Rosa Sicilia
Curriculum Vitae

Professional Experience

2025–present Associate Professor in the SSD IINF-05/A – Information Processing Systems at UniCamillus – Saint Camillus International University of Health Sciences, Rome, Italy.

2023 National Scientific Qualification as Associate Professor in the SSD IINF-05/A – Information Processing Systems.

2023–2025 Faculty member of the Quality Assurance Committee for the Master's Degree Programme in Intelligent Systems Engineering, Departmental Faculty of Engineering, Università Campus Bio-Medico di Roma.

2021–2025 Fixed-term Researcher (Type A) at the Faculty of Engineering, Università Campus Bio-Medico di Roma, SSD IINF-05/A. Research topic: "We-ease-it: a smart and intelligent outpatient clinic for Hospital 4.0".

2020–2021 Research Fellow at the Faculty of Engineering, Università Campus Bio-Medico di Roma, SSD IINF-05/A. Research topic: "Development of artificial intelligence models for radio-pathomics in lung cancer".

2018–2025 Member of the Collaborative Laboratory of Precision Medicine & BioData Analytics – joint laboratory established by Università Campus Bio-Medico di Roma and Centro Diagnostico Italiano, Milan.

2020 Occasional collaboration – Università Campus Bio-Medico di Roma – Departmental Faculty of Engineering – Laboratory of Information Processing and Bioinformatics.

2015–2016 Part-time collaboration at the Dean's Office of the Departmental Faculty of Engineering – Università Campus Bio-Medico di Roma.

Education and Training

2016–2020 Ph.D. in Bioengineering and Biosciences, XXXII Cycle – Università Campus Bio-Medico di Roma – Departmental Faculty of Engineering – Laboratory of Information Processing and Bioinformatics, curriculum in Computer Science (SSD IINF-05/A). Dissertation title: "μLevel Rumour Detection on Twitter".

2014–2016 Master's Degree in Biomedical Engineering with final grade 110/110 cum laude et mentione – Università Campus Bio-Medico di Roma. Thesis title: "Health-related Rumour Detection in Social Networks: a Classification Problem".

2011–2014 Bachelor's Degree in Industrial Engineering with final grade 110/110 cum laude et mentione – Università Campus Bio-Medico di Roma. Thesis title: "Development of a Biometric System for Access Control".

2006–2011 High School Diploma (Classical Studies) with final grade 100/100 cum laude – Liceo Classico "Bernardino Telesio", Cosenza.

Scientific Activity

The scientific activity focuses on artificial intelligence (AI), with particular emphasis on machine learning, deep learning, data mining, and complex data analysis. Her research topics combine methodological investigation and applied development, with a strong interdisciplinary orientation and a documented impact in biomedical, social, and industrial domains.

The main research lines include:

- **Machine learning and data mining**: automatic feature selection, transfer learning, and heuristic methods for sample characterization [J10, C7, C9].
- **Social network analysis**: design of systems for rumour detection at the single-post level, validated on thematic datasets in the healthcare domain [J1, C1, C4], including studies on domain adaptation [C11] and techniques for unknown topics [C13]. Work [C11] received the Best Paper Award (IEEE CBMS 2021).
- **Representation learning**: application of deep learning models to derive representations from clinical text and images [J19], with focus on multi-task prognostic problems.
- **Multi-expert and multi-modal learning**: integration of heterogeneous sources and management of missing modalities in clinical and social scenarios [J12, J13, J14, J15, J20, J24, C20, C26], including patented intelligent devices such as *di-Pen*, awarded in the industrial field (Regione Lazio, Giomi).
- **Sequential data (structured and unstructured)**: deep learning for vocal signals (project "SMOQP"), epidemiological analysis of COVID-19 [C8], energy consumption prediction [J3], early stress classification [C20], critical event alerting [J16], and learning from incomplete data [C25]. For textual data, NLP and NER models have been developed for clinical reports [C21, C22, C27, J19], as well as automatic text generation techniques [C28].
- **AI for precision medicine**: radiomic, radiogenomic, and radiopathomic methods applied to lung cancer [J2, J6, C2, J9, C14], prostate cancer [C5, J7], acoustic neuroma [J4, J5, C3], breast cancer [C6, J8], and COVID-19 (project "AIforCovid") [J11, J12, C12], with conference awards [C3]. She is a member of the joint laboratory with CDI Milan (Bracco group).
- **Explainable AI (XAI)**: methods for interpreting black-box models, with applications to clinical, temporal, and insurance data [C15, J18, J19], in collaboration with ELIS–Generali Italia (project "Predictive Customer Management").

