PERSONAL INFORMATION

Annalisa Appice

Affiliation
University of Bari Aldo Moro
Department of Computer Science
Via E. Orabona 4, 70126 BARI – ITALY

Enterprise	University	EPR
☐ Management Level	☐ Full professor	☐ Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator
☐ Mid-Management Level	■ Full Professor	☐ Level III Researcher and Technologist
☐ Employee / worker level	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

from April 5, 2024– to today

Full Professor SSD IINF-05/A (prima ING-INF 05)

University of Bari Aldo Moro, Department of Computer Science, Via E. Orabona 4, 70126 BARI – ITALY (www.di.uniba.it)

Skills: Teaching a number of classes on advanced programming, artificial intelligence and cybersecurity; Conducting research, publishing papers, and attending conferences; Supervising, advising, and mentoring graduate and phD students; Mentoring post-doc researchers; Organizing and attending conferences and workshops; Writing proposals to secure research funding and coordinating research units in projects; Organizing department events where students can interact with established industry professionals

Subjects covered: Artificial Intelligence; XAI; Deep learning; Cybersecurity; Process mining; Stream data mining, Remote sensing

from December 28, 2018– to April 4, 2024

Associate Professor SSD ING-INF 05

University of Bari Aldo Moro, Department of Computer Science, Via E. Orabona 4, 70126 BARI – ITALY (www.di.uniba.it)

Skills: Teaching a number of classes on advanced programming, artificial intelligence and cybersecurity; Conducting research, publishing papers, and attending conferences; Supervising, advising, and mentoring graduate and phD students; Mentoring post-doc researchers; Organizing and attending conferences and workshops; Writing proposals to secure research funding and coordinating research units in projects; Organizing department events where students can interact with established industry professionals

Subjects covered: Artificial Intelligence; XAI; Deep learning; Cybersecurity; Process mining; Stream data mining, Remote sensing

from January 2, 2009– to December 28, 2018

Assistant Professor SSD ING-INF 05

University of Bari Aldo Moro, Department of Computer Science, Via E. Orabona 4, 70126 BARI – ITALY (www.di.uniba.it)

Skills: Teaching a number of classes on advanced programming; Conducting research, publishing papers, and attending conferences; Supervising graduate and phD students; Organizing and attending conferences and workshops; Writing proposals to secure research funding; Organizing department events where students can interact with established industry professionals

Subjects covered: Artificial Intelligence; Machine learning; Process Mining; Stream data mining; Spatio-temporal data mining

from March 23, 2005 to January, 2009

Post-doc researcher

University of Bari, Department of Computer Science, Via E. Orabona 4, 70126 BARI – ITALY (www.di.uniba.it)

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Skills: Teaching a number of seminars; Conducting research, publishing papers, and attending conferences; Co-supervising graduate students; Attending conferences and workshops, organizing workshops
Subjects covered: Artificial Intelligence; Machine learning; Process Mining; Relational data mining, Spatial data mining

EDUCATION AND TRAINING

from November 1, 2001, to March 23, 2005

PhD in Computer Science, thesis on “Learning Relational Model Tree” *EQF 8*

University of Bari, Department of Computer Science, Via E. Orabona 4, 70126 BARI – ITALY (www.di.uniba.it)

- Skills acquired: Written and oral communication; Presentation; Critical thinking; Management; Creativity and innovation; Listening and reflection; Learning
- Subjects covered: Artificial intelligence; Machine learning; Relational data mining; Spatial data mining

from November 1, 1995, to March 30, 2001

Laura degree in Computer Science (summa cum Laude) *EQF 7*

University of Bari, Department of Computer Science, Via E. Orabona 4, 70126 BARI – ITALY (www.di.uniba.it)

- Skills acquired: Written and oral communication; Presentation; Critical thinking; Listening and reflection; Learning
- Subjects covered: Machine learning

