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Francesco Bardozzo

Ph.D., Assistant Professor

Profile

Francesco Bardozzo is an Assistant Professor at the University of Salerno, specializing in deep learning, explainable AI, and neuromorphic modeling in several application domains. He earned his B.Sc. and M.Sc. cum laude in Computer Science—with a master's specialization in Artificial and Computational Intelligence—and completed his Ph.D. (summa cum laude, 2018–2021) on artificial intelligence bio-engineering applications in micro-robotic surgery and soft-tissue 3D reconstruction. His research combines theoretical innovation with real-world application, focusing on the development of novel neural network architectures inspired by the connectome of living organisms. He has worked extensively in areas such as computational biology, biomedical engineering, medical imaging, and generative composition. He collaborates with leading institutions—including the University of Cambridge (UK), IRCAD (FR), and the University of Navarra (ES)—and currently serves as a Research Fellow at the NAIR Research Center (ES) and ISASI-CNR "E. Caianiello" (IT). Francesco Bardozzo is also active in the scientific and artistic domains with the Oberlunar project, where he explores the intersection between artificial intelligence and music. His research spans human-machine co-composition, multimodal synthesis, and the creative use of AI for audio and musical-structure generation. Since 2023, he has served on the scientific committee of AI-ISIA at the University of Florence, contributing to research and discourse on AI-driven music creation. He is also the Chief Scientific Officer of Sonogram Technologies srl, a company developing AI solutions for audio-based anomaly detection hardware.

Academic Positions

- Occupations
- Assistant Professor, University of Salerno (Dept. of Business Sciences – Management & Innovation Systems/DISA-MIS), Fisciano, Italy, from April 2023 to Present.
 - Postdoctoral Fellow, University of Salerno, Fisciano, Italy, from 2021-09-01 to 2023-06-31.
 - Ph.D. Student, University of Salerno, Fisciano, Italy, from 2018-02-01 to 2021-03-31.

University Teaching

- Data Management and Visualization (University of Salerno, from Sept 2024);
- Advanced Algorithms for Bioinformatics (University of Salerno, from Sept 2024);

International teaching and research fellowships

- **Teaching: MIMOmics Summer School 2017, University of Cambridge (UK)** (*1 May 2017 – 27 Aug 2017; school held 20–27 Aug 2017*): formal assignment of teaching duties. Roles included planning with supervisors, delivering seminars, and supervising PhD students in developing software in R and Python for a workshop on multi-omics integration. Outcomes: three publications (two Q1 journal papers in computer science and one A- conference paper): doi:10.1093/bioinformatics/btaa966, doi:10.1109/IJCNN.2015.7280853, doi:10.1186/s12859-018-2175-5.
- **Teaching: Public University of Navarra (UPNA), Pamplona, Spain — M.Sc. in Data Sciences, course “Aprendizaje Profundo (Deep Learning)”** (*10 hours; 3 Oct 2024 – 10 Oct 2024*): formal teaching assignment in English covering convolutional neural networks, connectomic deep learning, and deep learning for medical diagnostics and medical imaging.
- **Teaching: Public University of Navarra (UPNA), Pamplona, Spain — M.Sc. in Biomedical Engineering, course “Artificial Intelligence and Biomedical Engineering”** (*4 hours; 3 Oct 2024 – 9 Oct 2024*): formal teaching assignment in English on *Deep Learning in Biomedicine* and *Machine Learning methods in brain MRI studies*.
- **Research Fellowship: NAIR — Navarra Center for Artificial Intelligence, Public University of Navarra (UPNA), Pamplona, Spain** (*1 Oct 2024 – Present*): formal assignment of a research fellowship on neuromorphic and connectomic deep learning in computational neuroscience, with applications to healthcare and medical diagnostics. Duties include supervising research and PhD students and an on-site presence of two months per year for three years (renewable).
- **Research Fellowship: CNR-ISASI “E. Caianiello”** — Formal collaboration assignment by the National Research Council (Institute of Applied Sciences and Intelligent Systems) for the development of AI for holographic and ptychographic imaging within the PdGP project “MORFEO — MORphological biomarkers For Early diagnosis in Oncology” (*1 Jul 2022 – 30 Jun 2023*).

