

Full Publication List

Antônio Horta Ribeiro

- Samples of my work on **machine learning**: ICLR (2026) [C1], NEURIPS (2025) [C2], ICML (2025) [C5], AISTATS (2025) [C6], NEURIPS (2024) [C8], ICML (2024) [C10], NEURIPS (2023) [C11], AISTATS (2020) [C18].
- Samples of my work on **system identification** and **signal processing**: AUTOMATICA (2025) [J9], ICASSP (2025) [C7], IEEE TRANSACTIONS ON SIGNAL PROCESSING (2023) [J19], ICASSP (2021) [C14], AUTOMATICA (2020) [J34].
- Samples of my work on **medical applications**: NPJ DIGITAL MEDICINE (2025) [J3], NPJ DIGITAL MEDICINE (2025) [J8], NPJ DIGITAL MEDICINE (2024) [J15], IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING (2023) [J20], CIRCULATION (2023) [J22], NATURE COMMUNICATIONS (2022) [J28], NATURE COMMUNICATIONS (2021) [J30], NATURE COMMUNICATIONS (2020) [J35].

Journal articles

- [J1] X. Gu, W. Tang, J. Han, V. Sangha, F. Liu, S. N. Gowda, **A. H. Ribeiro**, P. Schwab, K. Branson, L. Clifton, A. L. P. Ribeiro, Z. Liu, and D. A. Clifton. “*Cardiac health assessment across scenarios and devices using a multimodal foundation model pretrained on data from 1.7 million individuals*”
In: NATURE MACHINE INTELLIGENCE 8.2 (2026), pp. 220–233.
DOI: 10.1038/s42256-026-01180-5.
Cover of the february issue
- [J2] E. Zvuloni, G. Gagliardi, A. H. Ribeiro, A. L. P. Ribeiro, M. De Vos, and J. A. Behar. “*A multi-source domain fine-tuning framework for deep generalization performance in physiological time series analysis*”
In: MACHINE LEARNING: HEALTH (2025).
DOI: 10.1088/3049-477X/ae2ac5.
- [J3] K. Patlatzoglou, L. Pastika, J. Barker, E. Sieliwonczyk, G. R. Khattak, B. Zeidaabadi, **A. H. Ribeiro**, J. S. Ware, N. S. Peters, A. L. P. Ribeiro, D. B. Kramer, J. W. Waks, A. Sau, and F. S. Ng. “*The cost of explainability in artificial intelligence-enhanced electrocardiogram models*”
In: NPJ DIGITAL MEDICINE 8.1 (2025), p. 747.
DOI: 10.1038/s41746-025-02122-y.
- [J4] L. C. Brant, **A. H. Ribeiro**, O. B. Eromosele, M. M. Pinto-Filho, S. M. Barreto, B. B. Duncan, M. G. Larson, E. J. Benjamin, A. L. Ribeiro, and H. Lin. “*Prediction of Atrial Fibrillation From the ECG in the Community Using Deep Learning: A Multinational Study*”
In: CIRCULATION: ARRHYTHMIA AND ELECTROPHYSIOLOGY (2025).
DOI: 10.1161/CIRCEP.125.013734.
- [J5] K. Sumwiza, **A. H. Ribeiro**, G. Rushingabigwi, P. Bakunzibake, and C. Twizere. “*Evaluation of AI ECG age in the prediction of cardiovascular diseases and risk factors: Exploratory data analysis*”
In: JOURNAL OF ELECTROCARDIOLOGY 93 (2025), p. 154123.
DOI: 10.1016/j.jelectrocard.2025.154123.
- [J6] N. Rajabi, I. Zanettin, **A. H. Ribeiro**, M. Vasco, M. Björkman, J. N. Lundström, and D. Kragic. “*Exploring the feasibility of olfactory brain–computer interfaces*”
In: SCIENTIFIC REPORTS 15.1 (2025), pp. 1–13.
DOI: 10.1038/s41598-025-01488-z.