WORK ACTIVITIES

Awards

- Best Paper award at MLDM 2012. M. Ceci, A. Appice, H. L. Viktor, D. Malerba, E. Paquet, H. Guo, Transductive Relational Classification in the Co-training Paradigm. MLDM 2012: 11-25, 10.1007/978-3-642-31537-4_2
- Best Paper award at CyberSiTech 2022. M. Al-Essa, G. Andresini, A. Appice, D. Malerba, An XAI-based adversarial training approach for cyber-threat detection. DASC/PiCom/CBDCom/CyberSciTech 2022: 1-8, 10.1109/DASC/PiCom/CBDCom/Cy55231.2022.9927842

Editorial activity

- Co-editor of n. 11 volumes edited by Springer on the topics artificial intelligence and machine learning
- Co-guest editor of n. 6 special issues published by Springer on Machine Learning Journal, Data Mining and Knowledge Discovery, Journal of Intelligent Information Systems on the topics artificial intelligence and machine learning
- Member of the Journal Editorial Board of: Data Mining and Knowledge Discovery, Journal of Intelligent Information Systems, Intelligenza Artificiale
- Member of the Editor Board (with the role of management of the review process of submitted papers) of Machine Learning Journal (until now) and Engineering Applications of Artificial Intelligence (until October 2026)

Invited presentations

- Keynote speaker on “Monitoring forest health with AI: approaches for mapping tree dieback in satellite data” at Workshop on Machine Learning for Earth Observation MACLEAN24@ECML-PKDD2024 (https://sites.google.com/view/maclean24)
- Keynote speaker on “Artificial Intelligence meets Cybersecurity” at FMEC 2021, December 6-9, 2021 (IEEE, http://emergingtechnet.org/FMEC2021/keynote-speakers.php)
- Invited speaker on “Spatio-temporal data mining: Part 2”at SUMMER SCHOOL in “Mining Big and Complex Data”, September 4-8 2016 (https://videolectures.net/miningdata2016_ohrid/)
- Invited focus talk on “Data Mining Techniques in Sensor Networks: Summarization, Interpolation and Surveillance” at DAGSTUHL SEMINAR 13492 Geosensor Networks: Bridging Algorithms and Applications, December 1-6, 2013 http://www.dagstuhl.de/en/program/calendar/semhp/?semnr=13492)
- Panellist in the panel on “Robustness of ML-based cybersecurity against adversarial attacks” organized within the 3rd International Workshop on Machine Learning for Cybersecurity co-located with ECML PKDD 2021, September 13, 2021 (https://mlcs.lasige.di.fc.ul.pt/)

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Organization and Coordination of Research Events

- Co-chair of n.16 International Workshops on: “Machine Learning for Cybersecurity” (MLCS) collocated with ECML-PKDD (editions 2019,2020,2022,2023,2024); “Leveraging Machine Learning in Process Mining” (ML4PM) collocated with ICPM (editions 2020, 2021, 2022, 2023); “New Frontiers in Mining Complex Patterns” (NFMCS) collocated with ECML-PKDD (editions 2012, 2013, 2014, 2016, 2017, 2018), “Artificial Intelligence for Process Mining” collocated with ECML-PKDD (edition 2026)
- Co-Program Chairs on n. 4 conferences: DS 2020, October 19-21, 2020; ISMIS 2017, June 26-29, 2017; ECMLPKDD 2015, September 7-11, 2015; ISMIS 2024, June 17-19, 2024;
- Area Chair of ECML-PKDD 2012, ECML-PKDD 2022, ICPR 2022, ECML-PKDD 2013, ECML-PKDD 2024, ECML-PKDD 2025, ICDE 2024 on the topics: artificial intelligence and machine learning
- Steering committee member of ISMIS (2018-today), ECML-PKDD (2016-2018, 2022-2024)
- Journal Track Chair at ECMLPKDD 2021, ECMLPKDD 2026

