PERSONAL INFORMATION

Paola Velardi

⚲ Dipartimento di Informatica, Univ. degli Studi di Roma "La Sapienza"

✉ velardi@di.uniroma1.it

⚘ en.wikipedia.org/wiki/Paola_Velardi

◈ sites.google.com/a/di.uniroma1.it/paolavelardi/

ⓘ ORCID orcid.org/0000-0003-0884-1499

Gender female | Date of birth April 26th, 1955 | Nationality Italian

SHORT BIO

Paola Velardi is a full professor (retired in 2025) with the Department of Computer Science at Sapienza University of Roma. Currently, she holds a research position at Sapienza and is Senior Associate with CNR-ISTC. She has been in the field of Artificial Intelligence since 1983 when she was a visiting researcher for one year at Stanford University. Her main research interests are in the areas of text processing, network science, machine learning, and knowledge-bases. Applications of interest are in the areas of social networks, e-health, e-learning, bioinformatics, recommender systems, cultural heritage, visual analytics. She has published more than 200 papers many of which were on top-tier conferences and journals such as ACM and IEEE Transactions. She has proposed, led and co-led many national and international projects, and she has served as a reviewer and PC member in the main conferences of the AI sector. She is regularly invited to participate in government and industry committees and roundtables, as well as keynote speeches on relevant, interdisciplinary topics in AI, organized by public and private entities.

In addition to her scientific interests, Paola Velardi aims at debunking the myth of computer science as a man-oriented discipline. She is the founder of the educational project "NERD? Non e' roba per donne?" (translated from Italian: "NERD? Is it not stuff for women?"). This project, aimed at high-school girls, was launched by Velardi in 2012 in the Department of Computer Science at Sapienza University. Since 2013 the project has been carried out in partnership with IBM Italy, which later created a nation-wide spin-off of the project. She has been the program chair of the 19th ACM celebration of Women in Computing, directed to high-school girls, university students and young professionals in the ICT sector. From 2022 to 2024 she created and coordinated G4GRETA, an educational project that involves female high-school students of Rome and Lazio. The project combines the development of IT skills with the themes of environmental sustainability and soft skills (teambuilding, public speaking, social networking, etc.). In 2025, she created and coordinated the project sIAte PROMPTE! (a word play in Italian, meaning "be ready!"), to teach high school girls the principles of generative AI and prompting techniques, through the creation of videos, images, and music on ethical and sustainability topics. She is the coordinator of @GICT, Atlas of Gender Initiatives in ICT, a coordination action to collect initiatives, projects, and institutions - in Italy and Europe - directed at reducing the gender gap in ICT.

Velardi is also involved in scientific dissemination: among other activities, she regularly cooperates with RaiCultura , the cultural division of RAI, the national broadcasting company, with short lessons and conversations on topics such as Bias in Artificial Intelligence, AI and Health, Information Diffusion in Social Networks, and other AI-related topics (programs: #Maestri (2020-2021), Italian Green (2023), Oggi è (2024), Rai Parlamento Settegiorni (2024, 2025)). Paola Velardi is on Wikipedia.

WORK EXPERIENCE

2001 – Present **Full Professor**

Sapienza University of Rome, Dept. Computer Science).

1996-2001 **Associate Professor**

Sapienza University of Rome, Dept. Computer Science.

1987-1996	**Associate Professor**
	Università Politecnica delle Marche, Ancona

1984-1987	**Researcher**
	IBM Scientific Centre, Roma

1983-1984	**Visiting Scholar**
	Stanford University, CA, USA

1979-1982	**Researcher**
	Fondazione Ugo Bordoni, Roma

EDUCATION AND TRAINING

1978	**Master Degree in Electrical Engineering**
	Sapienza University of Rome

MAIN ROLES AND
RESPONSIBILITIES

2025-2026	**Member of the Ministerial Commission on Artificial Intelligence of the Ministry for Regional Affairs and Autonomies**

2019-2023	**Member of the Steering Committee of the International Network Medicine Alliance**
	Coordinated by the University of Harvard. The Network Medicine Alliance (NMA) represents 33 leading universities and institutions around the world committed to improving global health and advancing the field of Network Medicine.

2015-2025	**Coordinator of the Bachelor degree in Computer Science, distance learning**
	Sapienza University of Rome, Dept. Computer Science.

2010-2013, 2016-2017	**Head of Bachelor and Master Programs in Computer Science**
	Sapienza University of Rome, Dept. Computer Science.