- [J7] A. Sau, E. Sieliwonczyk, K. Patlatzoglou, L. Pastika, K. A. McGurk, **A. H. Ribeiro**, A. L. P. Ribeiro, J. E. Ho, N. S. Peters, J. S. Ware, U. Tayal, D. B. Kramer, J. W. Waks, and F. S. Ng. “*Artificial intelligence-enhanced electrocardiography for the identification of a sex-related cardiovascular risk continuum: a retrospective cohort study*”
In: THE LANCET DIGITAL HEALTH 7.3 (2025), e184–e194.
DOI: 10.1016/j.landig.2024.12.003.
- [J8] P. Hempel, **A. H. Ribeiro**, M. Vollmer, T. Bender, M. Dörr, D. Krefting, and N. Spicher. “*Explainable AI associates ECG aging effects with increased cardiovascular risk in a longitudinal population study*”
In: NPJ DIGITAL MEDICINE 8.1 (2025).
DOI: 10.1038/s41746-024-01428-7.

- [J9] G. Pillonetto, A. Aravkin, D. Gedon, L. Ljung, **A. H. Ribeiro**, and T. B. Schön. “*Deep networks for system identification: a Survey*”
In: AUTOMATICA (2025).
DOI: 10.1016/j.automatica.2024.111907.
- [J10] **A. H. Ribeiro** and A. L. P. Ribeiro. “*AI-ECG and prediction of new atrial fibrillation: when the heart tells the age*”
In: EUROPEAN HEART JOURNAL (2024), ehae809.
DOI: 10.1093/eurheartj/ehae809.
- [J11] A. Sau, B. Zeidaabadi, K. Patlatzoglou, L. Pastika, **A. H. Ribeiro**, E. Sabino, N. S. Peters, A. L. P. Ribeiro, D. B. Kramer, J. W. Waks, and F. S. Ng. “*A comparison of artificial intelligence-enhanced electrocardiography approaches for the prediction of time to mortality using electrocardiogram images*”
In: EUROPEAN HEART JOURNAL - DIGITAL HEALTH 6.2 (2025), pp. 180–189.
DOI: 10.1093/ehjdh/ztae090.
- [J12] K. A. McGurk, M. Qiao, S. L. Zheng, A. Sau, A. Henry, A. L. P. Ribeiro, **A. H. Ribeiro**, F. S. Ng, R. T. Lumbers, W. Bai, J. S. Ware, and D. P. O’Regan. “*Genetic and phenotypic architecture of human myocardial trabeculation*”
In: NATURE CARDIOVASCULAR RESEARCH (2024).
DOI: 10.1038/s44161-024-00564-3.
- [J13] A. Sau, **A. H. Ribeiro**, K. A. McGurk, L. Pastika, N. Bajaj, M. Gurnani, E. Sieliwonczyk, K. Patlatzoglou, M. Ardissino, J. Y. Chen, H. Wu, X. Shi, K. Hnatkova, S. L. Zheng, A. Britton, M. Shipley, I. Andršová, T. Novotný, E. C. Sabino, L. Giatti, S. M. Barreto, J. W. Waks, D. B. Kramer, D. Mandic, N. S. Peters, D. P. O’Regan, M. Malik, J. S. Ware, A. L. P. Ribeiro, and F. S. Ng. “*Prognostic Significance and Associations of Neural Network-Derived Electrocardiographic Features*”
In: CIRCULATION: CARDIOVASCULAR QUALITY AND OUTCOMES 0.0 (2024).
DOI: 10.1161/CIRCOUTCOMES.123.010602.