Teaching within ministry-accredited Ph.D. programs

Teaching assignments (12 hours) — Ph.D. Program Big Data & Artificial Intelligence [8861100007] *CDS D226 Data Science Accounting & Management [88611]* — Department of Business Sciences – Management & Innovation Systems, University of Salerno. Module: Machine Learning and Artificial Intelligence

- **XL Cycle** (2 Sep 2025 – 14 Jul 2025): Advanced methods for deep learning.
- **XXXIX Cycle** (2 Sep 2024 – 10 Sep 2024): Advanced methods for deep learning.
- **XXXVIII Cycle** (2 May 2023 – 31 May 2023): Advanced methods for deep learning.
- **XXXIX Cycle** (2 Sep 2024 – 24 Sep 2024): Computational finance and applications of Artificial Intelligence.

Other Ph.D. programs activity

- **Doctoral Thesis Defense Committee (Tribunal) — Iosu Rodríguez Martínez** (*Ph.D. Program in Industrial Sciences and Technologies, Public University of Navarra - Spain*) — accepted to serve on the defence tribunal as external reviewer.

National and international collaborations in qualified research groups

- **NeuroneLab (Prof. Roberto Tagliaferri), DISA–MIS, University of Salerno, Italy** (1 Jan 2015 – Present): research on Artificial Intelligence and Machine Learning for medical imaging and bioinformatics. Member since 2015; all scientific publications affiliated with NeuroneLab.
- **Artificial Intelligence and Computational Biology Group, Computer Laboratory, University of Cambridge, UK (Prof. Pietro Liò)** (1 Jun 2015 – Present): multi-omics models for genetic engineering and bio-plausible deep learning. Outcomes: 3 Q1 journal papers (doi:10.1093/bioinformatics/btaa966, doi:10.1186/s12859-018-2175-5, doi:10.1016/j.neucom.2024.127598) and an A- conference paper (GII–GRIN–SCIE) doi:10.1109/IJCNN.2015.7280853.
- **AIM Center (Dr. Antonello Forgione), Niguarda Hospital, and Value Biotech (Eng. Renzo Zaltieri), Milan, Italy** (1 Apr 2018 – 31 Dec 2022): 3D reconstruction of internal surfaces and working volume for laparoscopic microsurgery. Outcomes: Q1 journal paper doi:10.1016/j.media.2022.102380 and A- conference paper doi:10.1109/IJCNN55064.2022.9892345.
- **IRCAD (Dr. Alexandre Hostettler; Dr. Toby Collins), New Civil Hospital, Strasbourg, France** (1 Jan 2019 – 1 Jan 2022): unsupervised-AI 3D reconstruction for laparoscopic microsurgery. Outcomes: Q1 journal paper doi:10.1016/j.media.2022.102380 and A- conference paper doi:10.1109/IJCNN55064.2022.9892345.
- **Department of Artificial Intelligence and Computation (Prof. Humberto Bustince), Pamplona, Spain** (1 Apr 2019 – Present): adaptive thresholding with Choquet and Sugeno integrals. Outcomes: Q1 paper doi:10.1016/j.inffus.2020.10.020 and conference paper CEUR-WS.
- **CNR–ISASI “E. Caianiello”, Naples, Italy** (1 Mar 2020 – Present): AI for label-free cell/tissue classification and reconstruction from holographic/ptychographic imaging. Outcomes: 4 Q1 journal papers (doi:10.1109/JSTQE.2021.3059532, doi:10.1109/JSTQE.2022.3154236, doi:10.1039/D3LC00385J, doi:10.1016/j.compbiomed.2024.108861) and 2 conference papers (doi:10.1364/DH.2021.DTh1D.3, doi:10.1117/12.2674881).
- **Dept. of Chemistry and Biology “A. Zambelli”, University of Salerno (Prof. Anna Marabotti)** (1 Nov 2022 – Present): computational structural biology. Outcome: Q1 paper doi:10.1016/j.csbj.2023.10.056.
- **Department of Materials Engineering (Prof. Roberto Citarella), Dept. of Industrial Engineering – Mechanical Engineering, University of Salerno, Italy** (1 Jan 2023 – Present): Outcome: Q1 paper doi:10.1016/j.compstruc.2023.107157.