2012-2017	**Coordinator of Gamification Lab**
	Sapienza University of Rome, Dept. Computer Science

PROJECTS (FROM 2020)

European institutions	– Unit Partner - Elexis (H2020-INFRAIA-2016-2017 Grant Agreement No. 731015) European lexicographic infrastructure (2020-2022) Funds: tbd – Unit Partner - DataCloud (H2020 Grant agreement ID: 101016835) Big Data for a lifetime (2020-2023) Granted Funds: a 3-year post-doc position (98k)

Italian institutions:	– member of the management committee of the educational project PER-LEI-STEM (2025-2027) CUP B84E25002280001 financed by the Department of Equal Opportunities, budget 300k
	– Scientific responsible and unit leader: @HOME - PR FESR 2021-2027 - Avviso Pubblico "Riposizionamento Competitivo RSI" (2024-2025)Det. 16 novembre 2023, n. G15206. granted funding (to our research unit):109k
	– WP leader: FAIR SPOKE 5 - PNRR MUR project PE0000013-FAIR (2023-2025).
	– Unit co-leader: SMARTOUR - MIUR Project SCN 0166 (2019-2023) Funding of the research unit: 450k.
	– Project Coordinator of G4GRETA, a 3rd mission project to attract more girls in computer science (2021-ongoing). Funded by Sapienza, EY Foundation, and LazioInnova for about 30-40k every year.
	– Unit leader : E-Linus POR FESR Lazio 2014-2020 POR A0376E0005 (2021) Funding of the research unit: 163k.
	– Scientific responsible: Sensor Based health analytics Dottorati di Innovazione per le Imprese e le PA della Regione Lazio (fully funded 3-years Ph.D position) (2021-2024)
	– Scientific responsible: "Challenges and Solutions to the Student Dropout Prediction Problem in Online Courses", 3-year Ph.D. position fully funded by Unitelma University. (2018-2021)
	– Scientific responsible of "Progetti Ateneo medi" or "H2020" (Sapienza) almost every year with a variable budget between 13k and 37k.

ACADEMIC RECORDS

Evaluation metrics	– H-index (Google): 42 (retrieved on November 4th, 2025)
	– Citations (Google): 8055
	– H-index (Scopus) 28
	– Citations (Scopus) 3217

TEACHING SAPIENZA (CURRENT)

Sapienza	Machine Learning, Master degree in Computer Science
Sapienza	Business Intelligence, Master degree in Enterprise Management

MAIN EDITORIAL ACTIVITIES

2015- present	Editorial Board of Knowledge and Information Systems (KAIS) Springer
2020- present	Editorial Board of ACM Transactions on Knowledge Discovery from Data (TKDD)

RECENT RECOGNITIONS

2016	Included in the "100 esperte" (hundred female experts) an online databank inaugurated in 2016 with the names and CVs of top female STEM (Science, Technology, Engineering and Mathematics) experts in Italy
2017	IBM Faculty Award, a world-wide monetary, hardware, software, and services program that promoted research and innovation in areas of strategic, mutual interest between IBM and universities.
2018	Included in the list of Italian Inspiring 50. The Inspiring Fifty world-wide initiative has been established to increase diversity in tech by making female role models more visible.
2019	Standout Woman Award at the seat of the Italian Parliament in Montecitorio, for her educational project NERD?
2023	She was one of the portrayed women in the exhibition "Portraits: Women in Art and Science" at the Carlo Bilotti Museum in Roma (June-September 2023)
2025	Her biography and photograph have been included, along with 18 other profiles of international women scientists, in the virtual Women in Science room of the UNESCO's Virtual Science Museum, a project launched in December 2025.

RECENT SELECTED PUBLICATIONS (FROM 2020)

For the comprehensive list of publications please see `https://dblp.org/pid/12/2807.html` and `https://scholar.google.it/citations?user=yf0g6zkAAAAJ&hl=it`.

Leonardo Berti, Bardh Prenkaj and Paola Velardi; TRADES: Generating Realistic Market Simulations with Diffusion Models, 28th European Annual Conference on Artificial Intelligence, (2025)

Davide Gabrielli, Bardh Prenkaj and Paola Velardi; AI on the Pulse: Real-Time Health Anomaly Detection with Wearable and Ambient Intelligence, 34th ACM Conference on Information and Knowledge Management CIKM 2025, (2025)

Bardh Prenkaj and Paola Velardi; Unsupervised Detection of Behavioural Drifts with Dynamic Clustering and Trajectory Analysis, IEEE Transactions on Data and Knowledge Engineering, (2024)

Luca Podo, Bardh Prenkaj and Paola Velardi; Agnostic Visual Recommendation Systems: Open Challenges and Future Directions, IEEE Transactions on Visualization and Computer Graphics, 2024, DOI: 10.1109/TVCG.2024.3374571

Matteo Prata, Giuseppe Masi , Leonardo Berti, Viviana Arrigoni, Andrea Coletta , Irene Cannistraci, Svitlana Vyetrenko, Paola Velardi and Novella Bartolini; Lob-based deep learning models for stock price trend prediction: a benchmark study, Artificial Intelligence Review, 2024, DOI : 10.1007/s10462-024-10715-4