- [J14] A. Sau, L. Pastika, E. Sieliwonczyk, K. Patlatzoglou, A. H. Ribeiro, K. A. McGurk, B. Zeidaabadi, H. Zhang, K. Macierzanka, D. Mandic, E. Sabino, L. Giatti, S. M. Barreto, L. d. V. Camelo, I. Tzoulaki, D. P. O’Regan, N. S. Peters, J. S. Ware, A. L. P. Ribeiro, D. B. Kramer, J. W. Waks, and F. S. Ng. “*Artificial intelligence-enabled electrocardiogram for mortality and cardiovascular risk estimation: a model development and validation study*”
In: THE LANCET DIGITAL HEALTH 6.11 (2024), e791–e802.
DOI: 10.1016/S2589-7500(24)00172-9.
- [J15] L. Pastika, A. Sau, K. Patlatzoglou, E. Sieliwonczyk, **A. H. Ribeiro**, K. A. McGurk, W. R. Scott, J. S. Ware, A. L. P. Ribeiro, D. B. Kramer, J. W. Waks, and F. S. Ng. “*Artificial intelligence-enabled electrocardiogram for mortality and cardiovascular risk estimation: An actionable, explainable and biologically plausible platform*”
In: NPJ DIGITAL MEDICINE 7.167 (2024).
DOI: <https://doi.org/10.1038/s41746-024-01170-0>.
- [J16] P. von Bachmann, D. Gedon, F. K. Gustafsson, **A. H. Ribeiro**, E. Lampa, S. Gustafsson, J. Sundström, and T. B. Schön. “*Evaluating regression and probabilistic methods for ECG-based electrolyte prediction*”
In: SCIENTIFIC REPORTS 14.1 (2024), p. 15273.
DOI: 10.1038/s41598-024-65223-w.
- [J17] Z. Huang, S. MacLachlan, L. Yu, L. F. Herbozo Contreras, N. D. Truong, A. H. Ribeiro, and O. Kavehei. “*Generalization challenges in electrocardiogram deep learning: insights from dataset characteristics and attention mechanism*”
In: FUTURE CARDIOLOGY 0.0 (2024).
DOI: 10.1080/14796678.2024.2354082.
- [J18] L. Lu, T. Zhu, **A. H. Ribeiro**, L. Clifton, E. Zhao, J. Zhou, A. L. P. Ribeiro, Y.-T. Zhang, and D. A. Clifton. “*Decoding 2.3 Million ECGs: Interpretable Deep Learning for Advancing Cardiovascular Diagnosis and Mortality Risk Stratification*”
In: EUROPEAN HEART JOURNAL - DIGITAL HEALTH (2024), ztae014.
DOI: 10.1093/ehjdh/ztae014.
- [J19] **A. H. Ribeiro** and T. B. Schön. “*Overparameterized Linear Regression under Adversarial Attacks*”
In: IEEE TRANSACTIONS ON SIGNAL PROCESSING (2023).
DOI: 10.1109/TSP.2023.3246228.

- [J20] E. Zvuloni, J. Read, **A. H. Ribeiro**, A. L. P. Ribeiro, and J. A. Behar. “*On Merging Feature Engineering and Deep Learning for Diagnosis, Risk-Prediction and Age Estimation Based on the 12-Lead ECG*”
In: IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING (2023).
DOI: 10.1109/TBME.2023.3239527.
- [J21] T. Habineza, **A. H. Ribeiro**, D. Gedon, J. A. Behar, A. L. P. Ribeiro, and T. B. Schön. “*End-to-end Risk Prediction of Atrial Fibrillation from the 12-Lead ECG by Deep Neural Networks*”
In: JOURNAL OF ELECTROCARDIOLOGY (2023).
DOI: 10.1016/j.jelectrocard.2023.09.011.
- [J22] V. Sangha, A. A. Nargesi, L. S. Dhingra, B. J. Mortazavi, **A. H. Ribeiro**, C. A. Brandt, E. J. Miller, A. L. P. Ribeiro, E. J. Velazquez, H. M. Krumholz, and R. Khera. “*Detection of Left Ventricular Systolic Dysfunction from Electrocardiographic Images*”
In: CIRCULATION (2023).
DOI: 10.1161/CIRCULATIONAHA.122.062646.