Scientific responsibilities on public or private institutions

- **Participation in the project: Statistical Learning for Big Data** — Department of Business Sciences — Management & Innovation Systems (DISA-MIS), University of Salerno; University internal funds; Scientific Coordinator: Prof. Roberto Tagliaferri (*29 Jul 2016 – 20 Sep 2018*).
- **Participation in the project: Machine Learning and Advanced Data Mining Techniques in the Big Data Era** — DISA-MIS, University of Salerno; University internal funds; Scientific Coordinator: Prof. Roberto Tagliaferri (*20 Nov 2017 – 20 Nov 2021*).
- **Participation in the project: Artificial Intelligence and Data Mining for the Analysis of Complex and Large-Scale Data** — DISA-MIS, University of Salerno; University internal funds; Scientific Coordinator: Prof. Roberto Tagliaferri (*11 Mar 2019 – 10 Mar 2022*).
- **Participation in the project: Artificial and Computational Intelligence for the Analysis of Complex Data** — DISA-MIS, University of Salerno; University internal funds; Scientific Coordinator: Prof. Roberto Tagliaferri (*18 May 2020 – 18 May 2023*).
- **Research Grant (Assegno di Ricerca)** — University of Salerno, DISA-MIS; SSD INF/01. By Rectoral Decree (D.R.) 23.07.2021, Rep. no. 1349, Dr. Francesco Bardozzo was awarded the grant for the project “3D Surgical Neural Networks Systems and Applications.” Activated on 1 Sep 2021, renewed on 7 Jul 2022, and concluded on 31 Mar 2023 upon appointment as Assistant Professor (*1 Sep 2021 – 31 Mar 2023*).
- **Participation in the project: AI Models and Techniques for the Analysis of Complex Data** — DISA-MIS, University of Salerno; University internal funds; Scientific Coordinator: Prof. Roberto Tagliaferri (*25 Jul 2022 – 25 Jul 2025*).
- **Participation in the project: Artificial Intelligence, Deep Learning & Data Science** — DISA-MIS, University of Salerno; University internal funds; Scientific Coordinator: Prof. Roberto Tagliaferri (*31 Jul 2023 – Present*).

Scientific responsibilities in international research projects

Workpackage scientific coordinator and local responsible of “Enhancing learnable models extraction, abstraction and explainable feature relations” within the research project entitled “Resilient AI Framework for Secure and Ethical Machine Learning Systems” (RAISE), funded under the public call “Bando a cascata” issued by the University of Naples “Federico II” – SPOKE 3, RESILIENT AI, CUP E63C22002150007. This project aligns with the objectives of the Future Artificial Intelligence Program and is funded by the Italian National Recovery and Resilience Plan (PNRR), Mission 4 “Education and Research” – Component 2 “From Research to Business” – Investment Line 1.3, Project ID Code PE00000013.

Specific professional experiences characterised by research activities

- **Bi-to-IV-D Project (CUP 300639PRR22TAGLI_Finanza); agreement with DISA-MIS (1 Jan 2023 – 1 Oct 2024)** — activity recognized within a third-party research contract between the Department of Business Sciences — Management & Innovation Systems (DISA-MIS) and Finanza Tech spa. Developed an automatic chart-of-accounts mapping system to the codes set by the EU IV Directive, using pre-trained large language models fine-tuned on the specific task.
- **Remote Sensing NAIS (CUP 300639PRR22TAGLI_NAISSRL); agreement with DISA-MIS (1 Jan 2023 – 15 Nov 2024)** — research and development within a third-party contract between DISA-MIS and NAIS srl. Responsibilities included neural architecture design, development of the data preprocessing system, and planning/training of artificial neural networks for image captioning on multi-modal satellite remote-sensing imagery.
- **NISIDA2AI Project (NISIDA/PROETICO; agreement with DISA-MIS) (2024 – 2025; ongoing)** — NLP for Italian regulatory/technical documentation to support sustainable manufacturing and cognitive automation; Domain-specific deep NLP for automatic extraction (clauses, requirements, thresholds, metadata) and automated compliance-checking engine (norms vs product specifications).