Andrea Lenzi, Stefano Faralli, Paola Velardi; A Benchmark Study on Knowledge Graphs Enrichment and Pruning Methods in the Presence of Noisy Relationships, Journal of Artificial Intelligence Research, 78, 2023

Tiziana Catarci, Barbara Polidori, Daniel Raffini and Paola Velardi, A Greed(y) Training Strategy to Attract High School Girls to Undertake Studies in ICT; HCI International 2023 Conference, 23-28 July, Copenhagen, Denmark, Lecture Notes in Computer Science, 2023

X. Wang, L. Madeddu, K. Spirohn, L.Martini, A. Fazzone, L. Becchetti T. P. Wytock, István A. Kovács, O. M. Balogh, B. Benczik, M. Pétervári, B. Ágg, P. Ferdinandy, L.Vulliard, J. Menche, S. Colonnese, M. Petti, G. Scarano, F. Cuomo, T. Hao, F. Laval, L. Willems JC. Twizere, M. Vidal, M. A. Calderwood, E. Petrillo, AL. Barabási 1, E. K. Silverman, J. Loscalzo, P. Velardi (corr.), YY. Liu (corr.); Assessment of community efforts to advance network-based prediction of protein-protein interactions, Nature Communications 14-1582 (2023)

Prenkaj, B., Aragona, D., Flaborea, A., Galasso, F., Gravina, S., Podo, L, Reda, E., Velardi, P (corr.). (2023). A self-supervised algorithm to detect signs of social isolation in the elderly from daily activity sequences. Artificial Intelligence in Medicine, 135 (2022)

Giorgio Grani, Andrea Lenzi, Paola Velardi: Supporting Personalized Health Care With Social Media Analytics: An Application to Hypothyroidism. ACM Trans. Comput. Health 3(1): 4:1-4:28 (2022)

Giorgio Grani, Lorenzo Madeddu, Paola Velardi: A Network-Based Analysis of Disease Modules From a Taxonomic Perspective. IEEE J. Biomedical Health Informatics 26(4): 1773-1781 (2022)

Luca Podo, Paola Velardi: AnomalyByClick: An Interactive Visualization Tool for Monitoring Activities of Daily Living and Anomaly Annotation. Proc. of Advanced Visual Interface Conf. AVI 2022: 75:1-75:3 (2022)

Stefano Faralli, Andrea Lenzi, Paola Velardi: A Large Interlinked Knowledge Graph of the Italian Cultural Heritage. LREC 2022: 6280-6289(2022)

Luca Podo, Velardi: Plotly.plus, an Improved Dataset for Visualization Recommendation. Proceedings of the 31st ACM International Conference on Information & Knowledge Management CIKM 2022: 4384-4388 (2022)

Bardh Prenkaj, Paola Velardi, Giovanni Stilo, Damiano Distante, Stefano Faralli: A Survey of Machine Learning Approaches for Student Dropout Prediction in Online Courses. ACM Compututing Surveys 53(3): 57:1-57:34 (2021)

Bardh Prenkaj, Damiano Distante, Stefano Faralli, Paola Velardi: Hidden space deep sequential risk prediction on student trajectories. Future Generation Computing Systems 125: 532-543 (2021)

Lorenzo Madeddu, Giorgio Grani, Paola Velardi: Integrating categorical and structural proximity in Disease Ontologies. Proc. of EMBC 2021: 2011-2014 (2021)

Dario Aragona, Luca Podo, Bardh Prenkaj, Paola Velardi: CoRoNNa: a deep sequential framework to predict epidemic spread. Proc. of ACM SAC 2021: 10-17 (2021)

Lorenzo Madeddu, Giovanni Stilo, Paola Velardi: A feature-learning-based method for the disease-gene prediction problem. Int. J. Data Mining and Bioinformatics 24(1): 16-37 (2020)

Giorgia Di Tommaso, Mauro Gatti, Michela Iannotta, Ajay Mehra, Giovanni Stilo, Paola Velardi: Gender, rank, and social networks on an enterprise social media platform. Social Networks 62: 58-67 (2020)

Bardh Prenkaj, Paola Velardi, Damiano Distante, Stefano Faralli: A Reproducibility Study of Deep and Surface Machine Learning Methods for Human-related Trajectory Prediction. Proceedings of the 30st ACM International Conference on Information & Knowledge Management CIKM 2020: 2169-2172 (2020)

Lorenzo Madeddu, Giovanni Stilo, Paola Velardi: Predicting disease genes for complex diseases using random watcher-walker. Proc. of ACM SAC 2020: 458-465 (2020)

Stefano Faralli, Paola Velardi, Farid Yusifli: Multiple Knowledge GraphDB (MKGDB). Proc. of LREC 2020: 2325-2331 (2020)

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Date, Signature
Paola Velardi