Diego ROSSINI

NLP | LLM | ML | CL

✉ diego.rossini418@gmail.com

⌂ Lyon

🔗 diegorossini.github.io

🪪 Driving licence (B)

📱 06 27 62 12 00

Computer skills

Python

R

Docker

Git

Spoken Languages

Spanish
Beginner-level

English
Fluent

French
Fluent

Italian
Mother Tongue

Social Media

🐦 @@DiegoRossi7550

🐙 @DiegoRossini

🔺 @diego.rossini418

in @diego-rossini

Interests

Sport
Padel, football and tennis player

Cuisine
Pasta Expert

Musique Rock
Pink Floyd Fan

Echecs
Rapid ELO 1400

PAPERS

Title : A modal sense classifier for the french modal verb "pouvoir" [July 2024]
Authors : Anna Colli, Diego Rossini, Delphine Battistelli
Conference : CLiC-it 2024

- Designed and executed **experiments** in **model evaluation**, achieving high **F1-scores** with the flaubert-base-cased model for **modality classification** of the French verb *pouvoir*.
- Contributed as an **annotator** for manual **corpus annotation**, developing multiple **datasets** for machine learning experiments.

EDUCATION

Master's Degree in Natural Language Processing (NLP)

From September 2022 to June 2024 Université de Nanterre FRANCE

- Mention **Très Bien**.
- LLM: State of the Art, RAG, and LangChain: Prompt Templates, Agents, Chains.
- Fine-tuning of a pre-trained model for automatic comment generation.
- Librairies : sklearn, transformers, PyTorch, pandas, numpy, HF, SpaCy, Gensim.
- *Project 1* : Semantic analysis of the word "banlieue" and its variants in Italian, English, and French. Bash scripts for information extraction and Python for corpus preprocessing. Website here.
- *Project 2* : Scraping of trending expressions over time from Le Monde publications in 2022. Utilized OOP paradigm and libraries such as dataclasses, selenium, xml.etree, and argparse. Data formats: JSON, XML, and pickle. Implementation of an LDA model. Website here.

Udemy NLP Courses

From February 2020 to April 2022 Udemy online

- Python Bootcamp From Zero to Hero, 24 hours.
- NLP Bootcamp (preprocessing, vectorization, algorithms), 17 hours.
- NLP with Python (neural networks and chatbot construction), 12 hours.
- Machine Learning in NLP, 12 hours.

Master's Degree in Linguistics

From September 2016 to March 2019 Università di Bologna ITALY

- **110/110** with highest honors.

Bachelor's Degree in Literature and General Linguistics

From September 2012 to February 2016 Università di Urbino ITALY

- **110/110** with highest honors.

PROFESSIONAL EXPERIENCE

Intern in LLM Inference Acceleration

From March 2024 to August 2024 WorldLine Lyon FRANCE

- Evaluation of various LLMs in terms of FLOPS, inference speed, and output performance.
- Design of scripts to verify the degradation/improvement of LLM performance with different attention mechanisms.
- Fine-tuning LLM for specific tasks (LoRA) on Azure ML.
- Implementation of GQA attention mechanism on Open Source LLM.

Intern - AutoGrammar Project

From April 2023 to July 2023 Laboratoire Modyco Nanterre FRANCE

- Training a ML parser on ArboratorGrew and creating a usable treebank.
- Designing scripts for the conversion and processing of Elan files from voice recordings.

Intern in Machine Learning

From April 2022 to September 2022 ItaTechSolutions Srl Milano ITALY

- Utilization of text preprocessing pipelines to prepare data for analysis.
- Performing sentiment analysis on client's comments.