Industrial/Company responsibility

- **Co-founder and Chief Scientific Officer (CSO), Sonogram Technologies Srl** - from July 2025 till now — Registered office: Via Semonzetto, 33, 31030 Borso del Grappa (TV), Italy; VAT (P.IVA) 04584400248; ATECO 72.19.09 (Experimental R&D in other natural sciences and engineering). Company focus: research and development of acoustic devices to identify normal and anomalous sound patterns in industrial machinery and workplaces, primarily leveraging proprietary in-house Artificial Intelligence for monitoring, diagnostics, and predictive maintenance.
- **Founder of Oberchain Srl** from Mar 2022 to Dec 2023— Registered office: Capezzano Viale Filanda, 3, Pellezzano (SA), Italy; VAT 06074270650; REA SA 495243; ATECO 62.01 (Software production not connected with publishing). Company Focus: development of Artificial Intelligence algorithms for anomaly detection and MEV/front-running analysis on blockchains.

Editorial Activities

Academic Editor in Music and Cognitive Neuroscience of PLOS ONE - from December 2024 to Present. **Q1 journal** - [Link](#)

Academic Area Editor in Data Mining and Machine Learning of the International Journal of Computational Intelligence Systems (Springer Nature) - from September 2024 to Present. - **Q2 journal** - [Link](#)

Academic Proceedings Editor, *Lecture Notes in Computer Science LNCS* - (Springer Nature), vol. 15276 (*Lecture Notes in Bioinformatics, LNBI*) — *Computational Intelligence Methods for Bioinformatics and Biostatistics (CIBB 2024)*, Revised Selected Papers. Springer, 2025. DOI: 10.1007/978-3-031-89704-7.

Academic Guest Editor BMC Bioinformatics - **Q1 journal** - Topic: Medical Informatics - July 2024

Peer Review Activities

Between 2021 and 2025, FB completed **65** peer-review assignments for international journals, including: Artificial Intelligence in Medicine (2), BMC Bioinformatics (3), Computer Methods and Programs in Biomedicine (5), Computers & Structures (2), Computers in Biology and Medicine (14), Engineering Applications of Artificial Intelligence (11), Evolutionary Intelligence (1), IEEE Transactions on Cybernetics (1), Journal of Ambient Intelligence & Humanized Computing (1), Knowledge-Based Systems (2), Neural Networks (13), and Neurocomputing (10). All review activities are officially recorded by the respective journals in my ORCID profile (<https://orcid.org/0000-0003-0199-6623>).

Journal Publications

Between 2018 and 2025, FB published 14 peer-reviewed scientific articles indexed in Scopus, spanning theoretical and applied research in Computer Science and Artificial Intelligence. His work integrates theoretical developments with practical AI applications across domains such as Computational Biology, and Biomedical Engineering and Imaging.

All publications are in **Q1** journals, according to the Scopus-SJR classification within their respective fields.

