Irene **Cannistraci**

Ph.D. Student in Computer Science

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Education

Sapienza University of Rome	*Rome, Italy*
Ph.D. in Computer Science	*2021 - present*

- GLADIA Research Group, Prof. Emanuele Rodolà

Sapienza University of Rome	*Rome, Italy*
M.S. in Computer Science - GRADUATED WITH 110/110 CUM LAUDE	*2019 - 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*

Experience

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  - Develop a microservices architecture to revise an outdated monolithic platform for messaging.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.

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" ⬈ *Rieti, Italy*

<small>ITALIAN WORKSHOP FOR BACHELOR STUDENTS</small> *July 2023*

Invited Talk at the Artificial Intelligence Trento Journal Club ⬈ *Trento, Italy*

<small>COMMUNICATING BETWEEN LATENT SPACES WITH LIMITED SEMANTIC CORRESPONDENCE</small> *March 2023*

Invited Talk at Sapienza School of Advanced Studies (SSAS) *Virtual*

<small>COURSE OF INTRODUCTION TO PROGRAMMING WITH PYTHON (PROF. E. RODOLÀ)</small> *Feb 2022*

Invited Panelist for WiDS Rome Event ⬈ *Virtual*

<small>WOMEN IN DATA SCIENCE ROME EVENT</small> *Jun 2021*

Invited Talk for Data Science Innovation in Diabetes Webinar *Virtual*

<small>REAL DATA ARE OFTEN DIRTY DATA: PROBLEMS WITH THE ANALYSIS OF LARGE COLLECTIONS OF ELECTRONIC HEALTH RECORDS</small> *Jun 2021*

Attended

Challenges in building Billion Users Cloud Applications (BUCA) ⬈	Scholarship Awardee	*Sep 2023*	*Varenna, Italy*
International Conference on Machine Learning (ICML 2023) ⬈		*Jul 2023*	*Honolulu, USA*
Eastern European Machine Learning Summer School (EEML) ⬈	Scholarship Awardee	*Jul 2023*	*Košice, Slovakia*
Machine Learning Summer School on Applications in Science (MLSSS) ⬈	Admission upon selection	*Jun 2023*	*Krakow, Poland*
Mediterranean Machine Learning Summer School (M2L) ⬈	Scholarship Awardee	*Sep 2022*	*Milan, Italy*
Synapse AI Symposium ⬈	Scholarship Awardee	*Jul 2022*	*Milan, Italy*
Lightning DevCon ⬈	Scholarship Awardee	*Jun 2022*	*New York City, USA*
ACM International Conference on AI in Finance (ICAIF) ⬈	Scholarship Awardee	*Nov 2021*	*Virtual*

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* ***ICIAP 2023***. 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: *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.

[Cri+23]   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.

[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,* ***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). URL: https://arxiv.org/abs/2310.01211.

[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).