

Irene Cannistraci

PH.D. STUDENT IN COMPUTER SCIENCE

📍 Rome, Italy | ✉ irenecannistraci@gmail.com | 🏠 irene.cannistraci.dev | 📷 icannistraci | 📺 irene-cannistraci | 🐦 @ire_cannistraci

Education

Sapienza University of Rome

PH.D. IN COMPUTER SCIENCE

- Laboratories: GLADIA (Prof. E.Rodolà) and VisionLab (Prof. D. Avola)

Rome, Italy

2020 - present

Sapienza University of Rome

M.S. IN COMPUTER SCIENCE - GRADUATED WITH 110/110 CUM LAUDE

- Thesis: Time-Aware Sequential Deep Learning and Their Application in Healthcare

Rome, Italy

2018 - 2020

Sapienza University of Rome

B.S. IN COMPUTER SCIENCE

Rome, Italy

2014 - 2017

Experience

Teaching Assistant - Data Science in Action

LUISS GUIDO CARLI UNIVERSITY - DEPARTMENT OF BUSINESS AND MANAGEMENT

- Lecturer and mentor for the Data Science in Action course

Rome, Italy

Sept 2023 - present

Teaching Assistant - Deep Learning and Applied AI

SAPIENZA UNIVERSITY OF ROME - DEPARTMENT OF COMPUTER SCIENCE

- Lecturer and mentor for the Deep Learning and Applied AI course

Rome, Italy

Feb 2023 - Jun 2023

Tutor

UNITELMA SAPIENZA - COMPUTER SCIENCE DEPARTMENT

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

Rome, Italy

Nov 2021 - present

Coding Teacher

FONDAZIONE MONDO DIGITALE

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

Rome, Italy

Nov 2020 - Dec 2021

Software Developer Engineer

NTT DATA

- RESTful APIs - Telecom
 - Develop a microservices architecture to revise an outdated monolithic platform for messaging. Scalability and high reliability were guaranteed by the Openshift platform, meanwhile real-time tracking and quick troubleshooting by Elasticsearch.
- Internal Portals (ServiceNow) - Enel
 - eProfile: employees use the service to create their profiles, insert their job-related information, and apply to open internal positions.
 - OneClick: employees adopt it to open issue tickets, request devices, software licenses, etc.
 - Global Travel: employees adopt it to insert travel requests.

Rome, Italy

Jun 2017 - Feb 2019

Awards

Nov. 2022 **Avvio alla Ricerca - Sapienza University**, Research grant for young researchers and Ph.D. students.

€1000

Mar. 2022 **2021 Zonta International Women in Technology Scholarship**, Zonta International

\$8000

2014-2017 **Lazio DiSCo - Sapienza University**, Scholarship for academic merits to fully cover the B.S. tuition fees.

Professional Activities

Reviewer (Workshops)

- Symmetry and Geometry in Neural Representations (NeurReps) @ NeurIPS - 2023
- Unifying Representations in Neural Models (UniReps) @ NeurIPS - 2023
- New in ML @ NeurIPS - 2023
- Women in Machine Learning Workshop (WiML) @ NeurIPS - 2023

Reviewer (Conferences)

- International Conference on Image Analysis and Processing (ICIAP) - 2023

Reviewer (Journals)

- ACM Transactions on Knowledge Discovery from Data (TKDD) - 2021

Talks

Invited Talk at "il Futuro Annunciato"

ITALIAN WORKSHOP FOR BACHELOR STUDENTS

Rieti, Italy

July 2023

Invited Talk at the Artificial Intelligence Trento Journal Club

COMMUNICATING BETWEEN LATENT SPACES WITH LIMITED SEMANTIC CORRESPONDENCE

Trento, Italy

March 2023

Invited Talk at Sapienza School of Advanced Studies (SSAS)

COURSE OF INTRODUCTION TO PROGRAMMING WITH PYTHON (PROF. E. RODOLÀ)

