Lounes MECHOUEK

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🏠 Île-de-France

Data Scientist/Engineer

Computer engineer passionate about AI and data.
Specialized in data analysis and processing as well as in
the implementation and industrialization of AI systems.

Education

From October 2021 to September 2023

Master's in Computer Science, Specialization in Machine Learning for Data Science (MLSD)
Université Paris Cité Paris
- Curriculum: Big Data, NLP, Machine Learning, Deep Learning, Times Series, Recommender Systems.

From September 2017 to September 2022

Engineer's degree in Computer Science
École nationale Supérieure d'Informatique ESI ex INI Algiers
- Curriculum: High-Performance Computing, Advanced Database Systems, Data Structures, Operations Research & Graph Theory.
- Active member of student associations like School of AI Algiers and GDG Algiers, involved in workshop facilitation.

Work experience

Since January 2024

Data Scientist
Freelance Paris
- Text analysis and processing (supervised/unsupervised).
- Implementation of LLM-based solutions (RAG) for custom creative text generation.
- Web Scraping and building databases.
- **Tools**: Python, FastAPI, Haystack, MongoDB, Playwright.

From November 2022 to September 2023

Data Scientist: application of LLMs in the medical field (NLP, Statistics, Ethics)
SogetiLabs part of Capgemini Issy-les-Moulineaux, France
- Improved reliability of extracted information by a range of 5 to 20%.
- Designed and implemented robust, reusable, and **industrializable** NLP and LLM pipelines for processing medical reports, showcasing technical skills and creativity.
- Critically analyzed methods, obtained results, and future developments, demonstrating rigor and critical thinking.
- **Tools:** Python, Pandas, HuggingFace, Numpy, Matplotlib, Streamlit, Docker.

From November 2022 to January 2023

Experiences and missions with clients of SogetiLabs.
Spectre Biotech & Coface Paris, France
- Accompanying clients in the realization of POCs on innovative AI and Data challenges.
- Implementation of personalized machine learning models and NLP and LLM pipelines.
- In-depth data analysis and creation of dashboards for monitoring and visualization.
- **Tools:** Python, Pandas, ScikitLearn, HuggingFace, Plotly, Streamlit.

Personal and Academic Projects

Engineer's Thesis Project: Automatic Extraction of License Plate Numbers using Deep Learning.
- Fine-tuned the models and Deployed them on GCP, created a Rest API ensuring accessibility.
- Python, Pytorch, Tensorflow, VM, Matplotlib, Flask, CNN, RNN, Attention.

Kaggle Competition: Deep learning architecture for predicting sleep periods.
Python, Tensorflow, Time Series, LSTM, CNN, BiLSTM, Matplotlib, Pandas, Parquet

TweetAnalysis: A web platform for scraping and advanced analysis of tweets.
- Trend analysis on a topic, sentiment analysis, visualizations, etc.
- Python, Pandas, Streamlit, ScikitLearn, NLP, Machine Learning.

Skills

GCP (AutoML, Looker Studio, BigQuery, etc.), Azure Machine Learning, MLOps
- **Azure Data Scientist Associate** certification *(in progress)*.
- **GCP Professional Data Engineer** certification *(in progress)*.

Docker, SQL (PostgreSQL), NoSQL (MongoDB), MLFlow, Bash, Java, Spark, Apache Beam, Databricks.
- Databricks Accredited Lakehouse Platform Fundamentals
- Databricks Accredited Generative AI Fundamentals

Python, R, Pandas, Numpy, Matplotlib, Tensorflow, Streamlit, Scikit-Learn, HuggingFace, LLM & RAG
Substantial enterprise experience and through personal projects.

Interests
Chess, Cinema

Languages
French (C2), **English** (C1)

Social networks
in @lounes-mechouek
 @lounesmechouek