The scientific production is documented by numerous publications in international journals and conferences, awards, and participation in strategic research projects.

Bibliometric Indicators as of October 21, 2025

Source	Citations	H-index
Scopus	544	13
Google Scholar	737	14

Research Projects

2023–present   **IDEA – AI-powered digital Twin for next-generation lung cancer care** (Internal UCBM Call 2023). Development of a digital twin for NSCLC integrating artificial intelligence technologies to optimize diagnosis and therapy.

2022–present   **Early Detection of Rare Inherited Retinal Dystrophies and Cardiac Amyloidosis enhanced by AI** (PNRR 2022). AI for improving diagnosis and management of rare diseases (cardiac amyloidosis, inherited retinal dystrophies).

2022–present   **Fit4MedRob – Fit for Medical Robotics** (PNC 2022). Robotic solutions for the rehabilitation of patients with motor, sensory, or cognitive impairments.

2022–present   **PICTURE – Pathological response AI-driven prediCTion after neoadjUvant theRapiEs in NSCLC** (PRIN-PNRR 2022). Prediction of complete pathological response in NSCLC patients by integrating radiological, histological, and textual data. *Leader of Work Package 3*.

2022–present **AIDA – Explainable Multimodal Deep Learning for Personalized Oncology** (PRIN 2022). Multimodal models (radiomics, pathomics, textual reports) for prognosis prediction in precision oncology.

2021–2023 **We-Ease-It – Smart Ambulatory 4.0** (Open Fiber). Intelligent outpatient clinic for chronic patients supported by fiber network and advanced ICT solutions.

2020–2022 **CeBMI – Educational Centre in Biomedical and Medical Informatics** (Erasmus+). Creation of advanced training programs for students and professionals in biomedical informatics.

2020–2021 **SMOQP – Objective Measurement System of Speech Quality** (ARTES 4.0). Development of algorithms for automatic evaluation of speech articulation in clinical contexts.

2020–2021 **Explainable AI for Predictive Customer Management** (ELIS + Generali Italia). Design of an XAI system to enhance predictive transparency in the insurance sector.

2020 **AIforCovid Imaging Archive** (Bracco, IIT, CDI). Creation of shared datasets and development of deep learning algorithms for COVID-19 imaging.

2019–2022 **CLARO – Collaborative Radiopathomics for NSCLC** (Università Campus Bio-Medico). Development of AI models for personalized therapy in lung cancer.

Teaching Activity

Teaching Assignments at UniCamillus – Saint Camillus International University of Health Sciences

2025–present **Lecturer**, *Course in* Physics and Information Processing, *Master's Degree in Medicine and Surgery, Rome campus, SSD IINF-05/A (7 CFU, 3 CFU assigned).*

2025–present **Lecturer**, *Course in* Physics and Statistics, *Master's Degree in Medicine and Surgery, Cefalù campus, SSD IINF-05/A (11 CFU, 3 CFU assigned).*

2025–present **Lecturer**, *Course in* Physics and Statistics, *Master's Degree in Medicine and Surgery (English-taught program), SSD IINF-05/A (17 CFU, 4 CFU assigned).*

Teaching Assignments at Università Campus Bio-Medico di Roma

2025–2026 **Lecturer**, *Course in* Deep Learning, *Master's Degree in Intelligent Systems Engineering, SSD IINF-05/A (6 CFU, 3 CFU assigned).*

2023–2025 **Course Coordinator**, *Course in* Fundamentals of Computer Science, *Bachelor's Degree in Biomedical Engineering (English-taught), SSD IINF-05/A (10 CFU, 7 CFU assigned).*

