

# Diego ROSSINI

Application for the position of data scientist - machine learning engineer at Randstad

#### ☑ diego.rossini418@gmail.com

**A** Lyon

diegorossini.github.io

Driving licence (B)

06 27 62 12 00

# Computer skills

**Python** 

Azure ML

Docker

Git

## **Spoken Languages**

## **English**

Fluent

#### **French**

Fluent

#### Italian

Mother Tongue

### Social Media

@DiegoRossini

@diego.rossini418

in @diego-rossini

### **Interests**

#### Sport

Played football for 15 years (forward) and tennis for 3 years.

## Cuisine

Pasta Expert

# **Musique Rock**

Pink Floyd Fan

## **Echecs**

ELO 1400

#### PROFESSIONAL EXPERIENCE

#### Intern in LLM Inference Acceleration

Since March 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 (ITALIE)

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

### **EDUCATION**

### Master's Degree in Natural Language Processing (NLP)

From September 2022 to June 2024 Université de Nanterre Nanterre (FRANCE)

- Average Grade: 16/20
- 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 <a href="here">here</a>.
- 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 en ligne

- 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.

# Ph.D. Project

From March 2019 to April 2019 Université de Paris 8 Paris

• For a unified analysis of partitive phrases in contemporary French.

## Master's Degree in Linguistics

From 2016 to 2019 Università di Bologna Bologna (ITALIE)

• 110/110 with highest honors.