(+33) 6 23 79 56 81 Lyon, France amine.mekki.contact@gmail.com

# Amine MEKKI

# Al Engineer

github.com/AmineMekki01 linkedin.com/in/amine-mekki

**SKILLS** 

**Programming Languages** Python, JavaScript, Go, R, SQL Scikit-Learn, TensorFlow, PyTorch **Machine Learning Frameworks** 

Data Processing and Management: Pandas, Polars, Dask, NumPy, Spark, Snowflake, Apache Kafka, Apache Airflow

**Machine Learning Tools** : LangChain, DVC, MLflow, Hugging Face, LlamaIndex

FRONTEND: JavaScript, React, Tailwind CSS — BACKEND: FastApi/Flask, Go Web Development

Deployment and DevOps : Docker, Kubernetes, Git, GitHub Actions

**Cloud Platforms** : AWS

Visualization : Matplotlib, Seaborn, Plotly

**Databases** PostgreSQL, MySQL, MongoDB, Redis, Vector Databases

**EXPERIENCE** 

Sept 2023 — Present **Data Scientist** 

Sanofi Lyon, France

• Working on Automating the generation of quality reports using LLMs.

**MLOps Engineer** Jan 2024 — Mar 2024

IMT Mines Alès Alès, France

- Developed and implemented an MLOps pipeline to automate end-to-end processes for model training, evaluation, and deployment.
- Implemented data drift and model drift monitoring solutions, ensuring long-term model stability and performance.
- Utilized AWS services, leading to cost-effective and scalable solutions for model training and deployment.

**Data Scientist** Apr 2023 — Sept 2023

Saclay, France Vaisala Conducted in-depth market research and developed ML-based calibration methods, improving product focus and measurements.

Helped in creating a solutions for aerosol classification and wind speed forecasting, enhancing product utility and market competitiveness.

**Machine Learning Engineer** Jan 2023 — April 2023 **EUROMOV DHM** Montpellier, France

Analyze functional near-infrared spectroscopy (fNIRS) signals from patients undergoing transcranial direct current stimulation (tDCS).

 Derived unique biomarkers to establish correlations between the electric dosage and fNIRS responses. Enabling dosage modulation based on patient responses, contributing to a futur personalized treatment strategies for cognitive function restoration in patients with brain damage.

### **PROJECTS**

#### **Credit Card Fraud Detection System**

Technologies Used: Python, FastApi, Scikit-learn, Kafka, Cassandra, Docker

 Built a real-time fraud detection system using Python, FastAPI, Cassandra, and Kafka, focusing on identifying fraudulent transactions efficiently.

#### **Comprehensive Healthcare Management Platform**

Technologies Used: React, Golang, Python, PyTorch, MicroServices, FastAPI, Docker, Azure

- Created an integrated healthcare management platform (Web App) using React and Golang, which offers users the ability to book appointments with doctors.
- Implemented a symptom-based intelligent doctor search feature using LLM.
- Developed a retrieval-augmented generation (RAG) system for doctors, enabling them to efficiently search for valuable patient information.
- Currently investigating methods to enhance medical image descriptions using VLLMs, aiming to improve diagnostic precision and time.

#### **EDUCATION**

# Engineering Degree in Computer Science, Al and Data Science, IMT Mines Alès

Aug 2021 - 2024

 Relevant Coursework: Advanced Machine Learning, Advanced Deep Learning, Data Structures and Algorithms, Software Engineering, Data Mining, Healthcare Analytics, Product/Project Management

# Master of Biomedical Engineering, University Of Montpellier

Aug 2021 - Aug 2024

Relevant Coursework: Biomedical Signal Data Processing, Medical Image Analysis, Medical Devices, Nuclear Physics, Statistical Learning for **Biomedical Data**