2023–2025 **Course Coordinator**, *Course in* Fundamentals of Computer Science, *Master's Degree in Medicine and Surgery "MedTech" (English-taught), SSD IINF-05/A (5 CFU).*

2021–2025 **Co-lecturer**, *Course in* Computer Vision, *Master's Degree in Intelligent Systems Engineering (3 CFU).*

2021–2025 **Co-lecturer**, *Course in* Signal Processing, *Bachelor's Degree in Industrial Engineering (3 CFU).*

2020–2025 **Lecturer**, *Course in* Introduction to Digital Imaging, *Bachelor's Degree in Medical Radiology Techniques for Imaging and Radiotherapy (4 CFU).*

Teaching Collaborations and Tutoring Activities

2019 **Tutor**, *Summer School "Summer Lab 2019" for high school students.*

2018–2021 **Tutor**, *Course in* Signal Processing, *Bachelor's Degree in Industrial Engineering (10 hours).*

2017–2019 **Tutor**, Introduction to Digital Imaging *module within the course* Computer Systems and Hygiene, *Bachelor's Degree in Medical Radiology Techniques (6 hours).*

2017–2019 **Tutor**, *Course in* Computer Science and Statistics, *Master's Degree in Medicine and Surgery (12 hours).*

2024 **Lecturer – "Machine Learning" module**, *Second-Level Interfaculty Master's in "Precision Medicine between Culture and Society," promoted by CMP3VdA in collaboration with Università Campus Bio-Medico di Roma (24 hours).*

Personal Skills

Mother tongue	Italian
Other languages	English – Excellent spoken and written proficiency
Communication skills	Excellent presentation and interpersonal skills, consolidated in academic, scientific, and institutional contexts
Organizational skills	Strong coordination and management abilities in positions of responsibility, organization of international scientific events, supervision of theses and PhD projects
Technical skills	Development of machine and deep learning models; programming in C, C++, R, Java, Python, MATLAB; use of advanced libraries such as PyTorch and TensorFlow

Additional Degrees and Training Courses

2018 Annual PhD School – Università Campus Bio-Medico di Roma.

2018 Padua Galileo Innovation Festival – Participation in the festival with Academy scholarship.

2018 CAPM Training, Certified Associate in Project Management – Training course by the Project Management Institute (PMI).

2017 DeepLearn 2017 – International Summer School on Deep Learning, Bilbao.

2017 Annual PhD School – Università Campus Bio-Medico di Roma.

2017 Seminar series on Cassandra and Spark – SkillZone training program by Cisco System with ELIS.

Scholarships and Awards

2022 European mobility/staff training grant to conduct scientific and teaching activities at Universidad Rey Juan Carlos, Madrid (Spain) – focused on multivariate time series processing, explainability of artificial intelligence algorithms, and synthetic generation of medical images (in collaboration with Prof. Cristina Soguero Ruìz).

2020 Research fellowship – Winner of the competitive selection for a research collaboration grant within the Faculty of Engineering at Università Campus Bio-Medico di Roma, SSD IINF-05/A. Research project title: "Development of artificial intelligence models for radio-pathomics in lung cancer.".

2016 PhD Scholarship – Winner of the competitive selection for the XXXII cycle of the PhD Program in Bioengineering and Biosciences at Università Campus Bio-Medico di Roma.

2016 Erasmus+ Scholarship – Master's Thesis Project abroad (6 months) at Eindhoven University of Technology (TU/e). Thesis: Health-related Rumour Detection in Social Networks: a Classification Problem.

2015 Best Student Award for the Master's Degree in Biomedical Engineering – Università Campus Bio-Medico di Roma. Recognition for academic merit and extracurricular activities.

Membership in Scientific Societies

2020–present Member of the Italian Association for Research in Computer Vision, Pattern Recognition, and Machine Learning (CVPL, formerly GIRPR).

2020–present Member of IEEE and IEEE Computer Society.

2017–2020 IEEE Graduate Student Member and member of IEEE Computer Society.