Rome, Italy

Jan 2023

Invited Talk at Sapienza School of Advanced Studies (SSAS)

COURSE OF INTRODUCTION TO PROGRAMMING WITH PYTHON (PROF. E. RODOLÀ)

Virtual

Feb 2022

Invited Panelist for WiDS Rome Event

WOMEN IN DATA SCIENCE ROME EVENT

Virtual

Jun 2021

Invited Talk for Data Science Innovation in Diabetes Webinar

REAL DATA ARE OFTEN DIRTY DATA: PROBLEMS WITH THE ANALYSIS OF LARGE COLLECTIONS OF ELECTRONIC HEALTH RECORDS

Virtual

Jun 2021

Scholarships for Conferences

Sept 2023 **Challenges in building Billion Users Cloud Applications** , **BUCA Scholarship**

Varenna

Jul 2023 **Eastern European Machine Learning Summer School** , **EEML Scholarship**

Kosice

Aug 2022 **Mediterranean Machine Learning Summer School** , **M2L Scholarship**

Milan

Jul 2022 **Synapse AI Symposium** , **Bending Spoons Scholarship**

Milan

Jun 2022 **Lightning DevCon** , **Lightning Scholarship**

New York City

Nov 2021 **ICAIF'21** , **JPMorgan Fellowship**

Virtual

Oct 2021 **Festival Informatici Senza Frontiere** , **Aused Fellowship**

Rovereto (TN)

Publications

Peer reviewed

- [Avo+23] D. Avola, **I. Cannistraci**, M. Cascio, L. Cinque, A. Diko, D. Distanti, G. L. Foresti, A. Mecca, and I. Scagnetto. "Real-Time GAN-Based Model for Underwater Image Enhancement". In: *International Conference on Image Analysis and Processing*. Springer. 2023, pp. 412–423.
- [Can+23c] **I. Cannistraci**, L. Moschella, V. Maiorca, M. Fumero, A. Norelli, and E. Rodolà. "Bootstrapping Parallel Anchors for Relative Representations". In: *Tiny Paper Track at ICLR 2023*. 2023. URL: <https://openreview.net/pdf?id=VBuUL2IWlq>.
- [Avo+22] D. Avola, **I. Cannistraci**, M. Cascio, L. Cinque, A. Diko, A. Fagioli, G. L. Foresti, R. Lanzino, M. Mancini, A. Mecca, and D. Pannone. "A Novel GAN-Based Anomaly Detection and Localization Method for Aerial Video Surveillance at Low Altitude". In: *Remote Sensing* 14.16 (2022), p. 4110.

Preprints

- [Can+23a] **I. Cannistraci**, M. Fumero, L. Moschella, V. Maiorca, and E. Rodolà. "Infusing invariances in neural representations". In: *Extended Abstract at TAG-ML workshop, ICML 2023* (2023). URL: <https://openreview.net/pdf?id=mCm4iiNoNc>.
- [Can+23b] **I. Cannistraci**, L. Moschella, M. Fumero, V. Maiorca, and E. Rodolà. "From Bricks to Bridges: Product of Invariances to Enhance Latent Space Communication". In: *arXiv preprint arXiv:2310.01211* (2023).
- [Pra+23] M. Prata, G. Masi, L. Berti, V. Arrigoni, A. Coletta, **I. Cannistraci**, S. Vyetrenko, P. Velardi, and N. Bartolini. "LOB-Based Deep Learning Models for Stock Price Trend Prediction: A Benchmark Study". In: *arXiv preprint* (2023). URL: <https://arxiv.org/abs/2308.01915>.
- [Mar+22] M. Maranghi, A. Anagnostopoulos, **I. Cannistraci**, I. Chatzigiannakis, F. Croce, G. Di Teodoro, M. Gentile, G. Grani, M. Lenzerini, S. Leonardi, et al. "AI-based Data Preparation and Data Analytics in Healthcare: The Case of Diabetes". In: *arXiv preprint arXiv:2206.06182* (2022).