

PERSONAL INFORMATION

Giovanna Castellano



📍 Dipartimento di Informatica, Campus "Ernesto Quagliariello" Via E. Orabona 4, 70125, Bari

☎ +39 080 5442456 📠 +39 3386116073

✉ giovanna.castellano@uniba.it

🌐 <http://www.uniba.it/docenti/castellano-giovanna>

Sex F | *Date of birth* 27/06/1969 | *Nationality* Italian
 h-index: 27 total citations: 2979 (source: Google Scholar)

Enterprise	University	EPR
<input type="checkbox"/> Management Level	<input type="checkbox"/> Full professor	<input type="checkbox"/> Research Director and 1st level Technologist / First Researcher and 2nd level Technologist
<input type="checkbox"/> Mid-Management Level	<input checked="" type="checkbox"/> Associate Professor	<input type="checkbox"/> Level III Researcher and Technologist
<input type="checkbox"/> Employee / worker level	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

- 2015 - present **Associate Professor (INF/01)**
 Dipartimento di Informatica, Campus "Ernesto Quagliariello" Via E. Orabona 4, 70125, Bari
 • Research topics: Computational Intelligence (CI), Fuzzy Systems, Neural networks, Neuro-fuzzy modeling, Fuzzy Clustering, Computer Vision, eXplainable AI, Granular Computing, Knowledge-graph based learning, Data stream mining, Process mining, Robotics.
Research: development of innovative CI methods and their application in various domains (e.g. Computer Vision, Healthcare and Digital Humanities).
- 2002 - 2015 **Assistant Professor (INF/01)**
 Dipartimento di Informatica, Campus "Ernesto Quagliariello" Via E. Orabona 4, 70125, Bari
 • Research topics: Computational Intelligence (CI), Fuzzy Systems, Neural networks, Neuro-fuzzy modeling, Fuzzy Clustering, Fuzzy Image Processing, Granular Computing, Recommender systems.
Research: Development of innovative CI methods and their application in various domains (e.g. Image processing and Recommender systems).
- 2001 - 2002 **Research assistant (assegnista di ricerca)**
 Dipartimento di Informatica, Campus "Ernesto Quagliariello" Via E. Orabona 4, 70125, Bari
 • Research topics: Computational Intelligence, Fuzzy Systems, Neural networks, Fuzzy Clustering
Research: Hybrid neuro-fuzzy approaches in modeling complex systems
- 2000 - 2001 **Contract researcher (contratto di collaborazione)**
 Dipartimento di Informatica, Campus "Ernesto Quagliariello" Via E. Orabona 4, 70125, Bari
 • Research topics: Computational Intelligence, Fuzzy Systems, Neural networks
Research: Computational Intelligence approaches in modeling complex systems
- 1997 - 2000 **PhD scholarship holder**
 Dipartimento di Informatica, Campus "Ernesto Quagliariello" Via E. Orabona 4, 70125, Bari
 • Research topics: Computational Intelligence, Fuzzy Systems, Neural networks, Neuro-fuzzy systems, Fuzzy clustering
Research: Neurofuzzy methodologies for predictive modeling
- 1996 - 1997 **Fellow researcher (titolare di borsa di studio)**
 IESI-CNR Via Amendola, 70125, Bari
 • Research topics: Robotics, Computational Intelligence, Fuzzy Systems, Neural networks, Fuzzy clustering
Research: Navigation of autonomous vehicles in structured environments using fuzzy logic
- 1995 - 1996 **Fellow researcher (titolare di borsa di studio)**
 IESI-CNR Via Amendola, 70125, Bari
 • Research topics: Robotics, Computational Intelligence, Fuzzy Systems, Neural networks
Research: Navigation of autonomous vehicles in structured environments using fuzzy logic

EDUCATION AND TRAINING

- 2001 Ph.D in Computer Science
University of Bari, Italy
• A neurofuzzy methodology for predictive modeling
- 1992 M.Sc. in Information Sciences
University of Bari, Italy
• A method for static pruning of an artificial neural network, 110/110 magna cum laude

**PROJECTS
(last five years)**

- Apr 2022 - Sep 2023 RIPARTI "MARVIN: Monitoring Adverse Reactions of anti-coVid vacclNes" (PI)
Mar 2020 - Sep 2021 GNCS 2020 "Computational Intelligence methods for Digital Health" (PI)
Feb 2020 - Jan 2023 MISE PON "L.I.F.T. - Learning Intelligent Factory based on information Technologies" (reference person for task 6.3)
Jul 2018 - Jun 2020 POR Innonetwork "C3 - Creative Cultural Collaboration" (task 4.1 leader)

With leadership roles**Project advisor**

- Jan 2021 - Sep 202 Member of the International Advisory Board for the Small Grant Scheme "BIPOLAR: Bipolar disorder Prediction with sensOr-based semi-supervised LeARning" (advisor for WP3 and WP5)

COMMUNITY SERVICE (last 5y)

