Curriculum vitae

Personalia

Name:	Richard Christian Hendriks
Address:	Anna van Burenstraat 12
	3136 CG Vlaardingen
Tel:	+31 (0)10 4601119/ +31 (0)644507157 (privat)
	+31 (0)15 2787191 (office)
Email:	R.C.Hendriks@tudelft.nl
Gender:	male
Birth date:	June 21, 1980
Nationality:	Dutch
Languages:	Dutch (native)
	English (CEF level: C2 - near native)
	Danish (basic)
	German (basic)
	French (basic)

Education

Feb. 2008	Ph. D. degree in Electrical Engineering (**cum laude**)
	Delft University of Technology, the Netherlands
	Supervisors: Dr. J. Jensen and Dr. ir. R. Heusdens
	Promotor: Prof. dr. ir. J. Biemond
	Title thesis: “Advances in DFT-Based Single-Microphone Speech Enhancement”
Sept. 1998 - June 2003	Electrical Engineering, Delft University of Technology, the Netherlands
Sept. 2003	M. Sc. degree in Electrical Engineering (**cum laude**)
	Supervisors: Dr. J. Jensen and Dr. ir. R. Heusdens
	Title thesis: “Residual Coding with LPC in the Perceptual Domain”
Sept. 2001	B. Sc. degree in Electrical Engineering
Aug. 1999	Propaedeutics Electrical Engineering (**cum laude**)
Sept. 1992 - June 1998	High school: pre-university education,
	S. G. Spieringshoek Schiedam, the Netherlands

Courses

April 2011	Course on ”Cochlear implantation in adults and children”
Dec. 2010	University Teaching Qualification
Oct. 2010 - Nov. 2010	Course ”Aansluiting VWO”
June 2010 - Oct. 2010	Course ”Promotor als coach”
March 2010	Course ”Toetsing en beoordeling van leerresultaten”
Feb. 2006 - March 2006	Course ”Active and collaborative learning”

Professional experience

Career

Sept. 2024 - present	Director of studies Bsc EE
Sept. 2023 - Aug. 2024	(a.i.) Director of studies Bsc EE
Feb. 2018 - present	Associate Professor Signal Processing Systems Group Delft University of Technology The Netherlands
Oct. 2016 - present	0 fte appointment at Erasmus MC (Cardiology department)
Feb. 2016 - May 2019	Honorary Research Associate Victoria University, New Zealand
July 2014 - Feb. 2018	Assistant Professor Circuits and Systems Group Delft University of Technology The Netherlands
July 2010 - July 2014	Assistant Professor (tenured since Nov. 2012) Multimedia Signal Processing Group Delft University of Technology The Netherlands
March 2008 - Feb. 2009	Guest researcher at Oticon A/S, Smørum, Denmark
Sept. 2007 - July 2010	Postdoctoral Researcher Multimedia Signal Processing Group Delft University of Technology The Netherlands
Sept. 2003 - Aug. 2007	Ph.D. Researcher Multimedia Signal Processing Group Delft University of Technology The Netherlands

Educational activities

Institutional Activities

2024 - present	Director of studies Bsc. EE
2023 - 2024	(a.i.) Director of studies Bsc. EE
2023 - 2023	Bsc. coordinator EE year 2 and year 3
2022	Coauthor of the critical reflections for the accreditation of the EE Bsc and EE Msc
2020 - present	Member EE Bsc Programme outline committee
2020 - 2021	projectleader VAN RIJN/WSV PROJECT normalizing study duration in the Msc EE
2020 - present	Member research committee department ME
2020 - 2021	Member EE Bsc design committee
2019 - 2023	Msc. coordinator for the track Signals and systems
2019 - present	Member of EE Msc. curriculum committee
2019 - present	Member educational committee department ME
2018 - 2021	Member board of studies biomedical engineering
2016 - 2017	Committee member cloudgroep studentdossier
2015 - 2018	Mentor PhD students
2012 - 2014	Doctoral contact person MSP group
2013 - 2014	Educational track coordinator (mathematics & modelling) computer science
2013 -2014	Quarterly coordinator computer science
2011 - 2014	Representative of DUT computer science in ICAB (Innovatiecentra Academisch Betaonderwijs)

Courses

Current:

