GIUSEPPE CARRINO

PhD student in Optimization at ENS Lyon
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EDUCATION

PhD in Optimization *Nov. 2025 - Ongoing*
ENS Lyon *Sup. by N.Brisebarre, E.Riccietti, T.Mary*
Mixed-precision optimization for Machine Learning.

MSc in Artificial Intelligence *Sep. 2022 - Oct. 2025*
University of Bologna 110/110 *summa cum laude*
Thesis: "Floating-point approximations for Newton's method".

BSc in Computer Science *Sep. 2019 - Jul. 2022*
University of Bologna 110/110 *summa cum laude*
Thesis: "Infrastructure for the comparison of international newspapers".

WORK EXPERIENCE

École normale supérieure, Lyon Mar. 2025 - Jun. 2025
Research Intern *Sup. by E. Riccietti, T. Mary*

- Floating-point **mixed precision error analysis**;
- **Newton** and **Quasi-Newton** methods for optimization.

Amazon Business, Madrid Sep. 2024 - Feb 2025
Software Development Engineer Intern

- Full-Stack developing using Java and React;
- Enhanced registration page achieving +**2% registrations**.

NTNU, Gjøvik Sep. 2021 - Nov. 2021
Research Intern *Sup. by Angelo Di Iorio, Gioele Barabucci*

- Semantic analyses using **NLP** Python tools.

PUBLICATIONS

Comparison of news commonality and churn in international news outlets with TARO
Hypertext Conference 2023

- Won ***Ted Nelson Newcomer Award***
- DOI: https://doi.org/10.1145/3603163.3609062

Publishing, linking and translating news in multilingual communities: a mirror of cultural differences?
Hypertext Conference 2024

- DOI: https://doi.org/10.1145/3648188.3675143

Investigating news coverage and circulation over time in a quantitative manner: the TARO framework
New Review of Hypermedia and Multimedia Journal 2024

- DOI: https://doi.org/10.1080/13614568.2024.2432300

PROJECTS

TARO - Tons of Articles Ready to Outline

- Developed in the context of Bachelor's internship at NTNU, expanded in subsequent works;
- Framework for the **collection** and the **comparative analysis** of *same topic* newspaper articles;
- Published and presented papers to **Hypertext** conference, winning an *ACM Award* at HT'23.
- https://github.com/JosephCarrino/ConcepTitle

SAET - Self-Attentive EmoBERTa for Trigger

- University project for *Natural Language Processing* and *Ethics for Artificial Intelligence* courses;
- Implemented transformer using **BERT-based model** as a backbone, validated on **MELD dataset**;
- Assessment of models' **explainability** with explored and novel methodologies.
- https://github.com/JosephCarrino/NLP_Project

RagnaBot

- University project for *Fundamentals of Artificial Intelligence and Knowledge Representation* course;
- **Autonomous player** for the board game *Tablut*, ranked **2nd** at student competition;
- Used **Java's AIMA library** and **Scikit-Learn** Machine Learning models.
- https://github.com/JosephCarrino/RagnaBot

TECHNICAL SKILLS

Programming Languages

- Python
- Java
- TypeScript

Applied math

- Unconstrained optimization
- Linear algebra
- Error analysis

Libraries

- NumPy
- SciPy
- PyTorch
- SpaCy
- Scrapy
- Matplotlib

LANGUAGES

Italian

- Native

Spanish

- Intermediate

English

- Fluent

French

- Basic