- [J23] T. Lindow, M. Maanja, E. B. Schelbert, **A. H. Ribeiro**, A. L. P. Ribeiro, T. T. Schlegel, and M. Ugander. “*Heart age gap by explainable advanced electrocardiography is associated with cardiovascular risk factors and survival*”
In: EUROPEAN HEART JOURNAL - DIGITAL HEALTH (2023).
DOI: 10.1093/ehjdh/ztad045.
- [J24] L. C. C. Brant, **A. H. Ribeiro**, M. M. Pinto-Filho, J. Kornej, S. R. Preis, B. Eromosele, J. W. Magnani, J. M. Murabito, M. G. Larson, E. J. Benjamin, A. L. P. Ribeiro, and H. Lin. “*Electrocardiographic Age Predicts Cardiovascular Events in Community: The Framingham Heart Study*”
In: CIRCULATION: CARDIOVASCULAR QUALITY AND OUTCOMES (2023).
DOI: 10.1161/CIRCOUTCOMES.122.009821.
- [J25] D. Gedon, **A. H. Ribeiro**, N. Wahlström, and T. B. Schön. “*Invertible Kernel PCA with Random Fourier Features*”
In: IEEE SIGNAL PROCESSING LETTERS (2023).
DOI: 10.1109/LSP.2023.3275499.
- [J26] C. Zhang, X. Miao, B. Wang, **A. H. Ribeiro**, L. Brant, A. L. P. Ribeiro, and H. Lin. “*Association of lifestyle with deep-learning based ECG-age*”
In: FRONTIERS IN CARDIOVASCULAR MEDICINE (2023).
DOI: 10.3389/fcvm.2023.1160091.
- [J27] S. Gustafsson, D. Gedon, E. Lampa, **A. H. Ribeiro**, M. J. Holzmann, T. B. Schön, and J. Sundström. “*Development and validation of deep learning ECG-based prediction of myocardial infarction in emergency department patients*”
In: SCIENTIFIC REPORTS 12.1 (2022), p. 19615.
DOI: 10.1038/s41598-022-24254-x.
Equal contribution: S. Gustafsson and D. Gedon
- [J28] V. Sangha, B. J. Mortazavi, A. D. Haimovich, **A. H. Ribeiro**, C. A. Brandt, D. L. Jacoby, W. L. Schulz, H. M. Krumholz, A. L. P. Ribeiro, and R. Khera. “*Automated multilabel diagnosis on electrocardiographic images and signals*”
In: NATURE COMMUNICATIONS 13 (2022), p. 1583.
DOI: 10.1038/s41467-022-29153-3.
- [J29] G. M. M. Paixão, E. M. Lima, P. R. Gomes, D. M. Oliveira, M. H. Ribeiro, J. S. Nascimento, **A. H. Ribeiro**, P. W. Macfarlane, and A. L. P. Ribeiro. “*Electrocardiographic Predictors of Mortality: Data from a Primary Care Tele-Electrocardiography Cohort of Brazilian Patients*”
In: HEARTS 2.4 (2021), pp. 449–458.
DOI: 10.3390/hearts2040035.
- [J30] E. M. Lima, **A. H. Ribeiro**, G. M. M. Paixão, M. H. Ribeiro, M. M. P. Filho, P. R. Gomes, D. M. Oliveira, E. C. Sabino, B. B. Duncan, L. Giatti, S. M. Barreto, W. Meira, T. B. Schön, and A. L. P. Ribeiro. “*Deep neural network estimated electrocardiographic-age as a mortality predictor*”
In: NATURE COMMUNICATIONS 12 (2021).
DOI: 10.1038/s41467-021-25351-7.
Equal contribution: E. M. Lima, A. H. Ribeiro, G. M. M. Paixao

- [J31] S. Biton, S. Gendelman, **A. H. Ribeiro**, G. Miana, C. Moreira, A. L. P. Ribeiro, and J. A. Behar. “*Atrial fibrillation risk prediction from the 12-lead ECG using digital biomarkers and deep representation learning*”
In: EUROPEAN HEART JOURNAL - DIGITAL HEALTH (2021).