Organization or Participation as Speaker at Scientific Conferences in Italy or Abroad

2025–present Steering Committee Chair for the IEEE International Symposium on Computer-Based Medical Systems (CBMS). Reference: `https://cbms-conference.org/`

2023–2025 Steering Committee Vice-Chair for the IEEE International Symposium on Computer-Based Medical Systems (CBMS).

2025 Co-General Chair of the 38th IEEE International Symposium on Computer-Based Medical Systems (CBMS), June 18–20, 2025, Madrid, Spain. Co-General Chair: Prof. Alejandro Rodríguez-González, Polytechnic University of Madrid, Spain. Reference: `https://2025.cbms-conference.org/organizing-committee/`

2024 Program Committee Co-Chair of the 37th IEEE International Symposium on Computer-Based Medical Systems (CBMS), June 26–28, 2024, Guadalajara, Mexico. Program Committee Co-Chairs: Prof. Sharib Ali, University of Leeds, UK; Dr. Lucia Prieto Santamaria, Polytechnic University of Madrid, Spain. Reference: `https://eventos.tec.mx/s/lt-event?language=es_MX&id=a5u8X000000Igo9QAC#/Organization`

2023 Co-General Chair of the 36th IEEE International Symposium on Computer-Based Medical Systems (CBMS), June 22–24, 2023, L'Aquila, Italy. Co-General Chairs: Prof. Alejandro Rodríguez-González, Polytechnic University of Madrid, Spain; Prof. Giuseppe Placidi, University of L'Aquila, Italy. Reference: `https://2023.cbms-conference.org/organising-committee/`

2022 Program Committee Co-Chair of the 35th IEEE International Symposium on Computer-Based Medical Systems (CBMS), July 21–23, 2022, Shenzhen, China (online event). Program Committee Co-Chairs: Dr. Zhihui Lai, Shenzhen University, China; Dr. João Rafael Almeida, University of Aveiro, Portugal. Reference: `https://2022.cbms-conference.org/committee-members/`

2020 Invited Speaker at the international conference "Exploring Media Ecosystems Conference," Massachusetts Institute of Technology (MIT), Cambridge, MA, USA. Talk title: Level Rumor Detection on Twitter: Two Examples in the Health Domain.

National and International Collaborations

2024–present *Institute for Applied Computing, National Research Council (CNR), Italy.*

2024–present *Department of Computer Science and Numerical Analysis, University of Córdoba, Spain.*

2023–present *ENAV S.p.A., Italy.*

2023–present *Eustema S.p.A., Italy.*

2023–present *Department of Computer Science and Media Technology, Malmö University, Sweden.*

2022–present *Biomedical Engineering and Data Science Group, Universidad Rey Juan Carlos, Madrid.*

2020–2022 *CeBMI: University–Industry Educational Centre in Advanced Biomedical and Medical Informatics.*

2020–2021 *R&D Division of Mediavoice S.r.l., Italy.*

2019–2024 *Data Science Group of Generali Italia S.p.A., directed by Dr. Massimo Natale.*

2018–present *Research group led by Dr. Sergio Papa, Diagnostic Imaging, Centro Diagnostico Italiano S.p.A. – Bracco Corporate.*

2018–present *Fondazione Policlinico Universitario Campus Bio-Medico di Roma, Italy.*

2016–2018 *"Data Mining Group" led by Prof. Mykola Pechenizkiy, Department of Computer Science, Eindhoven University of Technology, The Netherlands.*

Scientific Research Responsibilities

2024–2025 Co-Scientific Lead of the industrial research contract "Digitalization of expertise in collectible goods and creation of an artificial model for artwork recognition: Technological analysis and Proof of Concept development" with Ti-Stimo S.r.l., valued at €30,000.

2024–2025 Leader of Work Package 3 "Unimodal Deep Learning and Multimodal Deep Learning" within the PRIN project "PICTURE: Pathological response AI-driven prediCTion after neoadjUvant theRapiEs in NSCLC."

