

# ZAKARIA HANSALI

Data Scientist (R&D)

✉ zaka.hansali@gmail.com

📞 +33 7 54 12 86 31

📍 Paris / Remote

🌐 jilicuerda.netlify.app

## TECH STACK

Python (Pandas/Numpy)

PyTorch / ML SQL

Docker / Git

Time Series Analysis

## LANGUAGES

English: Professional

French: Native

Spanish: Professional

Arabic: Native

## Why me for Kayrros?

Kayrros solves complex problems using AI and Satellite data. While I am completing my Bachelor's degree, my profile is heavily focused on **R&D and Engineering**. I have conducted benchmarks on LLM inference (SGLang vs vLLM), built ETL pipelines for telemetry data, and developed **Time Series Forecasting** tools. I bring operational Python skills and a rigorous scientific mindset to the team.

## R&D & ENGINEERING PROJECTS

### LLM Inference Optimization (Benchmark)

R&D | Python | CUDA

- **Challenge:** Optimizing AI model latency for production environments.
- **Methodology:** Reviewed scientific literature on memory management (PagedAttention vs RadixAttention).
- **Implementation:** Benchmarked vLLM vs SGLang on H100 GPUs, analyzing throughput and signal latency.
- **Result:** Identified a 29% performance gain, demonstrating ability to apply state-of-the-art research.

### Time Series Forecasting Tool

Stats | Signal Processing

- **Relevance to Kayrros:** Energy markets and climate data rely heavily on temporal analysis.
- Developed a tool to analyze sequential data points, applying **Moving Averages** and smoothing algorithms to detect trends and anomalies.
- Visualized results to aid decision-making (similar to "Products for Traders").

### Telemetry Data Pipeline (ETL)

Data Engineering | SQL

- Built a robust pipeline to ingest, clean, and store raw telemetry logs (unstructured data).
- Ensured data quality and consistency before analysis, collaborating with engineering principles (Git, Modular Code).

## EDUCATION

### B.U.T. Statistics & Business Intelligence (Data Science)

2022 – Present | IUT des Pays de l'Adour

- Specialized in Data Science: Exploration, Modeling, and Visualization.
- Intensive curriculum in **Statistics** and **Computer Science** (equivalent to 180 ECTS).
- Focus on practical application: Machine Learning, Big Data (Spark notions), and Database Management.

## INTERESTS

**Climate & Energy:** Keen interest in how AI can optimize energy transition.

**Tech Watch:** Regularly following advancements in Generative AI and Earth Observation.