Irene Cannistraci



To know more about me visit https://irene.cannistraci.dev/

Research Interests

My research journey has allowed me to explore diverse areas of deep learning, such as time-series analysis and computer vision.

Lately, I've been particularly focused on representation learning. I am working on analyzing and understanding when different neural networks generate similar latent spaces, and identifying the class of transformations arising between these latent spaces. This exploration is oriented towards model re-use encompassing diverse modalities such as vision, text, and graphs.

Education

PhD Student - Computer Science Nov. 2020 - Oct. 2024

Sapienza University of Rome, Italy

Advised by Prof. Rodolà

MSc in Computer Science

Sept. 2018 - Oct. 2020

Sapienza University of Rome, Italy

110/110 magna cum laude

BSc in Computer Science

Sept. 2013 - Mar. 2017

Sapienza University of Rome, Italy

Work Experience

Teaching Assistant

Sept. 2023 - Ongoing

LUISS Guido Carli, Italy

- ▶ Lectured and mentored 40+ students for the Data Science in **Action** MSc course
- Designed and implemented the course lab sessions

Teaching Assistant

Feb. 2023 - Jun. 2023

Sapienza University of Rome, Italy

Lectured and mentored 80+ students for the **Deep Learning** and Applied AI MSc course (link here)

Tutor

Nov. 2021 - Ongoing

Unitelma Sapienza, Italy

▶ Help students learn more about the university and provide an interface between them and the professors

Coding Teacher

Nov. 2020 - Dec. 2021

Fondazione Mondo Digitale, Italy

- ▶ Online coding lessons for high-school students for CO.ME.SE (COde&FraME for Self Empowerment) and CodinGirls
- ▶ Role Model for "La Notte dei Ricercatori 2020" and " STEM#4TeenGirls" the Erasmus+ Project for Scuole CEFA

Software Developer Engineer

Jun. 2017 - Feb. 2019

NTT Data, Italy

Developing multiple software for several international customers such as Enel and Telecom

Honors

Kickstarting Research Funding

€1,000 - Nov. 2022

Sapienza University of Rome

2021 Zonta International Women in Technology Scholarship

\$8,000 - Mar. 2022

Zonta International

Merit scholarship to cover the entire BSc tuition fees

Tuition Fees - Sep. 2013

Sapienza University of Rome

Selected Publications

From Charts to Atlas: Merging Latent Spaces into One

D. Crisostomi, **I. Cannistraci** Et al.

NeurReps @ NeurIPS 2023 (link here)

From Bricks to Bridges: Product of Invariances to **Enhance Latent Space Communication**

I. Cannistraci Et al.

Preprint (link here) & Oral at NeurReps @ NeurIPS 2023

Bootstrapping Parallel Anchors for Relative Representations

I. Cannistraci Et al.

Tiny Paper @ ICLR 2023 (link here)

Selected Invited Talks

Unifying Representations by Infusing Invariances in the Latent Space

Jun. 2022

Tübingen AI center, Tübingen (Germany)

Communicating between latent spaces with limited semantic correspondence

Mar. 2023

Trento Al Journal Club, Trento (Italy)

Panelist for Women in Data Science (WIDS) Jun. 2021 **Rome Event**

Real Data Are Often Dirty Data: Problems With the Analysis of Large Collections of EHRs

Remote

Hobbies & Interests

- Outdoor activities (climbing, hiking, mountain biking,..)
- Cooking vegan recipes
- Reading books
- Films and tv series