Tiago Filipe Sousa Gonçalves

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I received my MSc in Bioengineering (Biomedical Engineering) from Faculdade de Engenharia da Universidade do Porto (FEUP) in 2019 and my PhD in Electrical and Computer Engineering in 2025 from the same institution. I am a research assistant at the Centre for Telecommunications and Multimedia of INESC TEC with the Visual Computing & Machine Intelligence (VCMI) Research Group. My research interests include machine learning, explainable artificial intelligence (in-model approaches), computer vision, medical decision support systems, and machine learning deployment.

Besides working, I enjoy practising Karate-Do Shotokai or reading about life, philosophy, economy, politics or fundamental science. Moreover, I do not refuse a good TV series or a good film (preferably at the cinema).

Experience

2024 – 2025 **Invited Teaching Assistant**

Faculdade de Ciências | Universidade of Porto

- Invited Teaching Assistant during the 1st Semester of 2024-2025 on the course LBAW - Database and Web Applications Laboratory (L.EIC023)
- Invited Teaching Assistant during the 2nd Semester of 2024-2025 on the course IA - Artificial Intelligence (L.EIC029)

2024 **Visiting Researcher / PhD Student**

The Netherlands Cancer Institute

- Visiting PhD student at the Department of Radiology, under the supervision of Wilson Silva

2024 **Visiting Researcher / PhD Student**

University of Utrecht

- Visiting PhD student with AI Technology for Life research group of the Department of Information and Computing Sciences, under the supervision of Wilson Silva

2024 – Present **External Researcher / PhD Student**

Athinoula A. Martinos Center for Biomedical Imaging | Massachusetts General Hospital

- External PhD student with The Quantitative Translational Imaging in Medicine Lab (QTIM), under the supervision of Albert Kim and Christopher P. Bridge

2023 – 2024 **Visiting Researcher / PhD Student**

Athinoula A. Martinos Center for Biomedical Imaging | Massachusetts General Hospital

- Visiting PhD student with The Quantitative Translational Imaging in Medicine Lab (QTIM), under the supervision of Albert Kim and Christopher P. Bridge

2022 – 2023 **Invited Teaching Assistant**

Faculdade de Engenharia | Universidade of Porto

- Invited Teaching Assistant during the 1st Semester of 2022-2023 on the course PRO - Programming (L.EEC004)

2021 – 2022 **Invited Teaching Assistant**

Faculdade de Engenharia | Universidade of Porto

- Invited Teaching Assistant during the 1st Semester of 2021-2022 on the course TAIA - Advanced Topics on Artificial Intelligence (MECD14)

2020 – Present **Research Assistant**

INESC TEC | Centre for Telecommunications and Multimedia

2019 – 2020 **Research Assistant**

Faculdade de Engenharia | Universidade do Porto

2018 – 2018 **Junior Researcher**

Fraunhofer Portugal AICOS

Education

2020 – 2025 **Doctor of Philosophy (PhD)**
Electrical and Computer Engineering

Faculdade de Engenharia | Universidade do Porto

- Thesis Title: "Interpretable Machine Learning and its Application to Medical Decision Support Systems"
- Scientific Supervisor: Jaime S. Cardoso

2016 – 2019 **Bachelor of Science (BSc) & Master of Science (MSc)**
Bioengineering – Biomedical Engineering

Faculdade de Engenharia | Universidade do Porto

- Thesis Title: "Deep Aesthetic Assessment of Breast Cancer Surgery Outcomes"
- Scientific Supervisor: Jaime S. Cardoso
- Scientific Co-Supervisor: Wilson Silva

2016 **Bachelor of Science (BSc)**
Bioengineering – Biomedical Engineering

University of Twente

- Internship and Bachelor's Thesis as an Erasmus+ Student.