Relevant Research collaborations with Foreign Research Institutes

- Lorenzo Cavallaro (UCL) and Fabio Pierazzi (King’s College) on the topics concept drift robustness, network intrusion detection, deep learning, XAI (results published in 10.1145/3474369.3486864)
- Dino Ienco (UMR TETIS, Inrae, Inria) on the topics of AI applied to remote sensing (results published in 10.1007/S10844-024-00877-6, 10.1016/J.ESWA.2022.119123)
- Wil van der Aalst (Aachen University) on the topics of predictive process mining (results published in 10.1016/J.INS.2022.05.052)

Research Project management

- Coordinator of the Research Unit of the Department of Computer Science of University of Bari Aldo Moro in: n.1 regional project funded by INNOLABS Program- Apulia Region (Kometa topic: process mining), n. 2 national projects funded by PON Research and Innovation (2014-2020) – MIUR (RPASinAir, ARS01_00820, topic: machine learning; CLOSE to the Earth, ARS01_00141, topic: machine learning), n. 1 PN RC DM PON PN RIC 2021-2027 – D.D. n. 307/2025 (SINTESI, MI 1_93098910503_0000962, topic Symbiotic AI in Healthcare), n. 1 PRIN 2022 Project (REPA, 2022CJWPNA , 2025-2027, topic process mining) and n. 1 European project SWITT (topic: machine learning and deep learning in remote sensing)
- Participation to research projects hosted in SPOKE 3 e 6 di SERICS (PNRR)
- MC member in the CoST Action GW2Net and co-leader of the working group 1 - Machine Learning for Gravitational Wave astronomy

Team leadership

- Supervisor of several phD students (topics: AI & Deep Learning, cybersecurity, XAI, adversarial learning, GDPR compliance, process mining, spatio-temporal data mining, Data-Centic AI), and co-supervisor of n.1 phd student (topic: remote sensing) at University of Bari Aldo Moro between 2015 and 2025
- She was responsible of n. 1 post-doc programs (topic: artificial intelligence for cybersecurity) at University of Bari Aldo Moro

Teaching activity

- Advanced Programming Methods, Bachelor Degree, University of Bari Aldo Moro, from 2009-2010 to now
- Data analysis, Master Degree, University of Bari Aldo Moro, from 2017-2018 to now
- Artificial Intelligence for Security, Master Degree, University of Bari Aldo Moro, from 2021-2022 to now
- Data Mining + Lab Data Mining, phD Course, Teaching Activity in Informatics (art.4, comma 1, lett. (f), DM 45 8.2.2013), University of Bari Aldo Moro, 2014
- Stream Data Mining, phD, University of Bari Aldo Moro, 2015.
- Stream Data Mining, phD, University of Bari Aldo Moro, 2016.
- Advanced Techniques to Mining Structured Data – Module 1, phD, University of Bari Aldo Moro, 2017.
- Advanced Machine Learning for Cyber Defence -- Module 1, phD, University of Bari Aldo Moro, 2022
- Artificial Intelligence Techniques for Remote Sensing – Module 1, phD, University of Bari Aldo Moro, 2025

PhD program participation

- Member of the Board of the PhD Programme in Computer Science, University of Bari Aldo Moro, from 2010/11 to 2014/15
- Member of the Board of the PhD Programme in Computer Science and Mathematics, University of Bari Aldo Moro, from 2015/16 to now
- Member of the Board of the National PhD Programme in Cybersecurity, IMT Lucca, from 2022/23 to now

Visiting period

- Visting PhD student at University of Bristol, prof Peter Flach, November 2003-February 2004
- Visiting Researcher at Jozef Stefan Institute, prof Saso Dzeroski, January 2007 – March 2007

Grants

Patents

ADDITIONAL INFORMATION Member of IEEE Task Force in Process Mining

Publications on AI, Machine Learnin , Deep Learning (Source Scopus) Total number of publications: 221, H index 32, total number of citations 3512

A complete list of all publications is available at https://kdde.di.uniba.it/people/annalisa-appice/

Bari, October 19, 2026

Signature

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