- Advancing label-free cell classification with connectome-inspired explainable models and a novel LIVECell-CLS dataset**
Fiore P., Terlizzi A., Bardozzo F., Liò P. and Tagliaferri R.
Computers in Biology and Medicine, 2025, DOI: 10.1016/j.combiomed.2025.110274 **Q1 journal**
- Enhanced tissue slide imaging in the complex domain via cross-explainable GAN for Fourier ptychographic microscopy**
Bardozzo F., Fiore P., Valentino M., Bianco V., Memmolo P., Miccio L., Brancato V., Smaldone G., Gambacorta M., Salvatore M., Ferraro P., Tagliaferri R.
Computers in Biology and Medicine, 2024. DOI: 10.1016/j.combiomed.2024.108861 - **Q1 journal**
- Elegans-AI: How the connectome of a living organism could model artificial neural networks**
Bardozzo F., Terlizzi A., Simoncini C., Lió P., Tagliaferri R.
Neurocomputing, 2024. DOI: 10.1038/s41598-024-72649-9 - **Q1 journal**
- Consensus of algorithms for lesion segmentation in brain MRI studies of multiple sclerosis**
De Rosa, A. Benedetto, M., Tagliaferri, S., Bardozzo, F., D'Ambrosio, A., Bisecco, A., Gallo, A. and Cirillo, M., Tagliaferri, R., Esposito, F, *Nature Scientific Reports*, 2024. DOI: 10.1016/j.neucom.2024.127598 - **Q1 journal**
- Label-free cell classification in holographic flow cytometry through an unbiased learning strategy**
Ciaparrone G., Pirone D., Fiore P., Xin L., Xiao W., Li X., Bardozzo F., Bianco V., Miccio L., Pan F., Memmolo P., Tagliaferri R., Ferraro P.
Lab on a Chip, 2024. DOI: 10.1039/d3lc00385j - **Q1 journal**
- An automated pipeline integrating AlphaFold 2 and MODELLER for protein structure prediction**
Gil Zuluaga, F. H., D'Arminio, N., Bardozzo, F., Tagliaferri, R., Marabotti, A.
Computational and Structural Biotechnology Journal, 2023. DOI: 10.1016/j.csbj.2023.10.056 - **Q1 journal**
- Neural networks for fatigue crack propagation predictions in real-time under uncertainty**
Giannella V., Bardozzo F., Postiglione A., Tagliaferri R., Sepe R., Armentani E.
Computers and Structures, 2023. DOI: 10.1016/j.compstruc.2023.107157 - **Q1 journal**
- Machine Learning as a Support for the Diagnosis of Type 2 Diabetes**
Agliaia, A., Giordano, D., Bardozzo, F., Bottiglieri, S., Facchiano, A., Tagliaferri, R.
International Journal of Molecular Sciences, 2023. DOI: 10.3390/ijms24076775 - **Q1 journal**
- Deep Learning-Based, Misalignment Resilient, Real-Time Fourier Ptychographic Microscopy Reconstruction of Biological Tissue Slides**
Bianco V., Priscoli M.D., Pirone D., Zanfardino G., Memmolo P., Bardozzo F., Miccio L., Ciaparrone G., Ferraro P., Tagliaferri R.
IEEE Journal of Selected Topics in Quantum Electronics, 2022. DOI: 10.1109/JSTQE.2022.3154236 - **Q1 journal**

10. **StaSiS-Net: A stacked and siamese disparity estimation network for depth reconstruction in modern 3D laparoscopy**
Bardozzo F., Collins T., Forgione A., Hostettler A., Tagliaferri R.
Medical Image Analysis , 2022. DOI: 10.1016/j.media.2022.102380 - **Q1 journal**
11. **Signal metrics analysis of oscillatory patterns in bacterial multi-omic networks**
Bardozzo F., Lió P., Tagliaferri R.
Bioinformatics, 2021. DOI: 10.1093/bioinformatics/btaa966 - **Q1 journal**
12. **Sugeno integral generalization applied to improve adaptive image binarization**
Bardozzo F., De La Osa B., Horanská Ľ., Fumanal-Idocin J., Priscoli M.D., Troiano L., Tagliaferri R., Fernandez J., Bustince H.
Information Fusion , 2021. DOI: 10.1016/j.inffus.2020.10.020 - **Q1 journal**
13. **Neuroblastoma Cells Classification through Learning Approaches by Direct Analysis of Digital Holograms**
Delli Priscoli M., Memmolo P., Ciaparrone G., Bianco V., Merola F., Miccio L., Bardozzo F., Pirone D., Mugnano M., Cimmino F., Capasso M., Iolascon A., Ferraro P., Tagliaferri R.
IEEE Journal of Selected Topics in Quantum Electronics , 2021. DOI: 10.1109/JSTQE.2021.3059532 - **Q1 journal**
14. **A study on multi-omic oscillations in Escherichia coli metabolic networks**
Bardozzo F., Lió P., Tagliaferri R.
BMC Bioinformatics , 2018. DOI: 10.1186/s12859-018-2175-5 - **Q1 journal**

