# Irene **Cannistraci**

PH.D. STUDENT IN COMPUTER SCIENCE

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## **Edu**cation

**Sapienza University of Rome**                                                                 *Rome, Italy*
PH.D. IN COMPUTER SCIENCE                                                                       *2020 - present*
- Laboratories: GLADIA (Prof. E.Rodolà) and VisionLab (Prof. D. Avola)

**Sapienza University of Rome**                                                                 *Rome, Italy*
M.S. IN COMPUTER SCIENCE - GRADUATED WITH 110/110 CUM LAUDE                                     *2018 - 2020*
- Thesis: Time-Aware Sequential Deep Learning and Their Application in Healthcare

**Sapienza University of Rome**                                                                 *Rome, Italy*
B.S. IN COMPUTER SCIENCE                                                                        *2014 - 2017*

## **Exp**erience

**Teaching Assistant - Data Science in Action**                                                 *Rome, Italy*
LUISS GUIDO CARLI UNIVERSITY - DEPARTMENT OF BUSINESS AND MANAGEMENT                            *Sept 2023 - present*
- Lecturer and mentor for the Data Science in Action course

**Teaching Assistant - Deep Learning and Applied AI** ⬀                                          *Rome, Italy*
SAPIENZA UNIVERSITY OF ROME - DEPARTMENT OF COMPUTER SCIENCE                                    *Feb 2023 - Jun 2023*
- Lecturer and mentor for the Deep Learning and Applied AI course

**Tutor**                                                                                       *Rome, Italy*
UNITELMA SAPIENZA - COMPUTER SCIENCE DEPARTMENT                                                 *Nov 2021 - present*
- Help students learn more about the university and provide an interface between them and the professors.

**Coding Teacher**                                                                              *Rome, Italy*
FONDAZIONE MONDO DIGITALE                                                                       *Nov 2020 - Dec 2021*
- 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 inRome, Bilbao and Prague

**Software Developer Engineer**                                                                 *Rome, Italy*
NTT DATA                                                                                        *Jun 2017 - Feb 2019*
- 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.

## **Awa**rds

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.

## **Pro**fessional 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"** ⬈                                                 *Rieti, Italy*
Italian workshop for bachelor students    *July 2023*

**Invited Talk at the Artificial Intelligence Trento Journal Club** ⬈    *Trento, Italy*
Communicating between latent spaces with limited semantic correspondence    *March 2023*

**Invited Talk at Sapienza School of Advanced Studies (SSAS)**    *Rome, Italy*
Course of Introduction to programming with Python (Prof. E. Rodolà)    *Jan 2023*

**Invited Talk at Sapienza School of Advanced Studies (SSAS)**    *Virtual*
Course of Introduction to programming with Python (Prof. E. Rodolà)    *Feb 2022*

**Invited Panelist for WiDS Rome Event** ⬈    *Virtual*
Women In Data Science Rome Event    *Jun 2021*

**Invited Talk for Data Science Innovation in Diabetes Webinar**    *Virtual*
Real Data Are Often Dirty Data: Problems With the Analysis of Large Collections of Electronic Health Records    *Jun 2021*

## Scholarships for Conferences

Sept 2023 **BUCA** ⬈, BUCA Scholarship    *Varenna*
Jul 2023 **EEML** ⬈, EEML Scholarship    *Kosice*
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. Distante, 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).