IRENE CANNISTRACI

PhD Student in CS | Visiting Researcher @ Helmholtz Munich

@ irenecannistraci@gmail.com +393206938489 Milchstraße 27, 81667 München, Germany Italian
irene.cannistraci.dev @ire_cannistraci in irene-cannistraci icannistraci 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*
Lecturered 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

B.Sc. Tuition Fees
2014-2017
Sponsored for academic merits by Sapienza to cover **entire B.Sc. tuition fees**

PROFESSIONAL ACTIVITIES

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

Volunteering
WiML@NeurIPS2023

ATTENDED

Conferences
NeurIPS 2023, ICML 2023, Lightning DevCon 2022

Summer Schools
EEML 2023, MLSSŜ 2023, M2L 2022

REFEREES

Prof. Emanuele Rodolà *ERC grantee*
Sapienza University of Rome
@ rodola@di.uniroma1.it

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=VBuUL2IWlq.

[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.