DOI: 10.1093/ehjdh/ztab071.
- [J32] W. Meira Jr, A. L. P. Ribeiro, D. M. Oliveira, and **A. H. Ribeiro**. “*Contextualized Interpretable Machine Learning for Medical Diagnosis*”
In: COMMUNICATIONS OF THE ACM (2020).
DOI: 10.1145/3416965.
- [J33] G. M. M. Paixão, L. G. S. Silva, P. R. Gomes, E. M. Lima, M. P. F. Ferreira, D. M. Oliveira, M. H. Ribeiro, **A. H. Ribeiro**, J. S. Nascimento, J. A. Canazart, L. B. Ribeiro, E. J. Benjamin, P. W. Macfarlane, M. S. Marcolino, and A. L. Ribeiro. “*Evaluation of Mortality in Atrial Fibrillation: Clinical Outcomes in Digital Electrocardiography (CODE) Study*”
In: GLOBAL HEART 15.1 (2020).
DOI: 10.5334/gh.772.
- [J34] **A. H. Ribeiro**, K. Tiels, J. Umenberger, T. B. Schön, and L. A. Aguirre. “*On the smoothness of nonlinear system identification*”
In: AUTOMATICA 121 (2020), p. 109158.
DOI: 10.1016/j.automatica.2020.109158.
- [J35] **A. H. Ribeiro**, M. H. Ribeiro, G. M. M. Paixão, D. M. Oliveira, P. R. Gomes, J. A. Canazart, M. P. S. Ferreira, C. R. Andersson, P. W. Macfarlane, W. Meira Jr., T. B. Schön, and A. L. P. Ribeiro. “*Automatic diagnosis of the 12-lead ECG using a deep neural network*”
In: NATURE COMMUNICATIONS 11.1 (2020), p. 1760.
DOI: 10.1038/s41467-020-15432-4.
- [J36] P. Virtanen, R. Gommers, T. E. Oliphant, M. Haberland, T. Reddy, D. Cournapeau, E. Burovski, P. Peterson, W. Weckesser, J. Bright, S. J. van der Walt, M. Brett, J. Wilson, K. J. Millman, N. Mayorov, A. R. J. Nelson, E. Jones, R. Kern, E. Larson, C. J. Carey, Í. Polat, Y. Feng, E. W. Moore, J. VanderPlas, D. Laxalde, J. Perktold, R. Cimrman, I. Henriksen, E. A. Quintero, C. R. Harris, A. M. Archibald, **A. H. Ribeiro**, F. Pedregosa, P. van Mulbregt, and S. 1. Contributors. “*SciPy 1.0—Fundamental Algorithms for Scientific Computing in Python*”
In: NATURE METHODS 17.3 (2020), pp. 261–272.
DOI: 10.1038/s41592-019-0686-2.
- [J37] A. L. P. Ribeiro, G. M. M. Paixão, P. R. Gomes, M. H. Ribeiro, **A. H. Ribeiro**, J. A. Canazart, D. M. Oliveira, M. P. Ferreira, E. M. Lima, J. L. de Moraes, N. Castro, L. B. Ribeiro, and P. W. MacFarlane. “*Tele-electrocardiography and bigdata: The CODE (Clinical Outcomes in Digital Electrocardiography) study*”
In: JOURNAL OF ELECTROCARDIOLOGY (2019).
DOI: 10.1016/j.jelectrocard.2019.09.008.
- [J38] G. M. M. Paixão, E. M. Lima, P. R. Gomes, M. P. Ferreira, D. M. Oliveira, M. H. Ribeiro, **A. H. Ribeiro**, J. Nascimento, J. A. Canazart, G. Cardoso, L. B. Ribeiro, and A. L. P. Ribeiro. “*Evaluation of mortality in bundle branch block patients from an electronic cohort: Clinical Outcomes in Digital Electrocardiography (CODE) study*”
In: JOURNAL OF ELECTROCARDIOLOGY (2019).