Editorial Roles in Scientific Journals

2025–present Co-Guest Editor: *BMC Medical Informatics and Decision Making*, Springer Nature, Special Collection on "Innovations in Decision Support Systems for Personalized Medicine." Reference: `https://www.biomedcentral.com/collections/col5679`

2025–present Co-Guest Editor: *Artificial Intelligence in Medicine*, Elsevier, Special Issue on "IEEE CBMS 2025 – Artificial Intelligence for Next-Generation Healthcare Solutions."

2025–present Co-Guest Editor: *Health Information Science and Systems*, Springer, Special Issue on "Connected Healthcare: Data-Driven and Scalable Solutions." Reference: `https://link.springer.com/journal/13755/updates/27730058`

2024–present Associate Editor: *Multimedia Tools and Applications*, Springer, Track 8: Medical Imaging. Reference: `https://link.springer.com/journal/11042/editorial-board`

2023–present Co-Guest Editor: *Multimedia Tools and Applications*, Springer, Special Issue on "Supporting Medicine and Healthcare with Multimedia Tools." Reference: `https://www.springer.com/journal/11042/updates/23884690`

2023–present Co-Guest Editor: *Health Information Science and Systems*, Springer, Special Issue on "Improving Healthcare Services with Information Technology and Computer-Based Systems." Reference: `https://www.springer.com/journal/13755/updates/23923364?detailsPage=pltci_3166221`

2022–2024 Co-Guest Editor: *Artificial Intelligence in Medicine*, Elsevier, Special Issue on "IEEE CBMS 2022 – Mining Healthcare: AI and Machine Learning for Biomedicine." Reference: `https://www.sciencedirect.com/science/article/abs/pii/S0933365724001969`

2022–2023 Co-Guest Editor: *Healthcare*, MDPI, Special Issue on "Computer-Based Medical Systems." Reference: `https://www.mdpi.com/journal/healthcare/special_issues/CBMSS`

Teaching Assignments within Accredited PhD Programs

2022–2024 15-hour course "Can we trust AI? Opening the black box" for students of the National PhD Program in Artificial Intelligence, Health and Life Sciences area, cycles XXXVII–XXXVIII–XXXIX.

Teaching Assignments at Foreign or Supranational Universities and Research Institutes

2022 10-hour course on topics related to machine learning and deep learning at Universidad Rey Juan Carlos, Spain.

Awards

2021 Winner of the international competition "AI against COVID-19: Screening X-ray Images for COVID-19 Infections." Opening: May 27, 2021. Closing: June 17, 2021.

2021 Best Paper Award at the 34th IEEE International Symposium on Computer-Based Medical Systems, Aveiro, Portugal, June 7–9, 2021.

2018 Student Travel Award at the IEEE International Conference on Bioinformatics and Biomedicine (BIBM), December 3–6, 2018, Madrid, Spain.

Technology Transfer Achievements

2021–present Italian Patent "Subcutaneous Delivery Device," priority number 102021000026348 and WO2023062596A1 (Cordelli E., Francini L., Manfrini S., Piemonte V., Sicilia R., Soda P., 2022).

Other Titles

2025 Participation in the IEEE Technical Activities Committee meeting as representative of the Chair of the IEEE Technical Community of Computational Life Sciences (TCCLS), held in Tokyo, May 27–28, 2025.

Speaker at International Conferences

2018–2025 From 2018 to 2025, speaker at the following international scientific conferences:
– 31st, 32nd, 33rd, 34th, and 37th IEEE International Symposium on Computer-Based Medical Systems (CBMS 2018, 2019, 2020, 2021, 2024).
– 25th International Conference on Pattern Recognition (ICPR 2020).
– pHealth 2024: 20th International Conference on Personalized Health (2024).
– IEEE International Conference on Bioinformatics and Biomedicine (BIBM 2023), as representative of the IEEE Technical Committee on Computational Life Sciences (TCCLS).
– EFMI Special Topic Conference 2023 – Telehealth Ecosystems in Practice (2023).

Institutional Activities

2023–2025 Member of the Quality Assurance Group for the Master's Degree in Intelligent Systems Engineering, Departmental Faculty of Engineering, Università Campus Bio-Medico di Roma.