2013 – 2016 **Bachelor of Science (BSc)**
Bioengineering – Biomedical Engineering

Faculty of Biotechnology | Universidade Católica Portuguesa

Awards

2024 **The Third Workshop on Applications of Medical Artificial Intelligence (AMAI 2024) Best Student Paper Award**

- Inês Martins, João Matos, Tiago Gonçalves, Leo A. Celi, An-Kwok Ian Wong, and Jaime S. Cardoso for the paper entitled "Evaluating the Impact of Pulse Oximetry Bias in Machine Learning under Counterfactual Thinking"

2022 **APRP Code2Model 2022 Challenge First Prize Award**

- Member of the winning team "CodeSprinters" (Isabel Rio-Torto, Paulo Maia, Tiago Gonçalves and Tomé Albuquerque)

2021 **MICCAI Hackathon 2021 Best Contribution Award**

- Member of the winning team "HIT" (Helena Montenegro, Isabel Rio-Torto, João Nunes and Tiago Gonçalves) with the work titled "Show Me Consistency! Increasing the quality and consistency of annotations"

2021 **2nd Place World Data League**

- Member of the team "Tech Moguls" (Joana Morgado, Paulo Maia, Tiago Gonçalves and Tomé Albuquerque) that achieved 2nd place at the World Data League competition on data science

Extracurricular Activities

2025 Center for AI and Digital Policy
- CAIDP Team Leader

2024 Center for AI and Digital Policy
- CAIDP Research Group Member

2024 – 2025 INvicta school of VIsion, Computational intelligence, and patTern Analysis (INVICTA) Spring School 2025
- Member of the Advisory Team

2024 4th Workshop on Explainable & Interpretable Artificial Intelligence for Biometrics at ECCV 2024
- Member of the Organising Committee

2023 – 2024 INvicta school of VIsion, Computational intelligence, and patTern Analysis (INVICTA) Spring School 2024
- Member of the Organising Committee

2022 – 2023 3rd Workshop on Explainable & Interpretable Artificial Intelligence for Biometrics at WACV 2023
- Member of the Organising Committee
- Publicity Chair

2021 – 2022 VISion Understanding and Machine intelligence (VISUM) Summer School 2022
- Leader of the Project Committee
- Member of the Organising Committee

2021 – 2022 2nd Workshop on Explainable & Interpretable Artificial Intelligence for Biometrics at WACV 2022
- Member of the Organising Committee
- Sponsorship Co-chair

2020 – 2021 VISion Understanding and Machine intelligence (VISUM) Summer School 2021
- Member of the Organising Committee
- Member of the Project Committee

2020 – 2021 1st Workshop on Explainable & Interpretable Artificial Intelligence for Biometrics at WACV 2021
- Member of the Organising Committee
- Sponsorship Co-chair

2019 – 2020 VISion Understanding and Machine intelligence (VISUM) Summer School 2020
- Member of the Organising Committee

2020 – 2021 Conselho Nacional de Debates Universitários (Portuguese Universities Debating Council)
- Treasurer of the Board of Directors

2019 – 2021 Sociedade de Debates da Universidade do Porto (University of Porto Debate Society)
- President of the Audit Committee
- Treasurer of the Board of Directors

2017 – 2019 Associação Nacional de Estudantes de Engenharia Biomédica (Portuguese Biomedical Engineering Students' Association)

- Treasurer of the Board of Directors
- Founder and Secretary of the General Assembly

2017 – Present European Students, Sustainability Auditing (ESSA Project)

- Social Responsibility Student Auditor

2017 – 2019 ShARE-UP

- President of the Board of Directors
- Network Manager of the Energy Network

2016 – 2017 Uniplaces

- Uniplaces Academy – Ambassador Program
- University Partnerships Manager Porto
- Creative & Social Media Manager Porto

2016 – 2018 Núcleo de Estudantes de Bioengenharia FEUP/ICBAS (Bioengineering Student Association FEUP/ICBAS)

- Member of the Communication and Image Department

2013 – 2016 Associação de Estudantes da Escola Superior de Biotecnologia (Student's Union of the Faculty of Biotechnology)

- Treasurer of the Board of Directors
- Vice-President of the Board of Directors

2013 – 2016 Sociedade de Debates da Católica Porto (Católica Porto Debate Society)

- President of the Audit Committee
- Founder and President of the Board of Directors

2013 – 2021 Tuna da Universidade Católica Portuguesa – Porto (Academic Band of Universidade Católica Portuguesa – Porto)

- President of the Audit Committee
- Vice-President of the General Assembly
- Vice-President of the Board of Directors
- Vice-President of the Audit Committee

