

IRENE CANNISTRACI

PhD Student in CS | Visiting Researcher @ Helmholtz Munich

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Scholar

EDUCATION

Ph.D. in Computer Science Nov 2020 - Present
Sapienza University of Rome Rome, Italy
Part of the GLADIA group, advised by Prof. Emanuele Rodolà.

M.Sc. in Computer Science Sep 2018 - Oct 2020
Sapienza University of Rome Rome, Italy
Grade: 110/110 cum laude

B.Sc. in Computer Science Sep 2013 - Mar 2017
Sapienza University of Rome Rome, Italy

EXPERIENCE

International Research Visit Feb 2024 - Present
Institute of AI for Health, Helmholtz Munich Munich, Germany
Working at the intersection of representation learning, geometric deep learning, and topological machine learning in the AIDOS Lab, led by prof. Bastian Rieck.

Teaching Assistant Sept 2023 - Present
LUISS Guido Carli University Rome, Italy
Lectured and mentored 40+ students for the Data Science in Action MSc course, and designed and implemented the course lab sessions.

Teaching Assistant Feb 2023 - Jun 2023
Sapienza University of Rome Rome, Italy
Lectured and mentored 80+ students for the Deep Learning and Applied AI MSc course.

Software Developer Engineer Jun 2017 - Feb 2019
NTT Data Rome, Italy
Developing multiple software for several international customers such as Enel and Telecom.

SELECTED INVITED TALKS

From Bricks to Bridges: Product of Invariances to Enhance Latent Space Communication 29 Feb 2024
Helmholtz AI, Helmholtz Munich Munich, Germany
Hosted by Prof. Stefan Bauer. Slides here.

Unify Latent Spaces to Reuse Neural Components 20 Feb 2024
Helmholtz AI PhD Seminar, Helmholtz Munich Munich, Germany
Slides here.

Unifying Representations by Infusing Invariances in the Latent Space 22 Jul 2023
Tübingen AI center Tübingen, Germany

Communicating between latent spaces with limited semantic correspondence 31 Mar 2022
Trento AI Journal Club Trento, Italy
Slides here.

Panelist for the Women in Data Science Event 24 Jun 2021
WiDS Rome Event Virtual

AWARDS

ELISE Mobility Program for PhDs Mar 2024
Travel Grant of €5,000 for junior researchers in the ELISE/ELLIS network

G-Research Grant for PhD Students Feb 2024
Research grant of £2,000 for PhD students and postdocs in quantitative fields

Helmholtz Visiting Researcher Grant Feb 2024
Three months fully-funded research stay at the Helmholtz Munich (Apr-Jun)

Kickstarting Research Funding Nov 2022
Research grant of €1,000 for young researchers and Ph.D. students

Women in Technology Scholarship Mar 2022
Grant of US\$8,000 for women of any age and nationality, pursuing an IT degree

PROFESSIONAL ACTIVITIES

Reviewer
IJCNN 2023; Re-Align@ICLR2023; NeurReps, UniReps, New in ML, WiML @NeurIPS2023; ICIAP 2023; ACM TKDD 2021

Volunteering
WiML@NeurIPS2023

TECHNICAL SKILLS

Representation Learning Multimodal
Deep Learning Computer Vision
Foundation Models Transformers
NLP Git Python PyTorch

REFEREES

Prof. Emanuele Rodolà ERC grantee
Sapienza University of Rome
Homepage

Prof. Bastian Rieck
Helmholtz Munich and Technical University of Munich (TUM)
Homepage

SELECTED PUBLICATIONS

Peer reviewed

- [1] I. Cannistraci, L. Moschella, M. Fumero, V. Maiorca, and E. Rodolà. "From Bricks to Bridges: Product of Invariances to Enhance Latent Space Communication". In: *The Twelfth International Conference on Learning Representations (ICLR 2024, spotlight, top 5%)*. 2024. URL: <https://openreview.net/forum?id=vngVydDWft>.
- [2] I. Cannistraci, L. Moschella, V. Maiorca, M. Fumero, A. Norelli, and E. Rodolà. "Bootstrapping Parallel Anchors for Relative Representations". In: *The First Tiny Papers Track at ICLR 2023, Tiny Papers @ ICLR 2023, Kigali, Rwanda, May 5, 2023*. Ed. by K. Maughan, R. Liu, and T. F. Burns. OpenReview.net, 2023. URL: <https://openreview.net/pdf?id=VBuUL2IW1q>.
- [3] D. Crisostomi, I. Cannistraci, L. Moschella, P. Barbiero, M. Ciccone, P. Liò, and E. Rodolà. "From Charts to Atlas: Merging Latent Spaces into One". In: *NeurIPS 2023 Workshop on Symmetry and Geometry in Neural Representations (NeurReps @ NeurIPS 2023)* (2023). URL: <https://arxiv.org/abs/2311.06547>.

Preprints

- [4] I. Cannistraci, M. Fumero, L. Moschella, V. Maiorca, and E. Rodolà. "Infusing invariances in neural representations". In: *Extended Abstract, TAG-ML workshop @ ICML 2023* (2023). URL: <https://openreview.net/pdf?id=mCm4iiNoNc>.