

Irene Cannistraci

PH.D. STUDENT IN COMPUTER SCIENCE

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Education

Sapienza University of Rome

PH.D. IN COMPUTER SCIENCE

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

Rome, Italy

2021 - 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

2019 - 2020

Sapienza University of Rome

B.S. IN COMPUTER SCIENCE

Rome, Italy

2014 - 2017

Experience

Deep Learning and Applied AI course

TEACHING ASSISTANT

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

Rome, Italy

Feb 2023 - current

Fondazione Mondo Digitale

TEACHER

- 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

NTT Data

SOFTWARE DEVELOPER ENGINEER

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 - Develop a microservices architecture to revise an outdated monolithic platform for messaging.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

Talks

Invited Talk at 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

Jul 2022 **Synapse AI Symposium** [↗](#), **Bending Spoons Scholarship**
Jun 2022 **Lightning DevCon** [↗](#), **Lightning Scholarship**
Nov 2021 **ICAIF'21** [↗](#), **JPMorgan Fellowship**
Oct 2021 **Festival Informatici Senza Frontiere** [↗](#), **Aused Fellowship**

Milan
New York City
Virtual
Rovereto (TN)

Professional Activities

Tutor

UNITELMA SAPIENZA - COMPUTER SCIENCE DEPARTMENT

Nov 2021 - present

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

Reviewer

ACM TRANSACTIONS ON KNOWLEDGE DISCOVERY FROM DATA (TKDD) - JOURNAL

Oct 2021

Collaboration with Sapienza Flight Team

SAPIENZA AEROSPACE STUDENT ASSOCIATION-AIAA STUDENT BRANCH

Dec 2019

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

Projects Selection

A YouTube Player for Everyone

UNIVERSITY PROJECT

Rome
A.Y. 2019/2020

- A YouTube player designed and implemented to be accessible by deaf users, combining biometric and multimodal methodologies. Users can log in through a facial identification system, and an emotion recognition algorithm suggests playlists based on their mood. Then the user can interact with the player by using hand gestures and/or voice commands.

BAS2Net

UNIVERSITY PROJECT

Rome
A.Y. 2019/2020

- Developing a new model that combines two state-of-the-art works in the Salient Object Detection field (BasNet and Res2Net). The resulting model requires 40% less training time, leading to better results on several datasets. Moreover, the proposed neural network is half the size of the original one.

Cervical Cancer Biopsia Response Classification

UNIVERSITY PROJECT

Rome
A.Y. 2019/2020

- Development of several machine learning algorithms to detect cervical cancer based on the Biopsia response, using the Cervical cancer (Risk Factors) dataset.

Publications

Peer reviewed

- [Can+23] **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=VBuUL2IW1q>.
- [Avo+22] D. Avola, **I. Cannistraci**, M. Cascio, L. Cinque, A. Diko, A. Fagioli, G. L. Foresti, R. Lanzino, M. Mancini, A. Mecca, et al. "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

- [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).