DOI: 10.1016/j.jelectrocard.2019.09.004.
- [J39] **A. H. Ribeiro** and L. A. Aguirre. “*“Parallel Training Considered Harmful?”: Comparing series-parallel and parallel feedforward network training*”
In: NEUROCOMPUTING 316 (2018), pp. 222–231.
DOI: 10.1016/j.neucom.2018.07.071.

Conference papers

- [C1] M. Barsbey, **A. H. Ribeiro**, U. Şimşekli, and T. Birdal. “*On the Interaction of Compressibility and Adversarial Robustness*”
In: INTERNATIONAL CONFERENCE FOR LEARNING REPRESENTATIONS (ICLR) (2026).
DOI: 10.48550/arXiv.2507.17725.

- [C2] **A. H. Ribeiro**, D. Vävinggren, D. Zachariah, T. Schön, and F. Bach. “*Kernel Learning with Adversarial Features: Numerical Efficiency and Adaptive Regularization*”
In: ADVANCES IN NEURAL INFORMATION PROCESSING SYSTEMS (NEURIPS) (2025).
DOI: 10.48550/arXiv.2510.20883.
- [C3] M. A. Reyna, Z. Koscova, J. Pavlus, S. Saghafi, J. Weigle, A. Elola, S. Seyedi, K. Campbell, Q. Li, A. B. Rad, **A. H. Ribeiro**, A. L. P. Ribeiro, R. Sameni, and G. D. Clifford. “*Detection of Chagas Disease from the ECG: The George B. Moody PhysioNet Challenge 2025*”
In: COMPUTING IN CARDIOLOGY (CINC) (2025).
DOI: 10.48550/arXiv.2510.02202.
- [C4] G. R. Khattak, K. Patlatzoglou, Y. Liang, L. Pastika, B. Zeidaabadi, J. Barker, M. Gurnani, **A. H. Ribeiro**, J. Annis, A. L. P. Ribeiro, N. Peters, J. Ge, D. B. Kramer, J. W. Waks, E. Brittain, A. Sau, and F. S. Ng. “*Contrasting by Augmented Patient Electrocardiograms to Learn Representations for a Foundation Model*”
In: INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE IN MEDICINE 15735 (2025), pp. 202–206.
DOI: 10.1007/978-3-031-95841-0_38.
- [C5] N. Rajabi, **A. H. Ribeiro**, M. Vasco, F. Taleb, M. Björkman, and D. Kragic. “*Human-Aligned Image Models Improve Visual Decoding from the Brain*”
In: INTERNATIONAL CONFERENCE ON MACHINE LEARNING (ICML) (2025).
DOI: 10.48550/arXiv.2502.03081.
- [C6] **A. H. Ribeiro**, T. B. Schön, D. Zahariah, and F. Bach. “*Efficient Optimization Algorithms for Linear Adversarial Training*”
In: INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE AND STATISTICS (AISTATS) (2025).
DOI: 10.48550/arXiv.2410.12677.
- [C7] N. Rajabi, **A. H. Ribeiro**, M. Vasco, and D. Kragic. “*Deep learning amplified early stopping bias: Overestimating performance on small datasets*”
In: INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING (ICASSP) (2025).
DOI: 10.1109/ICASSP49660.2025.10890439.
- [C8] F. Taleb, M. Vasco, **A. H. Ribeiro**, M. Björkman, and D. Kragic. “*Can Transformers Smell Like Humans?*”
In: ADVANCES IN NEURAL INFORMATION PROCESSING SYSTEMS (NEURIPS) (2024).
DOI: 10.48550/arXiv.2411.03038.
Spotlight paper
- [C9] A. Eriksson, T. B. Schön, and A. H. Ribeiro. “*Transferability and Adversarial Training in Automatic Classification of the Electrocardiogram with Deep Learning*”
In: COMPUTING IN CARDIOLOGY (CINC) (2024).