2022–2025 Reference lecturer for the Bachelor's Degree in Biomedical Engineering, Departmental Faculty of Engineering, Università Campus Bio-Medico di Roma. This role was assigned as the course instructor for Fundamentals of Computer Science (10 CFU).

2020–2025 Coordinator of personal tutoring activities for the Master's Degree in Intelligent Systems Engineering, Departmental Faculty of Engineering, Università Campus Bio-Medico di Roma.

Supervision Activities

2017–present Supervision of 8 PhD students and over 15 Master's/Bachelor's theses.

Other Invited Talks and Seminars

2022 Festival Digitale Popolare, Turin. Talk title: "Connected Health."

2022 LUISS Orientation Summer School. Talk title: "AI for a 4.0 World."

2022 "CeBMI Open Day," University of Valencia, Spain. Talk title: "Support Decision Making."

2019 "Radiomics and Artificial Intelligence 2020: From Technology to the Patient," organized by Centro Diagnostico Italiano (CDI) and Bracco Group, Milan. Talk title: Boosting Radiomics by Learning from Skewed Data.

2018 "Radiomics: The Future is Here," Milan and Naples, October 26 and November 19, 2018. Talk title: Radiomics and the Challenge of Imbalanced Data.

2017 "Le giornate del Gottardo – Radiomics: Integrating Radiological and Other Data for Personalized Medicine," Piotta, Switzerland, September 23, 2017. Talk title: Research Experience in the Field of Radiomics.

Reviewing Activity

– IEEE Access;
– IEEE Transactions on Systems, Man, and Cybernetics;
– Artificial Intelligence in Medicine, Elsevier;
– Expert Systems with Applications, Elsevier;
– Engineering Applications of Artificial Intelligence, Elsevier;
– Scientific Reports, Springer Nature; – Complexity, Hindawi.
– (2020–2025) IEEE International Symposium on Computer-Based Medical Systems (CBMS);
– (2020) IEEE International Conference on Bioinformatics and Biomedicine (BIBM).

Publications

Below is the complete list of all scientific publications, divided into international journals and international conferences.

International Journals

[J20] Francesconi, A., di Biase, L., Cappetta, D., Rebecchi, F., Soda, P., Sicilia, R., ... & Alzheimer's Disease Neuroimaging Initiative. (2025). Class balancing diversity multimodal ensemble for Alzheimer's disease diagnosis and early detection. Computerized Medical Imaging and Graphics, 123, 102529.

[J19] Paolo, D., Greco, C., Cortellini, A., Ramella, S., Soda, P., Bria, A., & Sicilia, R. (2025). Hierarchical embedding attention for overall survival prediction in lung cancer from unstructured EHRs. BMC Medical Informatics and Decision Making, 25(1), 169.

[J18] Tronchin, L., Cordelli, E., Celsi, L. R., Maccagnola, D., Natale, M., Soda, P., & Sicilia, R. (2024). Translating Image XAI to Multivariate Time Series. IEEE Access.

[J17] Nibid, L., Greco, C., Cordelli, E., Sabarese, G., Fiore, M., Liu, C. Z., ... & Perrone, G. (2023). Deep pathomics: A new image-based tool for predicting response to treatment in stage III non-small cell lung cancer. Plos one, 18(11), e0294259.

[J16] Caruso, C. M., Soda, P., Giammichele, C., Rotilio, F., & Sicilia, R. (2023). A Cascade of Learners for Firemen'Emergency Events Classification. IEEE Access, 11, 122399-122410.

[J15] Tortora, M., Cordelli, E., Sicilia, R., Nibid, L., Ippolito, E., Perrone, G., ... & Soda, P. (2023). RadioPathomics: multimodal learning in non-small cell lung cancer for adaptive radiotherapy. IEEE Access, 11, 47563-47578.

[J14] Prata, F., Anceschi, U., Cordelli, E., Faiella, E., Civitella, A., Tuzzolo, P., ... & Papalia, R. (2023). Radiomic machine-learning analysis of multiparametric magnetic resonance imaging in the diagnosis of clinically significant prostate cancer: new combination of textural and clinical features. Current Oncology, 30(2), 2021-2031.

