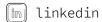
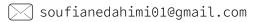
# Soufiane DAHIMI

## Al Engineer











#### EXPERIENCE

#### ALPHA10X | Al Engineer

March 2023 - Present | Ben Guerir, Morocco

#### · Key Responsibilities:

- Design and implement scalable Al architectures and end-to-end software and ML pipelines using Azure, Databricks, Elasticsearch, and ML models. Also, build and maintain CI/CD pipelines of microservices using Docker.
- Build AlphaCodex, a multi-agent Al framework using LangGraph connected to internal and external tools, integrating reward models and evaluation mechanism
- Develop and deploy custom Al-driven solutions (APIs, LLM services, dashboards) tailored to client needs.

#### Key Achievements and Client Projects:

- Permira (\$87B AUM): Built an enterprise-grade RAG-based API in 2 weeks featuring multi-agent architecture, PDF extraction, and SQL query generation capabilities.
- ALPHA Attributes API: Architected a production-ready serverless system processing thousands of companies, featuring multi-source retrieval (Vector DB, Elasticsearch, Web Search), reducing per-company processing time from 38s to 14s while achieving 83% accuracy in attribute generation.
- Kearney: Delivered 10+ Al-driven solutions, including dashboards and LLM-powered tools, for high-impact client projects with Kearney, a leading strategy consulting firm.
- Svensgo: Engineered automated data pipeline processing 1000+ company attributes and querying transactions from a 2M-document index, significantly reducing analysis time.

#### APM TERMINALS | Predictive Maintenance Intern

March 2023 - March 2023 | Tangier, Morocco

- → Shadowed the team to gain valuable insight into reliability and maintenance.
- → Conducted data cleaning, exploratory data analysis, and feature engineering on 166 IoT signals with 500K rows of data coming from the trolley motor.
- → Developed an LSTM-based deep learning anomaly detection model to identify abnormal behaviors in the asset.

### PROJECTS AND ACCOMPLISHMENTS

AGENT HUB: OPEN-SOURCE PLATFORM FOR SPECIALIZED AI AGENTS | 1st Place, Morocco Al Challenge 2024

- → Developed an open-source platform that enables modular, specialized Al agents to perform computer automation tasks.
- → Designed the microservices architecture to decouple agents based on tasks, leveraging lightweight LLMs and traditional software to optimize for speed, memory usage, and task accuracy.
- → Built an orchestration layer using langgraph, creating a graph-based execution pipeline to plan, coordinate, and adapt task flows dynamically based on user input.
- → Implemented an evaluation pipeline to benchmark agents against performance metrics such as latency, memory usage, accuracy, and cost, integrating CI/CD for automated testing and deployment.
- → Built a **reward model** to score agents based on multi-factor evaluations, ensuring fair and transparent agent rankings.

#### ÉCOLE POLYTECHNIQUE & BNP PARIBAS: GENHACK 3- GENERATIVE MODELLING CHALLENGE $\mid 2^{nd}$ Place 1 Month - 2023

- → Objective: Use generative AI to model the evolution of maize yield spatially and over time, accounting for climate change factors (temperature, rainfall)
- → Collaborated with a team of students to build three distinct generative models, VAE, GAN, Diffusion, to simulate yields.
- → Focused on customizing the diffusion model, which turned out to be the best-performing model and helped secure 2nd place in the competition.

#### **EDUCATION**

#### MASTER AND BACHELOR DEGREE IN INDUSTRIAL ENGINEERING | Minor : Data Science

EMINES - Mohammed VI Polytechnic University Sep 2019 - 2024 | Ben Guerir, Morocco

Relevant Coursework: Optimization, Linear Algebra, Probabilities, Statistics, Calculus, ML & DL, Databases, Mining, Finance.

#### SKILLS

Technical Skills: Cloud Architecture (Azure, Databricks) • DevOps & API Development • Machine Learning • SQL • Python Soft Skills: Adaptability • Teamwork • Problem Solving • Strategic Planning • Communication

Languages: English (Proficient) • French (Proficient) • Arabic (Fluent) • Chinese (HSK1)