2015 – 2016 Erasmus+ Buddy (Faculty of Biotechnology)

- Member of the Erasmus+ Buddy Committee

2013 – 2014 Clube de Investigadores – Escola Superior de Biotecnologia (Researchers Club – Faculty of Biotechnology)

- Project "Bacteria around the City", under the supervision of Professor Célia Manaia

2013 – 2016 Programa de Mentorado – Escola Superior de Biotecnologia (Mentorship Programme – Faculty of Biotechnology)

- Mentorship Programme under the supervision of the Alumnus José Carlos Pereira

2014 – 2015 Jornadas de Biotecnologia – Escola Superior de Biotecnologia (Journeys of Biotechnology – Faculty of Biotechnology)

- Treasurer of the Organising Committee
- BSc Representative of the Organising Committee

Technical Skills

Programming Languages	• Python • MATLAB • JavaScript • C/C++ • HTML • CSS
Programming Frameworks	• Bootstrap • Wordpress • Django
Technologies	• Docker

Personal Skills

Languages Known	• Portuguese: Reading (Native), Writing (Native), Speaking (Native) • English: Reading (Excellent), Writing (Excellent), Speaking (Excellent) • French: Reading (Fair), Writing (Fair), Speaking (Fair) • Spanish: Reading (Fair), Writing (Fair), Speaking (Fair)

Publications

Articles in International Journals and Conference Proceedings

1. Leonor Fernandes, Tiago Gonçalves, João Matos, Luis Filipe Nakayama, and Jaime S. Cardoso. Disentanglement and Assessment of Shortcuts in Ophthalmological Retinal Imaging Exams, 2025
2. Miguel M Romariz, Tiago F Gonçalves, Eduard Bonci, Hélder Oliveira, Carlos Mavioso, Maria J Cardoso, Jaime Cardoso, Tiago Gonçalves, and Eduard Alexandru Bonci. BreLoAI-A Scalable Web Application for Breast Cancer Locoregional Treatment Approaches. Cureus Journal of Computer Science, 2(1), 2025
3. Pedro Sousa, Diogo Campas, João Andrade, Pedro Pereira, Tiago Gonçalves, Luís F. Teixeira, Tania Pereira, and Hélder P. Oliveira. Enhancing Medical Image Analysis: A Pipeline Combining Synthetic Image Generation and Super-Resolution. In Nuno Gonçalves, Hélder P. Oliveira, and Joan Andreu Sánchez, editors, Pattern Recognition and Image Analysis, pages 122–133, Cham, 2026. Springer Nature Switzerland
4. Leonardo Capozzi, Leonardo Ferreira, Tiago Gonçalves, Ana Rebelo, Jaime S. Cardoso, and Ana F. Sequeira. Deciphering the Silent Signals: Unveiling Frequency Importance for Wi-Fi-Based Human Pose Estimation with Explainability. In Nuno Gonçalves, Hélder P. Oliveira, and Joan Andreu Sánchez, editors, Pattern Recognition and Image Analysis, pages 285–296, Cham, 2026. Springer Nature Switzerland
5. Carolina Albuquerque, Pedro C. Neto, Tiago Gonçalves, and Ana F. Sequeira. An Integrated and User-Friendly Platform for the Deployment of Explainable Artificial Intelligence Methods Applied to Face Recognition. In Abbas Moallem, editor, HCI for Cybersecurity, Privacy and Trust, pages 3–22, Cham, 2025. Springer Nature Switzerland
6. Tiago Gonçalves, Anna Hedström, Aurélie Pahud de Mortanges, Xiaoxiao Li, Henning Müller, Jaime S. Cardoso, and Mauricio Reyes. Chapter 15 - Interpretable AI for medical image analysis: methods, evaluation, and clinical considerations. In Marco Lorenzi and Maria A. Zuluaga, editors, Trustworthy AI in Medical Imaging, The MICCAI Society book Series, pages 315–346. Academic Press, 2025
7. Maria Miguel Beirão, João Matos, Tiago Gonçalves, Camila Kase, Luis Filipe Nakayama, Denise de Freitas, and Jaime S. Cardoso. Classification of Keratitis from Eye Corneal Photographs using Deep Learning. In 2024 IEEE International Conference on Bioinformatics and Biomedicine (BIBM), pages 3060–3065, 2024
8. Margarida Vieira, Tiago Gonçalves, Wilson Silva, and Ana F. Sequeira. An End-to-End Framework to Classify and Generate Privacy-Preserving Explanations in Pornography Detection. In 2024 International Conference of the Biometrics Special Interest Group (BIOSIG), pages 1–6, 2024
9. Inês Martins, João Matos, Tiago Gonçalves, Leo A. Celi, An-Kwok Ian Wong, and Jaime S. Cardoso. Evaluating the Impact of Pulse Oximetry Bias in Machine Learning Under Counterfactual Thinking. In Shandong Wu, Behrouz Shabestari, and Lei Xing, editors, Applications of Medical Artificial Intelligence, pages 221–230, Cham, 2025. Springer Nature Switzerland
10. Mohammad Hossein Zolfagharnasab, Nuno Freitas, Tiago Goncalves, Eduard Bonci, Carlos Mavioso, Maria J. Cardoso, Helder P. Oliveira, and Jaime S. Cardoso. Predicting Aesthetic Outcomes in Breast Cancer Surgery: A Multimodal Retrieval Approach. In Proceedings of the Deep Breast Workshop on AI and Imaging for Diagnostic and Treatment Challenges in Breast Care (in MICCAI 2024), 2024