TPC chair	TPC co-chair of IEEE EAIS 2020, TPC co-chair of IEEE EAIS 2022
Virtual Conference Chair	IEEE EAIS 2020
PhD forum Co-Chair	DS21- Doctoral Symposium MIR Labs, USA
Summer School Co-Chair	Co-organizer and Local arrangement chair of the IV European Summer School on Fuzzy Logic and Applications (SFLA2018), Bari, Italy.
Workshop Co-Chair	OLUD2022 (co-located with WCCI2022) FAPER 2022 (co-located with ICIAP2021, May 2022) FAPER 2020 (co-located with ICPR2020)
TPC member	ICPR2022, FUZZ-IEEE2022, IJCAI-ECAI 22, WILF2021, SoCPaR 2021, DEEP-BDB 2021, ICTS4eHealth2021, Deep-BDB 2021, IFSA-EUSFLAT 2021, IJCAI-PRICAI 2020, IJCAI2019), DEEP-ML 2019), EUSFLAT 2019, EUSFLAT 2013, KES-IDT-2019, KESIDT-21, SDF2019, IBICA2018.
Regular reviewer	IEEE Transactions on Fuzzy Systems, IEEE Transactions on Neural Networks, IEEE Transactions on System, Man and Cybernetics, IEEE Transactions on Knowledge and Data Engineering, Pattern Recognition, IEEE Access, Soft Computing (Springer), Information Sciences (Elsevier), Fuzzy Sets and Systems (Elsevier), Pattern Recognition (Elsevier), Pattern Analysis and Applications (Elsevier)

EDITORIAL ACTIVITY

- 2020 - Present Associate Editor for Springer Evolving Systems
2020 - Present Associate Editor for Wiley Journal of Intelligent Systems
2018 - Present Associate Editor for International Journal of Knowledge-Based and Intelligent Engineering Systems
2018 - Present Editorial board member for International Journal of Knowledge and Web Intelligence (IJKWI)
2018 - Present Editorial board member for International Journal of Systems, Control and Communications (IJSCC)
2011 - Present Associate Editor for Elsevier Information Sciences

PHD SUPERVISION

- 2009 - 2012 Supervisor of a PhD thesis on "Image content representation: using low-level and high-level descriptions", PhD Programme in Computer Science (XXIII cycle), University of Bari, Italy
- 2018 - Present Supervisor of a PhD thesis on "Computational Intelligence and Applications in Healthcare", PhD Programme in Computer Science and Mathematics (XXXIV cycle), University of Bari, Italy
- 2018 - 2021 Co-supervisor of a PhD thesis on "Big Data Analytics for Process Improvement in Organizational Development", PhD Programme in Computer Science and Mathematics (XXXIV cycle, Innovative Doctorate with industrial characterization, CUP: H94F18000270006), University of Bari, Italy

2019 - 2023 Co-supervisor of a PhD thesis on "Human Behavior Understanding", PhD Programme in Computer Science and Mathematics (XXXV cycle, Innovative Doctorate with high education and research apprenticeship contract financed by Exprivia S.p.A.), University of Bari, Italy

TEACHING

2020 - Present MSc course on "Computer Vision", University of Bari, Italy
2017-2020 MSc course on "Computational Intelligence", University of Bari, Italy
2003 - Present BSc course on "Computer Architecture and Operating Systems", University of Bari, Italy
2019 PhD course on "Computer Vision" (PhD Programme in Computer Science and Mathematics, XXXII, XXXIII, XXXIV cycles, University of Bari, Italy)
2012-2014 PhD course on "Advanced Computational Intelligence methods" (PhD Programme in Computer Science, XXVI, XXVII, XXVIII cycles, University of Bari, Italy)

INSTITUTIONAL RESPONSIBILITIES

2019 - Present Member of the Committee for evaluating the pre-enrolment of international students in the Computer Science Master's degree program, University of Bari, Italy
2015 - Present Board of the Doctorate Program on Computer Science and Mathematics, University of Bari, Italy
2006 - 2015 Board of the Doctorate Program on Computer Science, University of Bari, Italy
2017 - Present Coordinator of the Computational Intelligence LABORatory (CILAB), Department of Computer Science, University of Bari, Italy
2016 - Present Member of the Department Committee for the orientation and the tutoring, Department of Computer Science, University of Bari, Italy

INVITED TALKS

2018 "Fuzzy Logic for Image Processing and Computer Vision", invited lecture at SFLA2018 (IV European EUSFLAT Summer School on Fuzzy Logic and Applications).