Conference Publications

1. **Label-Free Nervous System Single Cell Classification Using Pretrained VGG and ResNet Networks.**
Fiore P., Bardozzo F., and Tagliaferri R.
IEEE 8th Forum on Research and Technologies for Society and Industry Innovation (RTSI). IEEE, 2024. DOI: 10.1109/RTSI61910.2024.10761642
2. **FP-Elegans M1: Feature Pyramid Reservoir Connectome Transformers and Multi-backbone Feature Extractors for MEDMNIST2D-V2.**
Bardozzo F., Fiore P., Lió P., Tagliaferri R.
International Meeting on Computational Intelligence Methods for Bioinformatics and Biostatistics. Cham: Springer Nature Switzerland, 2024. DOI: 978-3-031-89704-7_9
3. **Label-Free Nervous System Single Cell Classification Using Pretrained VGG and ResNet Networks**
Fiore P., Bardozzo F., Tagliaferri R.
8th IEEE International Forum on Research and Technologies for Society and Industry Innovation, 2024. DOI: 10.1109/RTSI61910.2024.10761642
4. **Soft Brain Ageing Indicators Based on Light-Weight LeNet-Like Neural Networks and Localized 2D Brain Age Biomarkers**
Bardozzo F., Delli Priscoli M., Russo A.G., Crescenzi D., Di Benedetto U., Esposito F., Tagliaferri R.
Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 2022. DOI: 10.1007/978-3-031-20837-9_19
5. **Artificial Intelligence for Label-free cells classification in holographic microscopy**
Fiore P., Pirone D., Bardozzo F., Xin L., Xiao W., Li X., Ciaparrone G., Bianco V., Miccio L., Pan F., Memmolo P., Ferraro P., Tagliaferri R.
Digital Holography and Three-Dimensional Imaging , 2024. DOI: 10.1364/dh.2024.w4a.29
6. **Deep learning assisted Fourier Ptychography for cells and tissue analysis**
Bianco V., Valentino M., Behal J., Pirone D., Bardozzo F., Memmolo P., Miccio L., Tagliaferri R., Ferraro P.
Proceedings of SPIE - The International Society for Optical Engineering, 2023. DOI: 10.1117/12.2674881
7. **Cross X-AI: Explainable Semantic Segmentation of Laparoscopic Images in Relation to Depth Estimation**
Bardozzo F., Priscoli M.D., Collins T., Forgione A., Hostettler A., Tagliaferri R.
Proceedings of the International Joint Conference on Neural Networks, 2022. DOI: 10.1109/IJCNN55064.2022.9892345
8. **Real-time FPM reconstruction and misalignment correction by numerical Multi-Look and GAN**

- Bianco V., Delli Priscoli M., Valentino M., Pirone D., Behal J., Zanfardino G., Memmolo P., Bardozzo F., Miccio L., Ciaparrone G., Tagliaferri R., Ferraro P.
Optics InfoBase Conference Papers, 2022. DOI: 10.1038/s41598-024-72649-9
9. **Gated Local Adaptive Binarization using Supervised Learning**
 Fumanal-Idocin J., Uriarte J., de la Osa B., Bardozzo F., Fernández J., Bustince H.
CEUR Workshop Proceedings, 2021. DOI: 10.3390/ijms24076775
 10. **Raw holograms based machine learning for cancer cells classification in microfluidics**
 Delli Priscoli M., Memmolo P., Ciaparrone G., Bianco V., Merola F., Miccio L., Bardozzo F., Pirone D., Mugnano M., Cimmino F., Capasso M., Iolascon A., Ferraro P., Tagliaferri R.
Optics InfoBase Conference Papers, 2021. DOI: 10.1016/j.csbj.2023.10.056
 11. **Blind microscopy image denoising with a deep residual and multiscale encoder/decoder network**
 Gil Zuluaga F.H., Bardozzo F., Rios Patino J.I., Tagliaferri R.
Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2021. DOI: 10.1109/EMBC46164.2021.9630502
 12. **Motor strength classification with machine learning approaches applied to anatomical neuroimages**
 Bardozzo F., Uribe S.C., Russo A.G., Castaño M.J., Delli Priscoli M., Esposito F., Tagliaferri R.
Proceedings of the International Joint Conference on Neural Networks, 2020. DOI: 10.1109/IJCNN48605.2020.9207471
 13. **Detecting the neural processes of lie generation with low-cost EEG: a preliminary study**
 Garofalo D., Nota F.D., Zoleo F., Bardozzo F., Priscoli M.D., Tagliaferri R., Esposito F.
Convegno Nazionale di Bioingegneria, 2020. DOI: 10.1016/j.compstruc.2023.107157
 14. **A comparative analysis of multi-backbone Mask R-CNN for surgical tools detection**
 Ciaparrone G., Bardozzo F., Priscoli M.D., Londono Kallewaard J., Zuluaga M.R., Tagliaferri R.
Proceedings of the International Joint Conference on Neural Networks, 2020. DOI: 10.1109/IJCNN48605.2020.9206854
 15. **Multi omic oscillations in bacterial pathways**
 Bardozzo F., Lió P., Tagliaferri R.
Proceedings of the International Joint Conference on Neural Networks, 2015. DOI: 10.1109/IJCNN.2015.7280853

