Abderraouf Lahmar

- **○** GitHub Profile
- **■** jsm6k4@inf.elte.hu
- in LinkedIn Profile
- Personal website

EDUCATION

• Eötvös Loránd University

2024-2026

Master's degree in data science.

• 08 Mai 1945 University, Guelma

2021 - 2024

 $ranked\ 1st,\ Bachelor\ in\ Informatics\ systems.$

Average: 16/20

• Mahmoud Ben Mahmoud

2018-2021

Experimental sciences specialty.

Average: 16.89

EXPERIENCE

• Data science Lab 1

Jan 2025-Present

Researcher

Eötvös Loránd University, Hungary

- I am currently interning as a researcher, focusing on distillation techniques for large language models (LLMs), including self-knowledge distillation and reinforcement learning-based approaches.

Personal Projects

• MAmmoTH LLM paper implementation.

[GitHub]

Re-implementing MAmmoTH LLM paper using QLoRA with Llama-2 7b as a base model.

• SELF-ALIGN approach implementation.

[GitHub]

Self-aligning a Llama-3.1-8B using QLoRA.

· Attention is all you need re-implementation

From scratch Pytorch implementation of "attention is all you need" paper.

• Youtube studying chrome extension (incomplete)

Creating an AI enhanced chrome extension to help students manage their youtube notes.

• Image captioning model using transformer architecture

Developed an image captioning model leveraging an encoder-decoder transformer-based architecture, achieving a BLEU score of 0.29.

Object detection using CNN-based model trained on synthetic data

Achieved competitive results compared to the YOLO-V8 model, with a mean Average Precision (mAP) of 0.92.

Used-cars dataset EDA, and price prediction using statistical methods.

[GitHub]

Applying some key notions from ISLP book.

TECHNICAL SKILLS AND INTERESTS

Technical Skills: Software engineering , machine learning, RL, Data Analysis, Web scraping

Soft Skills: Team leading skills, scientific writing skills, effective communication, time management.

Field of Interest: Machine learning, NLP, data mining, datascience, Reinforcement Learning

ACHIEVEMENTS

• Scholarship Stipendum Hungaricum scholarship awardee.

2025-2027

RELEVANT READINGS

- Speech and Language Processing By Dan Jurafsky and James H. Martin.
- Natural Language Processing with PyTorch Build Intelligent Language Applications Using Deep Learning.
- Reinforcement Learning: An Introduction By Andrew Barto and Richard S. Sutton.
- An Introduction to Statistical Learning. By Gareth James.
- Introduction to Machine Learning By Ethem Alpaydın.
- Linear Algebra and Its Applications by Gilbert Strang.
- Fundamentals of Statistical Signal Processing Steven M. Kay.

Courses and certificates

* Natural Language Processing with Classification and Vector Spaces	[Coursera]
* Natural Language Processing with Probabilistic Models	[Coursera]
* Advanced Learning Algorithms	[Coursera]
* Supervised Machine Learning: Regression and Classification	[Coursera]
* Introduction to Statistics	[Coursera]

 $\ast\,$ NLP Transformers Course (hugging face) .