



Aymane MAGHOUTI

DATA ENGINEER | BIG DATA | AI SOLUTIONS

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💻 Open to remote work
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PORTFOLIO

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LANGUAGES

Arabic
Native
French
Professional Proficiency
English
Professional Proficiency

TECHNICAL SKILLS

Programming languages & Frameworks
Python - Flask - FastAPI - Java - Spring - ReactJS - SQL
Databases
MySQL - Oracle - PostgreSQL - SQL Server - Mongo DB
Big data tech & BI tools
Hadoop - Spark - Kafka - Hive - HBase - Snowflake - DBT - Airflow - SSIS - SSRS - Power BI
Cloud Services

- **Azure** : Blob Storage, Data Factory, Databricks, ADLS, Synapse Analytics, Azure ML
- **AWS** : S3, Athena, QuickSight, RDS
- **GCP** : Bigquery, GCS, Looker

Functional Skills
ETL/ELT - Data Modeling - Data Warehousing - Data Visualization - Database Optimisation
Tools & Practices
Git - GitLab - GitHub - Jira - Postman - Scrum - Agile

INTERESTED

Reading
Reading data-related books
Football
Former goalkeeper for USAK Aknoul
Cooking
Cooking Moroccan traditional food

Data & AI Engineer with experience in enterprise data migration, real-time analytics, and AI-driven data pipelines. Skilled in building scalable data platforms and delivering intelligent BI solutions by combining Big Data, Cloud, and AI. Currently pursuing a M2 in Complex Systems Engineering at EILCO.

WORK EXPERIENCE

● Freenlancer - Data & AI Engineer (Remote)

Since February 2025 Shiftbriks Al Hoceima, Morocco

- Built AI pipelines for **50K+ Arabic legal docs**, boosting semantic search precision.
- Automated metadata & structuring, reducing manual effort from **2h to 15min**.
- Designed ingestion & embedding workflows scalable to **500K+ docs**.

Tech Stack: Azure Cloud, PostgreSQL, MongoDB, Python, LLM

● Data Consultant (On-Site)

From February 2025 to June 2025 SetGet Consulting - Client Inwi Casablanca, Morocco

- Migrated Oracle to **SQL Server**, cutting infra/licensing costs by **30%** and modernizing the data ecosystem.
- Built **SSIS ETL pipelines (50M+ rows/day)**, reducing processing time from **2h to 4min**.
- Deployed partition-based purge strategies, freeing **350GB+/month** and cutting runtimes from **6h to 1min**.
- Integrated **Kafka + Python** for real-time analytics (**500K+ events/15min**).
- Delivered **Power BI & SSRS dashboards**, cutting manual reporting effort by **70%**.

Tech Stack: SQL Server, SSIS, Power BI, SSRS, Kafka, Python

● Data Engineer Intern (Remote)

From June 2024 to September 2024 Shiftbricks Al Hoceima, Morocco

- Built **Medallion pipeline** transforming **10K+ unstructured docs to structured datasets**, enabling scalable AI apps.
- Automated workflows with **Apache Airflow (5+ DAGs)**, achieving **99% job success** with error handling & retries.
- Developed **FastAPI + React.js validation tool**, cutting manual review from **2h to 20min**.
- Improved data quality with validation & schema checks.

Tech Stack: Python, FastAPI, React.js, MongoDB, PostgreSQL, Airflow, Docker, Git/GitLab

● Data Engineer Intern (Hybrid)

From July 2024 to September 2024 ONCF Rabat, Morocco

- Built **Python ETL pipeline** processing **10M+ train records/day** into a **SQL Server data warehouse**.
- Designed a **star schema**, cutting query latency by **60%** and enabling efficient KPI reporting.
- Delivered **Power BI dashboards** (delays, circulation, capacity), improving planning team's decision-making.
- Automated daily refresh workflows with **SQLAlchemy**, ensuring always up-to-date analytics.

Tech Stack: SQL Server, Python, SQLAlchemy, Power BI

EDUCATION

● M2 in Complex Systems Engineering

Since September 2025 Ecole d'ingénieurs du Littoral Côte d'Opale Calais, France

- Studying Data Science, Big Data, Data Analysis, Data Visualization, Machine Learning, Deep Learning, and AI.

● Engineering Degree in Data Engineering

From September 2020 to June 2025 National School of Applied Sciences of Al Hoceima Al Hoceima

- Specialization in Data Engineering & Big Data, focused on databases, distributed systems, cloud, ML, DL and NLP. Hands-on with ETL/ELT, Hadoop/Spark, Kafka, BI tools. **Graduated 1st in class (Promotion Major)**

COLLABORATION

Sol Plaatje University (South Africa) | Jul 30, 2025

Invited as a Data Engineering Speaker (Visio Conference).

Presented big data fundamentals, data engineering architectures, and AI integration to 20+ students, followed by Q&A.

Sol Plaatje University (South Africa - Remote) | Jan – Apr 2025

Collaborated on a Sign Language Recognition app using an Edge-Cloud Hybrid Architecture for real-time, privacy-preserving recognition.

Tools: HDFS, Kafka, Spark Streaming, Python, React Native, FastAPI, Slack