[J13] Caruso, C. M., Guarrasi, V., Cordelli, E., Sicilia, R., Gentile, S., Messina, L., ... & Soda, P. (2022). A multimodal ensemble driven by multiobjective optimisation to predict overall survival in non-small-cell lung cancer. Journal of Imaging, 8(11), 298.

[J12] Guarrasi, V., D'Amico, N. C., Sicilia, R., Cordelli, E., & Soda, P. (2022). Pareto optimization of deep networks for COVID-19 diagnosis from chest X-rays. Pattern Recognition, 121, 108242.

[J11] Soda, P., D'Amico, N. C., Tessadori, J., Valbusa, G., Guarrasi, V., Bortolotto, C., ... & Papa, S. (2021). AIforCOVID: predicting the clinical outcomes in patients with COVID-19 applying AI to chest-X-rays. An Italian multicentre study. Medical image analysis, 74, 102216.

[J10] Sicilia, R., Merone, M., Valenti, R., & Soda, P. (2021). Rule-based space characterization for rumour detection in health. Engineering Applications of Artificial Intelligence, 105, 104389.

[J9] Tortora, M., Cordelli, E., Sicilia, R., Miele, M., Matteucci, P., Iannello, G., ... & Soda, P. (2021). Deep Reinforcement Learning for Fractionated Radiotherapy in Non-Small Cell Lung Carcinoma. Artificial Intelligence in Medicine, 119, 102137.

[J8] Santucci, D., Faiella, E., Cordelli, E., Sicilia, R., de Felice, C., Zobel, B. B., ... & Soda, P. (2021). 3T MRI-radiomic approach to predict for lymph node status in breast cancer patients. Cancers, 13(9), 2228.

[J7] Prata, F., Esperto, F., Civitella, A., Tuzzolo, P., Cordelli, E., Sicilia, R., ... & Papalia, R. (2020). Radiomic analysis of T2 and ADC mpMRI images in the diagnosis of clinical significant prostate cancer: An early experience. European Urology Open Science, 20, S48-S49.

[J6] D'Amico NC, Sicilia R, Cordelli E, Tronchin L, Greco C, Fiore M, Carnevale A, Iannello G, Ramella S, Soda P (2020). Radiomics-Based Prediction of Overall Survival in Lung Cancer Using Different Volumes-Of-Interest. Applied Sciences. 2020; 10(18):6425, doi: https://doi.org/10.3390/app10186425.

[J5] D'Amico NC, Merone M, Sicilia R, Cordelli E, D'Antoni F, Zanetti IB, Valbusa G, Grossi E, Beltramo G, Fazzini D, Scotti G (2019). Tackling imbalance radiomics in acoustic neuroma. INTERNATIONAL JOURNAL OF DATA MINING AND BIOINFORMATICS, 22(4), pp.365-388. ISSN: 1748-5681, doi: https://dx.doi.org/10.1504/IJDMB.2019.10139.

[J4] D'Amico NC, Sicilia R, Cordelli E, Valbusa G, Grossi E, Zanetti IB, Fazzini D, Scotti G, Beltramo G, Iannello G, Soda P (2019). Early radiomics experiences in predicting CyberKnife response in acoustic neuroma. ACM SIGBIOINFORMATICS Rec. 8, 3 (December 2018), 11–13. doi: https://doi.org/10.1145/3307616.3307620.

[J3] Soda P, Sicilia R, Acciai L, Iannello G (2019). Grasping inter-attribute and temporal variability in multivariate time series. IEEE TRANSACTIONS ON BIG DATA. ISSN: 2332-7790, doi: https://doi.org/10.1109/TBDATA.2019.2918807.

[J2] Ramella S, Fiore M, Greco C, Cordelli C, Sicilia R, Merone M, Molfese E, Miele M, Cornacchione P, Ippolito E, Iannello G, D'Angelillo RM, Soda P (2018). A radiomic approach for adaptive radiotherapy in non-small cell lung cancer patients. PLOS ONE, ISSN: 1932-6203, doi: https://doi.org/10.1371/journal. Pone.0207455.

