and providing clear, actionable insights for decision-makers.
 - **Implementation of automated Airflow orchestration** to manage and schedule daily data flows.
- Stack**: GCP, Python, SQL, BigQuery, dbt, Airflow, Jira.

EDUCATION

Master 2 - Data et AI

Since September 2025 Engineering School of the Littoral Côte d'Opale (EILCO) Calais, France

- **Specializations**: Data Science, Big Data, Data Analysis & Visualization, Machine Learning, Deep Learning, Artificial Intelligence.

State Engineer's Degree in Data Engineering

From September 2020 to June 2025 National School of Applied Sciences AI Hoceima, Morocco

- **Specialization in Data Engineering & Big Data**: databases, distributed systems, cloud, ML/DL/NLP.
- **Ranked first in the class (valedictorian)**.