Articles in International Journals and Conference Proceedings (cont.)

11. Eduarda Caldeira, Pedro C. Neto, Tiago Gonçalves, Naser Damer, Ana F. Sequeira, and Jaime S. Cardoso. Disentangling Morphed Identities for Face Morphing Detection. Science Talks, 10:100331, 2024
12. Rio-Torto, Isabel and Gonçalves, Tiago and Cardoso, Jaime S. and Teixeira, Luís F. On the Suitability of B-cos Networks for the Medical Domain. In 2024 IEEE International Symposium on Biomedical Imaging (ISBI), pages 1–5, 2024
13. Tiago Gonçalves, Dagoberto Pulido-Arias, Julian Willett, Katharina V. Hoebel, Mason Cleveland, Syed Rakin Ahmed, Elizabeth Gerstner, Jayashree Kalpathy-Cramer, Jaime S. Cardoso, Christopher P. Bridge, and Albert E. Kim. Deep Learning-based Prediction of Breast Cancer Tumor and Immune Phenotypes from Histopathology, 2024
14. Pedro C. Neto, Rafael M. Mamede, Carolina Albuquerque, Tiago Gonçalves, and Ana F. Sequeira. Massively Annotated Datasets for Assessment of Synthetic and Real Data in Face Recognition, 2024
15. Eduarda Caldeira, Pedro C. Neto, Tiago Gonçalves, Naser Damer, Ana F. Sequeira, and Jaime S. Cardoso. Unveiling the Two-Faced Truth: Disentangling Morphed Identities for Face Morphing Detection. In 2023 31st European Signal Processing Conference (EUSIPCO), pages 955–959, 2023
16. Orit Kaidar-Person, Marilia Antunes, Jaime S. Cardoso, Oriana Ciani, Helena Cruz, Rosa Di Micco, Oreste D. Gentilini, Tiago Gonçalves, Pedro Gouveia, Jörg Heil, Pawel Kabata, Daniela Lopes, Marta Martinho, Henrique Martins, Carlos Mavioso, Martin Mika, Helena Montenegro, Helder P. Oliveira, André Pfob, Nicole Rotmensz, Timo Schinköthe, Giovani Silva, Rosana Tarricone, Maria-Joao Cardoso, and on behalf of the CINDERELLA Consortium. Evaluating the ability of an artificial-intelligence cloud-based platform designed to provide information prior to locoregional therapy for breast cancer in improving patient's satisfaction with therapy: The CINDERELLA trial. PLOS ONE, 18(8):1–12, 08 2023
17. Pedro Serrano e Silva, Ricardo Cruz, A. S. M. Shihavuddin, and Tiago Gonçalves. Interpretability-Guided Human Feedback During Neural Network Training. In Antonio Pertusa, Antonio Javier Gallego, Joan Andreu Sánchez, and Inês Domingues, editors, Pattern Recognition and Image Analysis, pages 276–287, Cham, 2023. Springer Nature Switzerland
18. Diana Teixeira e Silva, Ricardo Cruz, Tiago Gonçalves, and Diogo Carneiro. Two-stage semantic segmentation in neural networks. In Wolfgang Osten, Dmitry P. Nikolaev, and Jianhong (Jessica) Zhou, editors, Fifteenth International Conference on Machine Vision (ICMV 2022), volume 12701, page 127010G. International Society for Optics and Photonics, SPIE, 2023
19. Eduardo Castro, Pedro M Ferreira, Ana Rebelo, Isabel Rio-Torto, Leonardo Capozzi, Mafalda Falcão Ferreira, Tiago Gonçalves, Tomé Albuquerque, Wilson Silva, Carolina Afonso, et al. Fill in the blank for fashion complementary outfit product Retrieval: VISUM summer school competition. Machine Vision and Applications, 34(1):16, 2023
20. Ricardo Cruz, Diana Teixeira e Silva, Tiago Gonçalves, Diogo Carneiro, and Jaime S. Cardoso. Two-Stage Framework for Faster Semantic Segmentation. Sensors, 23(6), 2023
21. Helena Montenegro, Pedro Neto, Cristiano Patrício, Isabel Rio-Torto, Tiago Gonçalves, and Luís F Teixeira. Evaluating Privacy on Synthetic Images Generated using GANs: Contributions of the VCMI Team to ImageCLEFmedical GANs 2023. Challenge, page 8, 2023
22. Isabel Rio-Torto, Cristiano Patrício, Helena Montenegro, Tiago Gonçalves, and Jaime S Cardoso. Detecting concepts and generating captions from medical images: Contributions of the VCMI team to Image-CLEFmedical caption 2023. In CLEF2023 Working Notes, CEUR Workshop Proceedings, CEUR-WS. org, Thessaloniki, Greece, 2023
23. Wilson Silva, Tiago Gonçalves, Kirsi Härmä, Erich Schröder, Verena Carola Obmann, María Cecilia Barroso, Alexander Poellinger, Mauricio Reyes, and Jaime S Cardoso. Computer-aided diagnosis through medical image retrieval in radiology. Scientific reports, 12(1):20732, 2022