[J1] Sicilia R, Lo Giudice S, Pei Y, Pechenizkiy M, Soda P (2018). Twitter rumour detection in the health domain. EXPERT SYSTEMS WITH APPLICATIONS, vol. 110, p. 33-40, ISSN: 0957-4174, doi: https://doi.org/10.1016/j.eswa.2018.05.019.

International Conferences

[C27] Paolo, D., Russo, C., Russo, G., Greco, C., Cortellini, A., Russano, M., ... & Sicilia, R. (2024, December). Pathologic Complete Response Prediction with Machine Learning Using Hierarchical Attention Feature Extraction. In International Conference on Pattern Recognition (pp. 255-267). Cham: Springer Nature Switzerland.

[C26] Molle, R., Tamantini, C., Paglialonga, A., Simeone, D., Furia, L., Tortora, M., ... & Zollo, L. (2024, September). AI-CARE: Artificial Intelligence for Customized Adaptive Robot-Aided Rehabilitation. In International Workshop on Human-Friendly Robotics (pp. 168-181). Cham: Springer Nature Switzerland.

[C25] Escudero-Arnanz, Ó., Sicilia, R., Soguero-Ruiz, C., Mora-Jiménez, I., Lelli, D., Pedone, C., & Marques, A. G. (2024, June). Low-Rank Tensor Completion for Heart Failure Exacerbation Detection in Multivariate Time Series with Missing Data. In 2024 IEEE 37th International Symposium on Computer-Based Medical Systems (CBMS) (pp. 112-119). IEEE.

[C24] Aksu, F., Bria, A., Caragliano, A. N., Caruso, C. M., Chen, W., Cordelli, E., ... & Zollo, L. (2024). Towards AI-driven next generation personalized healthcare and well-being. In 2024 Ital-IA Intelligenza Artificiale-Thematic Workshops, Ital-IA 2024, Naples, Italy, May 29-30, 2024 (pp. 360-365). CEUR-WS.

[C23] Adornato, C., Assolito, C., Cordelli, E., Di Feola, F., Guarrasi, V., Iannello, G., ... & Tronchin, L. (2024). Virtual scanner: leveraging resilient generative ai for radiological imaging in the era of medical digital twins. In 2024 Ital-IA Intelligenza Artificiale-Thematic Workshops, Ital-IA 2024, Naples, Italy, May 29-30, 2024 (pp. 60-65). CEUR-WS.

[C22] Paolo, D., Bria, A., Greco, C., Russano, M., Ramella, S., Soda, P., & Sicilia, R. (2024). Exploring Negated Entites for Named Entity Recognition in Italian Lung Cancer Clinical Reports. In pHealth 2024 (pp. 98-102). IOS Press.

[C21] Paolo, D., Bria, A., Greco, C., Russano, M., Ramella, S., Soda, P., & Sicilia, R. (2023, December). Named entity recognition in italian lung cancer clinical reports using transformers. In 2023 IEEE International Conference on Bioinformatics and Biomedicine (BIBM) (pp. 4101-4107). IEEE.

[C20] Furia, L., Tortora, M., Soda, P., & Sicilia, R. (2023, December). Exploring early stress detection from multimodal time series with deep reinforcement learning. In 2023 IEEE International Conference on Bioinformatics and Biomedicine (BIBM) (pp. 1917-1920). IEEE.

[C19] Conte, F., Cordelli, E., Guarrasi, V., Iannello, G., Sicilia, R., Soda, P., ... & Tronchin, L. (2023). Sustainable AI: inside the deep, alongside the green. In CEUR WORKSHOP PROC (Vol. 3486, pp. 622-627).

[C18] Cordelli, E., Guarrasi, V., Iannello, G., Ruffini, F., Sicilia, R., Soda, P., & Tronchin, L. (2023). Making AI trustworthy in multimodal and healthcare scenarios. In CEUR Workshop Proceedings (Vol. 3486, pp. 353-358).

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