Irene **Cannistraci**

PH.D. STUDENT IN COMPUTER SCIENCE

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Education

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*

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

Fondazione Mondo Digitale   *Rome, Italy*
TEACHER   *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

NTT Data   *Rome, Italy*
SOFTWARE DEVELOPER ENGINEER   *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  - Develop a microservices architecture to revise an outdated monolithic platform for messaging.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.

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*

<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*

Professional Activities

Tutor

<small>UNITELMA SAPIENZA - COMPUTER SCIENCE DEPARTMENT</small>   *Nov 2021 - present*

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

Conference Reviewer

<small>22ND INTERNATIONAL CONFERENCE ON IMAGE ANALYSIS AND PROCESSING (ICIAP)</small>   *Jun 2023*

Journal Reviewer

<small>ACM TRANSACTIONS ON KNOWLEDGE DISCOVERY FROM DATA (TKDD)</small>   *Oct 2021*

Workshop Reviewer

<small>18TH WOMEN IN MACHINE LEARNING WORKSHOP (WiML 2023)</small>   *Sep 2023*

Collaboration with Sapienza Flight Team

<small>SAPIENZA AEROSPACE STUDENT ASSOCIATION-AIAA STUDENT BRANCH</small>   *Dec 2019*

- Developing a neural network for object detection and classification for the AUVSI SUAS 2020 Competition.

Scholarships for Conferences

Sept 2023	**BUCA** ⬈, BUCA Scholarship	*Varenna, Lake Como*
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+23b]   **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.

[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).