Articles in International Journals and Conference Proceedings (cont.)

24. Marco Huber, Fadi Boutros, Anh Thi Luu, Kiran Raja, Raghavendra Ramachandra, Naser Damer, Pedro C. Neto, Tiago Gonçalves, Ana F. Sequeira, Jaime S. Cardoso, João Tremoço, Miguel Lourenço, Sergio Serra, Eduardo Cermeño, Marija Ivanovska, Borut Batagelj, Andrej Kronovšek, Peter Peer, and Vitomir Štruc. SYN-MAD 2022: Competition on Face Morphing Attack Detection Based on Privacy-aware Synthetic Training Data. In 2022 IEEE International Joint Conference on Biometrics (IJCB), pages 1–10, 2022
25. Pedro C. Neto, Tiago Gonçalves, Marco Huber, Naser Damer, Ana F. Sequeira, and Jaime S. Cardoso. OrthoMAD: Morphing Attack Detection Through Orthogonal Identity Disentanglement. In 2022 International Conference of the Biometrics Special Interest Group (BIOSIG), pages 1–5, 2022
26. Tiago Gonçalves, Isabel Rio-Torto, Luís F. Teixeira, and Jaime S. Cardoso. A Survey on Attention Mechanisms for Medical Applications: Are We Moving Toward Better Algorithms? IEEE Access, 10:98909–98935, 2022
27. Pedro C. Neto, Tiago Gonçalves, João Ribeiro Pinto, Wilson Silva, Ana F. Sequeira, Arun Ross, and Jaime S. Cardoso. Causality-Inspired Taxonomy for Explainable Artificial Intelligence, 2024
28. Isabel Rio-Torto, Cristiano Patrício, Helena Montenegro, and Tiago Gonçalves. Detecting Concepts and Generating Captions from Medical Images: Contributions of the VCMI Team to ImageCLEFmedical 2022 Caption, 2022
29. Paulo Maia, Joana Morgado, Tiago Gonçalves, and Tomé Albuquerque. Applying Machine Learning for Traffic Forecasting in Porto, Portugal. In Machine Learning and Principles and Practice of Knowledge Discovery in Databases, pages 299–308, Cham, 2021. Springer International Publishing
30. Ana F. Sequeira, Tiago Gonçalves, Wilson Silva, João Ribeiro Pinto, and Jaime S. Cardoso. An exploratory study of interpretability for face presentation attack detection. IET Biometrics, 10(4):441–455, 2021
31. João Ribeiro Pinto, Tiago Gonçalves, Carolina Pinto, Luís Sanhudo, Joaquim Fonseca, Filipe Gonçalves, Pedro Carvalho, and Jaime S. Cardoso. Audiovisual Classification of Group Emotion Valence Using Activity Recognition Networks. In 2020 IEEE 4th International Conference on Image Processing, Applications and Systems (IPAS), pages 114–119, 2020
32. Tiago Gonçalves, Wilson Silva, Maria J. Cardoso, and Jaime S. Cardoso. Deep Image Segmentation for Breast Keypoint Detection. Proceedings, 54(1), 2020
33. Sara P. Oliveira, João Ribeiro Pinto, Tiago Gonçalves, Rita Canas-Marques, Maria-João Cardoso, Hélder P. Oliveira, and Jaime S. Cardoso. Weakly-Supervised Classification of HER2 Expression in Breast Cancer Haematoxylin and Eosin Stained Slides. Applied Sciences, 10(14), 2020
34. Tiago Gonçalves, Wilson Silva, Maria J Cardoso, and Jaime S Cardoso. A novel approach to keypoint detection for the aesthetic evaluation of breast cancer surgery outcomes. Health and Technology, 10:891–903, 2020
35. Ana F. Sequeira, Wilson Silva, João Ribeiro Pinto, Tiago Gonçalves, and Jaime S. Cardoso. Interpretable Biometrics: Should We Rethink How Presentation Attack Detection is Evaluated? In 2020 8th International Workshop on Biometrics and Forensics (IWBF), pages 1–6, 2020
36. Tiago Gonçalves, Wilson Silva, and Jaime Cardoso. Deep Aesthetic Assessment of Breast Cancer Surgery Outcomes. In Jorge Henriques, Nuno Neves, and Paulo de Carvalho, editors, XV Mediterranean Conference on Medical and Biological Engineering and Computing – MEDICON 2019, pages 1967–1983, Cham, 2020. Springer International Publishing