FELLOWSHIPS AND AWARDS

2019 2019 IET's Vision and Imaging Award

ADDITIONAL INFORMATION

2020 - Present Member of the Task Force on Explainable Fuzzy Systems, IEEE Computational Intelligence Society.
2020 - Present Member of the IAPR Technical Committee 19 (TC19) on Computer Vision for Cultural Heritage Applications
2018 - Present Member of the CITEL - Centro Interdipartimentale di Telemedicina, University of Bari
2018 - Present Member of the Machine Intelligence Research Labs (MIR Labs)
2018 - Present ASN I Fascia – settore 09/H1
2018 - Present ASN I Fascia – settore 01/B1
2016 - Present Member of the CINI laboratory on AIIS (Artificial Intelligence and Intelligent Systems)
2015 - Present Member of the CINI laboratory on BIG DATA

PUBLICATIONS

Publications
best and most relevant
in the last 10 years

1. G. Castellano, V. Digeno, G. Sansaro, G. Vessio. Leveraging Knowledge Graphs and Deep Learning for Automatic Art Analysis. Knowledge-Based Systems, 2022. In press.
2. G. Casalino, G. Castellano, and G. Zaza. Evaluating the robustness of a contact-less mhealth solution for personal and remote monitoring of blood oxygen saturation. Journal of Ambient Intelligence and Humanized Computing, 2022. DOI:0.1007/s12652-021-03635-6.
3. K. Kaczmarek-Majer, G. Casalino, G. Castellano, O. Hryniewicz, M. Dominiak. Explaining smartphone-based acoustic data in bipolar disorder: Semi-supervised fuzzy clustering and relative linguistic summaries. Information Sciences, 2022. DOI:10.1016/j.ins.2021.12.049.
4. G. Castellano and G. Vessio. Deep learning approaches to pattern extraction and recognition in paintings and drawings: an overview. Neural Computing and Applications, 2021. DOI:10.1007/s00521-021-05893-z.
5. G. Casalino, G. Castellano, A. Consiglio, N. Nuzziello, G. Vessio. MicroRNA expression classification for pediatric multiple sclerosis identification. Journal of Ambient Intelligence and Humanized Computing, 2021. DOI: 10.1007/s12652-021-03091-2.
6. G. Castellano, B. De Carolis, F. D'Errico, N. Macchiarulo, and V. Rossano. PeppeRecycle: Improving children's attitude toward recycling by playing with a social robot. International Journal of Social Robotics, 2021. DOI: 10.1007/s12369-021-00754-0.

7. V. Pasquadibisceglie, A. Appice, G. Castellano, D. Malerba. A multi-view deep learning approach for predictive business process monitoring. *IEEE Trans. on Services Computing*, 2021. DOI:10.1109/TSC.2021.3051771.
8. G. Castellano, E. Lella, G. Vessio. Visual link retrieval and knowledge discovery in painting datasets. *Multimedia Tools and Applications*, 2021. DOI: 10.1007/s11042-020-09995-z.
9. G. Castellano, C. Castiello, C. Mencar, and G. Vessio. Crowd detection in aerial images using spatial graphs and fully-convolutional neural networks. *IEEE Access*, 2020. DOI: 10.1109/ACCESS.2020.2984768.
10. D. Malerba, A. Appice, P. Buono, G. Castellano, B. De Carolis, M. De Gemmis, M. Polignano, V. Rossano, L.M. Rudd. Advanced programming of intelligent social robots. *Journal of e-Learning and Knowledge Society*, 2019. DOI: 10.20368/1971-8829/1611.
11. G. Castellano, C. Castiello, V. Pasquadibisceglie, G. Zaza. FISDeT: Fuzzy inference system development tool. *Int. Journal of Computational Intelligence Systems*, 2017. DOI:10.2991/ijcis.2017.10.1.2.
12. G. Castellano, A.M. Fanelli, M.A. Torsello, G. Sforza. Shape annotation for intelligent image retrieval. *Applied Intelligence*, 2016. DOI:10.1007/s10489-015-0693-7.
13. G. Castellano, M.G.C.A. Cimino, A.M. Fanelli, B. Lazzerini, F. Marcelloni, M.A. Torsello. A multi-agent system for enabling collaborative situation awareness via position-based stigmergy and neuro-fuzzy learning. *Neurocomputing*, 2014. DOI: 10.1016/j.neucom.2013.03.066.
14. L. Caponetti, G. Castellano, M.T. Basile, V. Corsini. Fuzzy mathematical morphology for biological image segmentation. *Applied Intelligence*, 2014. DOI: 10.1007/s10489-013-0509-6.
15. G. Castellano, A.M. Fanelli, M.A. Torsello. Shape annotation by semi-supervised fuzzy clustering. *Information Sciences*, 2014. DOI:10.1016/j.ins.2014.06.025.
16. G. Castellano, M.G.C.A. Cimino, A.M. Fanelli, B. Lazzerini, F. Marcelloni, and M.A. Torsello. A collaborative situation-aware scheme based on an emergent paradigm for mobile resource recommenders. *Journal of Ambient Intelligence and Humanized Computing*, 2013. DOI: 10.1007/s12652-012-0126-y.
17. G. Sforza, G. Castellano, S. Arika, R.W. LeAnder, R.J. Stanley William, V. Stoecker, J.R. Hagerty. Using adaptive thresholding and skewness correction to detect gray areas in melanoma in situ images. *IEEE Trans. on Instrumentation and Measurement*, 2012. DOI: 10.1109/TIM.2012.2192349.

May 3, 2022

