Diego ROSSINI

NLP | CL | ML

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Villeurbanne (69100)

🔗 diegorossini.github.io

🪪 Driving licence (B)

📱 06 27 62 12 00

Computer skills

Python

R

Docker

Git

Spoken Languages

Italian
Mother Tongue

English
Fluent

French
Fluent

Spanish
Beginner-level

Social Media

🐦 @@DiegoRossi7550

🐙 @DiegoRossini

🔺 @diego.rossini418

💼 @diego-rossini

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

- Worked within the 13/11 transdisciplinary research program on **modal verbs markers** in **conveying collective memory**.
- **Designed** and **executed** experiments in **model fine-tuning** and **evaluation**, achieving high F1 scores in the **automatic 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 Sorbonne Nouvelle - INALCO - Université Paris X FRANCE

- Highest honor **Très Bien**.
- LLM: State of the Art, RAG, and LangChain: Prompt Templates, Agents.
- ML algorithms: SVM, Linear Regression, Naive Bayes, LDA, Clustering Techniques.
- Librairies : sklearn, transformers, PyTorch, pandas, numpy, HF, SpaCy, Gensim.

- *Project 1*: Semantic analysis of the word "banlieue" and its variants in Italian, English, French and Greek. 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.

Ph.D. Project
From March 2019 to March 2020 Université de Paris 8 FRANCE online

- Conducted a unified analysis of partitive phrases grounded in the minimalist theory framework.

Master's Degree in Linguistics
From September 2016 to March 2019 Università di Bologna ITALY

- **110/110** with highest honors.
- *Project 1*: Analyzed the treatment of the French partitive construction with "de" and its Italian equivalents in the Robert-Zanichelli 2007 dictionary, highlighting grammatical nuances and translation challenges.
- *Project 2*: Analyzed the dual nature of proper nouns in antonomasia, exploring how they can maintain instructional meaning while embodying descriptive properties.
- *Thesis* : Study of partitive noun phrases in French from a unified perspective, emphasizing their structural and semantic similarities with quantitative phrases.

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.
- Implementation of GQA attention mechanism on Open Source LLM.

Intern - AutoGrammar Project

From April 2023 to July 2023 Laboratoire Modyco Nanterre FRANCE

- Automatic extraction of grammatical descriptions for low-resource languages Gbaya and Beja.
- Developed annotation schemas to connect linguist labels with ML algorithms for treebank creation.
- Designing scripts for the conversion and processing of Elan files from voice recordings.

Professor of Italian language for Opera singers

From June 2019 to September 2019 Centro Studi Italiani Urbania ITALY

- Guided a group of 22 opera students from 11 national backgrounds in learning Italian.