Abstracts in International Journals and Conference Proceedings

1. André Pfob, Eduard-Alexandru Bonci, Marília Antunes, Martin Mika, Maciej Bobowicz, Ludovica Borsoi, Jaime S. Cardoso, Oriana Ciani, Helena Cruz, Rosa Di Micco, Marcin Ekman, Oreste Gentilini, Tiago Gonçalves, Pedro Gouveia, Jörg Heil, Pawel Kabata, Orit Kaidar-Person, Elisabetta Listorti, Henrique Martins, Carlos Mavioso, Hélder P. Oliveira, André Pfob, Miguel Romariz, Natalie Romem, Giovani Silva, Timo Schinköthe, and CINDERELLA Consortium Cardoso, Maria-Joao. Abstract P2-04-24: CINDERELLA Clinical Trial (NCT05196269): initial Insights into Patient Engagement with an Artificial Intelligence-Based Healthcare Application for Enhancing Breast Cancer Locoregional Treatment Decisions. Clinical Cancer Research, 31(12_Supplement):P2–04–24–P2–04–24, 06 2025
2. Rebecca Henderson, Dagoberto Pulido-Arias, Joraly Lormil, Christophe Millien, Marie Djenane Jose, Gabriel Flambert, Jean Bontemps, Emmanuel Georges, Tiago Gonçalves, Elizabeth R. Gerstner, Jayashree Kalpathy-Cramer, Ali Brown, Kenneth Landgraf, Christopher Bridge, Dan Milner, Azin Mashayekhi, Jane Brock, and Albert E. Kim. Enhancing precision oncology for Haitian breast cancer patients through deep learning-enabled computational pathology tools. Journal of Clinical Oncology, 43(16_suppl):1080–1080, 2025. PMID:
3. Dagoberto Pulido Arias, Rebecca Henderson, Gabriel Flambert, Michael Mathelier, Maisha Corrielus, Tiago Gonçalves, Elizabeth Gerstner, Kenneth Landgraf, Jose Jeronimo, Philip Castle, et al. 215 Enhancing Precision Oncology for Haitian Breast Cancer Patients Using Deep Learning-Enabled Histopathology Analysis. Laboratory Investigation, 105(3), 2025
4. Eduard-Alexandru Bonci, M. Antunes, Maciej Bobowicz, Ludovica Borsoi, Oriana Ciani, Helena Cruz, Rosa Di Micco, Marcin Ekman, O. Gentilini, M. Romariz, Tiago Gonçalves, Pedro Gouveia, J. Heil, Paweł Kabata, Orit Kaidar-Person, H. Martins, Carlos Mavioso, M. Mika, H.P. Oliveira, and Maria Cardoso. P431: CINDERELLA Clinical Trial (NCT05196269): Patient Engagement with an AI-based Healthcare Application for Enhancing Breast Cancer Locoregional Treatment Decisions - Preliminary Insights. The Breast, 80:104244, 02 2025