DOI: 10.22489/CinC.2024.096.
- [C10] D. Gedon, **A. H. Ribeiro**, and T. B. Schön. “*No Double Descent in Principal Component Regression: A High-Dimensional Analysis*”
In: INTERNATIONAL CONFERENCE ON MACHINE LEARNING (ICML) (2024).
- [C11] **A. H. Ribeiro**, D. Zachariah, F. Bach, and T. B. Schön. “*Regularization properties of adversarially-trained linear regression*”
In: ADVANCES IN NEURAL INFORMATION PROCESSING SYSTEMS (NEURIPS) (2023).
DOI: 10.48550/arXiv.2310.10807.
Spotlight paper
- [C12] J. N. Hendriks, F. K. Gustafsson, **A. H. Ribeiro**, A. G. Wills, and T. B. Schön. “*Deep Energy-Based NARX Models*”
In: IFAC SYMPOSIUM ON SYSTEM IDENTIFICATION (SYSID) 54.7 (2021), pp. 505–510.
DOI: 10.1016/j.ifacol.2021.08.410.
- [C13] **A. H. Ribeiro**, J. N. Hendriks, A. G. Wills, and T. B. Schön. “*Beyond Occam’s Razor in System Identification: Double-Descent when Modeling Dynamics*”
In: IFAC SYMPOSIUM ON SYSTEM IDENTIFICATION (SYSID) 54 (2021), pp. 97–102.
DOI: 10.1016/j.ifacol.2021.08.341.
Young Author Award (Honorable Mention)

- [C14] **A. H. Ribeiro** and T. B. Schon. “*How convolutional neural networks deal with aliasing*”
In: IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING (ICASSP) (2021), pp. 2755–2759.
DOI: 10.1109/ICASSP39728.2021.9414627.
- [C15] D. Gedon, **A. H. Ribeiro**, N. Wahlström, and T. B. Schön. “*First Steps Towards Self-Supervised Pretraining of the 12-Lead ECG*”
In: COMPUTING IN CARDIOLOGY (CINC) 48 (2021), pp. 1–4.
DOI: 10.23919/CinC53138.2021.9662748.
- [C16] D. M. Oliveira, **A. H. Ribeiro**, J. A. O. Pedrosa, G. M. Paixao, A. L. P. Ribeiro, and W. Meira Jr. “*Explaining end-to-end ECG automated diagnosis using contextual features*”
In: EUROPEAN CONFERENCE ON MACHINE LEARNING AND PRINCIPLES AND PRACTICE OF KNOWLEDGE DISCOVERY IN DATABASES (ECML-PKDD) (2020).
DOI: 10.1007/978-3-030-67670-4_13.
- [C17] D. M. Oliveira, **A. H. Ribeiro**, J. A. O. Pedrosa, G. M. M. Paixao, A. L. Ribeiro, and W. M. Jr. “*Explaining black-box automated electrocardiogram classification to cardiologists*”
In: COMPUTING IN CARDIOLOGY (CINC) 47 (2020).
DOI: 10.22489/CinC.2020.452.
- [C18] **A. H. Ribeiro**, K. Tiels, L. A. Aguirre, and T. B. Schön. “*Beyond exploding and vanishing gradients: attractors and smoothness in the analysis of recurrent neural network training*”
In: INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE AND STATISTICS (AISTATS) 108 (2020), pp. 2370–2380.
DOI: 10.48550/arXiv.1906.08482.
- [C19] **A. H. Ribeiro**, D. Gedon, D. M. Teixeira, M. H. Ribeiro, A. L. P. Ribeiro, T. B. Schon, and W. M. Jr. “*Automatic 12-lead ECG classification using a convolutional network ensemble*”
In: COMPUTING IN CARDIOLOGY (CINC) (2020).
DOI: 10.22489/CinC.2020.130.
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