Academic Conferences

- **Local Committee, BITS 2016** – Annual Meeting of the Bioinformatics Italian Society. Responsible for logistics, website management, and digital proceedings. Held at the University of Salerno, Italy.
 01/01/2015 – 01/04/2016.
 Conference Committee Website
- **Speaker, CIBB 2021** – 17th International Conference on Computational Intelligence Methods for Bioinformatics and Biostatistics (CIBB 2021, online edition). Presented the work: *Soft Brain Ageing Indicators Based on Light-Weight LeNet-Like Neural Networks and Localized 2D Brain Age Biomarkers*, in the session *Machine learning in healthcare informatics and medical biology*.
 15/11/2021 – 17/11/2021
- **Scientific Committee BBCC 2022** – Bioinformatics and Computational Biology Conference (online edition).
 13/12/2022 – 15/12/2022.
 Scientific Committee Link
- **Invited Speaker at "Of Arts and Novel Intelligences" - March 2023** – Politecnico delle Arti di Firenze, AFAM – Alta Formazione Artistica e Musicale (Ministry of University and Research, MUR). Invited speaker in the session: *Muses and Music for Artificial Intelligence: challenges and myths of generative music, human and artificial entities in dialogue*.
 23/03/2023
- **Speaker, CIBB 2024** – 19th International Conference on Computational Intelligence Methods for Bioinformatics and Biostatistics, held in Benevento, Italy. Presented the project: *FP-Elegans M1: feature pyramid reservoir connectome transformers and multi-backbone feature extractors for MEDMNIST2D-V2*, in the *Medical Informatics* main track.
 04/09/2024 – 06/09/2024
- **Main Track Chair of Medical Informatics Session at CIBB 2024** – 19th International Conference on Computational Intelligence Methods for Bioinformatics and Biostatistics, University of Sannio, Benevento, Italy.

Topics included: AI in biomedicine, health informatics, biomedical imaging, multi-source data integration, NLP, explainable AI, decision support systems, personalized medicine, and computational drug discovery.

04/09/2024 – 06/09/2024

- **Keynote Speaker at Public University of Navarra (Spain)** – NAIR National Research Center, Pamplona. Title: *Connectomic Deep Learning: rethinking a novel form of bioplausibility*. Topics addressed bioplausible neural networks and their relevance in computational neuroscience.

09/10/2024

- **Chair, BITS 2025** – Annual Meeting of the Bioinformatics Italian Society, hosted at the University of Naples Federico II. Organizer of conference activities and co-chair of the special session on Artificial Intelligence and Structural Proteomics.

11/06/2025 – 13/06/2025

- **Invited Lecturer at University of Cambridge (UK) - Department of Computer Science and Technology** – Computer Laboratory. Title: *From Score to Sound: Music Production in the AI Era* in the Foundational Models section. The lecture “From Score to Sound: Music Production in the AI Era” explored the evolution of AI-driven methods for automatic music generation, from the early use of Recurrent Neural Networks to the latest Foundational Models. <https://www.cst.cam.ac.uk/seminars/list/234163>, 10/07/2025