5. T Schinköthe, EA Bonci, KP Orit, H Cruz, R Di Micco, O Gentilini, J Heil, P Kabata, M Romariz, T Gonçalves, et al. The CINDERELLA APProach: Future Concepts for Patient Empowerment in Breast Cancer Treatment with Artificial Intelligence-Driven Healthcare Platform. European Journal of Cancer, 200, 2024
6. Eduard-Alexandru Bonci, Orit Kaidar-Person, Marilia Antunes, Oriana Ciani, Helena Cruz, Rosa Di Micco, Oreste Gentilini, Pedro Gouveia, Jörg Heil, Pawel Kabata, et al. CINDERELLA Trial: validation of an artificial-intelligence cloud-based platform to improve the shared decision-making process and outcomes in breast cancer patients proposed for locoregional treatment. European Journal of Surgical Oncology, 50(2), 2024
7. A Pfob, EA Bonci, O Kaidar-Person, M Antunes, O Ciani, H Cruz, R Di Micco, OD Gentilini, J Heil, P Kabata, et al. 108TiP CINDERELLA clinical trial: Using artificial intelligence-driven healthcare to enhance breast cancer locoregional treatment decisions. ESMO Open, 9, 2024
8. Eduard-Alexandru Bonci, Orit Kaidar-Person, Marília Antunes, Oriana Ciani, Helena Cruz, Rosa Di Micco, Oreste Davide Gentilini, Nicole Rotmensz, Pedro Gouveia, Jörg Heil, Pawel Kabata, Nuno Freitas, Tiago Gonçalves, Miguel Romariz, Helena Montenegro, Hélder P. Oliveira, Jaime S. Cardoso, Henrique Martins, Daniela Lopes, Marta Martinho, Ludovica Borsoi, Elisabetta Listorti, Carlos Mavioso, Martin Mika, André Pfob, Timo Schinköthe, Giovani Silva, and Maria-Joao Cardoso. Abstract PO3-19-11: CINDERELLA Clinical Trial (NCT05196269): using artificial intelligence-driven healthcare to enhance breast cancer locoregional treatment decisions. Cancer Research, 84(9_Supplement):PO3–19–11–PO3–19–11, 05 2024
9. Eduard-Alexandru Bonci, Orit Kaidar-Person, Marilia Antunes, Oriana Ciani, Helena Cruz, Rosa Di Micco, Oreste Davide Gentilini, Jörg Heil, Pawel Kabata, Miguel Romariz, Tiago Gonçalves, Henrique Martins, Ludovica Borsoi, Martin Mika, André Pfob, Natalie Romem, Timo Schinkoethe, Giovani Silva, Maciej Bobowicz, Maria-Joao Cardoso, and null null. CINDERELLA clinical trial: Using artificial intelligence-driven healthcare to enhance breast cancer locoregional treatment decisions. Journal of Clinical Oncology, 42(16_suppl):TPS621–TPS621, 2024. PMID:

Abstracts in International Journals and Conference Proceedings (cont.)

