mechouek.contact@gmail.com

Île-de-France



https://lounes.tech

# **Data Scientist/Engineer**

Skillful computer engineer passionate about AI and data, seeking a new challenge in the design, implementation, industrialization, or monitoring 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.
- Minimum of one project per module, plus extended projects.

From September

2017 to

2022

September

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 Al Algiers and GDG Algiers, involved in workshop facilitation.

## Work experience

From November 2022 to September

2023

Internal project: 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.
- <u>Critically analyzed</u> methods, obtained results, and future developments, demonstrating <u>rigor and critical thinking</u>.
- Tools: Python, Pandas, HuggingFace, Numpy, Matplotlib, Streamlit, Docker.

Experiences and missions with clients of SogetiLabs. From

November 2022 to January 2023 Spectre Biotech & Coface Paris, France

- Accompanying clients in the realization of POCs on innovative Al and Data challenges.
- Implementation of personalized machine learning models and NLP and LLM pipelines.
- $\underline{\text{In-depth data analysis}} \text{ and creation of dashboards for monitoring and visualization.}$

Tools: Python, Pandas, ScikitLearn, HuggingFace, Plotly, Streamlit.

#### **Personal and Academic Projects**

## Engineer's Thesis Project: Automatic Extraction of License Plate Numbers using Deep Learning.

- <u>Implemented</u> the architecture and <u>Deployed</u> it on GCP, created a <u>Rest API</u> 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

## <u>TweetAnalysis:</u> 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.

## MedicoDZ: Medical appointment management platform.

- Implemented the database, REST API, and contributed to the mobile application.
- PostgreSQL, UML, Express.js, Kotlin, Sequelize, CI/CD.

#### **Skills**

#### GCP (AutoML, VertexAl, BigQuery, etc.), Azure Machine Learning, MLOps

- Azure Data Scientist Associate certification (in progress).
- GCP Professional Data Engineer certification (in progress).

## Docker, SQL (MySQL, PostgreSQL), MLFlow, Java, PySpark, Apache Beam, Databricks.

- Databricks Accredited Lakehouse Platform Fundamentals
- Databricks Accredited Generative Al Fundamentals

## Python, R, Pandas, Numpy, Matplotlib, Tensorflow, Streamlit, Scikit-Learn, HuggingFace, LLM & RAG

Substantial enterprise experience and through personal projects.

**Interests** Languages Chess **French** C2 Level adherent of the London System. Cinema and TV Shows **English** always ready for a popcorn session! C1 Level

## Social networks

@lounes-mechouek

@lounesmechouek