10. Shreyas Bhat Brahmavar and Tiago Goncalves and Tobias R. Bodenmann and Syed Rakin Ahmed and Jay B. Patel and Praveer Singh and Katharina V. Hoebel and Mason C. Cleveland and Felix Dorfner and Dagoberto Pulido-Arias and Philipp Hahnel and Jaime S. Cardoso and Jayashree Kalpathy-Cramer and Priscilla Brastianos and Elizabeth Gerstner and Albert E. Kim and Christopher P. Bridge. Deep Learning-based Non-Invasive Molecular Profiling of Brain Metastases from MR Imaging, 2024
11. Ines Martins, Joao Matos, Tiago Goncalves, Leo Anthony Celi, A. Ian Wong, and Jaime S. Cardoso. Thermometry Bias in Critical Care and Impact in Downstream Machine Learning Tasks, 2024
12. Maria Beirao, Joao Matos, Tiago Goncalves, Camila Kase, Luis Filipe Nakayama, and Jaime S. Cardoso. A machine learning system for keratitis diagnosis from cornea images, 2024
13. Dagoberto Pulido Arias, Tiago Goncalves, Jayashree Kalpathy-Cramer, Elizabeth Gerstner, Jaime S. Cardoso, Albert Kim, and Christopher P. Bridge. Dissecting the Impact of Data Augmentation on Whole Slide Image Classification, 2024

Articles in National Journals and Conference Proceedings

1. Tiago Gonçalves, Leonardo Capozzi, Ana Rebelo, and Jaime S. Cardoso. Deep Image Segmentation based on Mutual Information: A Study. In 30th Portuguese Conference in Pattern Recognition (RECPAD), Covilhã, Portugal, 2024
2. Leonardo Capozzi, Tiago Gonçalves, Jaime S. Cardoso, and Ana Rebelo. Towards Fingerprint Presentation Attack Generation using Generative Adversarial Networks. In 30th Portuguese Conference in Pattern Recognition (RECPAD), Covilhã, Portugal, 2024
3. Mohammad Hossein Zolfagharnasab, Nuno Freitas, Tiago Gonçalves, Eduard Bonci, Carlos Mavioso, Maria J. Cardoso, Hélder P. Oliveira, and Jaime S. Cardoso. Multimodal Deep Learning for Predicting Aesthetic Outcomes in Breast Cancer Surgery. In 30th Portuguese Conference in Pattern Recognition (RECPAD), Covilhã, Portugal, 2024
4. Tiago Gonçalves, Leonardo Capozzi, Ana Rebelo, and Jaime S. Cardoso. Optimisation of Deep Neural Networks using a Genetic Algorithm: A Comparative Study. In 29th Portuguese Conference in Pattern Recognition (RECPAD), Coimbra, Portugal, 2023
5. Leonardo Capozzi, Tiago Gonçalves, Jaime S. Cardoso, and Ana Rebelo. Analysis of Neurons' Information in Deep Spiking Neural Networks using Information Theory. In 29th Portuguese Conference in Pattern Recognition (RECPAD), Coimbra, Portugal, 2023
6. Isabel Rio-Torto, Cristiano Patrício, Helena Montenegro, Tiago Gonçalves, and Jaime S. Cardoso. Detecting Concepts and Generating Captions from Medical Images. In 29th Portuguese Conference in Pattern Recognition (RECPAD), Coimbra, Portugal, 2023
7. Helena Montenegro, Pedro Neto, Cristiano Patrício, Isabel Rio-Torto, Tiago Gonçalves, and Luís F. Teixeira. Evaluating Privacy on Synthetic Images Obtained using Deep Generative Models. In 29th Portuguese Conference in Pattern Recognition (RECPAD), Coimbra, Portugal, 2023
8. Eduarda Caldeira, Eduardo Meca Castro, and Tiago Gonçalves. From Easy to Hard: A Curriculum Learning Approach for Breast Lesion Classification. In 28th Portuguese Conference in Pattern Recognition (RECPAD), Leiria, Portugal, 2022
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