2022 - present	Lecturer (responsible) and course developer of Array processing (EE4715)
2015 - 2024	Lecturer (responsible) and course developer of Estimation and Detection Theory (ET4386)
2012 - present	Supervisor B. Sc. projects Electrical Engineering

Past:

2006 - 2021	Lecturer (responsible) and course developer of Audio and speech processing (IN4182/EE4182)
2014 - 2020	Lecturer (responsible) and course developer of Signal processing (EE2S31)
2010 - 2014	Lecturer for medical delta minor Dokter 2.0, Signal Processing and Systems
2009 - 2014	Lecturer (responsible) of Random Signal Processing (IN4309)
2009 - 2014	Instructor, substitute lecturer and course developer (responsible) of Signaalverwerking (IN2405-A)
2009	Course developer of Context project Computer Science
2009	Lecturer of the mp3 project (IN1105)
2007	Instructor and substitute lecturer of Signaalverwerking (IN2405-I)
2006/2007	Instructor of Information processing (ET3125)
2005	Course developer of Lab module signal Processing (ET3505)
2001 - 2004	Instructor of Lab module signal Processing (ET3505)

Supervision

B.Sc. Students

- M. Aarts, H. Pries and A. Doff, ”Two Sensor Array Beamforming Algorithm for Android Smartphones”, 2012.
- F. Van Putten and D. Schellekens, ”Verbetering van Verstaanbaarheid in Teleconferenties door het Gebruik van Beamforming”, 2013.
- J. C. Noortman and M. C. Bisschop, ”Sound Reflections in an audio-based game for visually impaired children”, 2015.
- J. T. Coppoolse and W. J. L. van Dam, ”Audio-based game for visually impaired children”, 2015
- R. Duba and B. W. Kootte, ”Sound localization in audio-based games for visually impaired children”, 2015.
- B. Generowicz and X. Wesdijk, ”Heart Rate Monitoring using Adaptive Noise Cancellation”, 2016.
- B. Ballesteros and T. A. Khan, ”Heart rate monitoring using PPG signals”, 2016.
- Z. Khalik and A. Gercekcioglu, ”Heart rate monitoring Using PPG signals”, 2016.
- J. Bentvelsen and N. de Koeijer, ”Localization Algorithms for Conference Systems”, 2018.
- N. Rozsa and J. Tams, ”Acoustic TDOA Propagation Time Estimation”, 2018.
- T. Al and T. Ammerlaan, ”Estimation of Internal Delays”, 2018.
- W. Sewnarain and M. Rijkeboer, ”Noise Statistics Estimation based on adaptive filtering”, 2019.
- E. Riemens and B. Luppes, ”On the enhancement of intelligibility”, 2019.
- T. timmer and Q. van Wingerden,, ”Pre-amplifier and noise cancellation for a speech enhancement and noise dampening system”, 2019.
- C. Kos and M. Bekkering, ”Adaptive filtering in adaptive feedback cancellation for PA systems”, 2020.
- L. Huijbregts and M. Jongepier, ”Decorrelation in Adaptive Feedback Cancellation for Public Address Systems”, 2020.
- J. de Vries and C. Weustink, ”Postfiltering in Adaptive Feedback Cancellation for PA Systems”, 2020.
- T. van Es and F. Helfferich, ”Classification Algorithm for Early Detection of Atrial Fibrillation”, 2021.
- K. Demir and J. Konijn, ”Digital Signal Processing of PPG”, 2021.
- A. Kohabir and A. Smit, ”An ECG- and PPG Based Wearable Atrial Fibrillation Detection Device”, 2021.

M.Sc. Students

- C. van Bijleveld, "Packet Loss Concealment for Speech Communications", 2007 (advisor).
- J. A. Oosterom, "Intelligibility Based Automatic Volume Control for Public Address Systems", 2011.
- M. J. R. Gerrits, "Evaluation of Instrumental Measures for the Prediction of Musical Noise in Enhanced Noisy Speech", 2014
- E. F. Aguilar, "Audio-based snake game for visually impaired children", 2015.
- D. Feng, "Heart rate variability analysis based on instantaneous frequency estimation", 2015.
- B. Xu, "Packet Loss Concealment algorithm for real-time wireless audio systems", 2017.
- J. Maswan, "Multiway Component Analysis for the Removal of Far Ventricular Signal in Unipolar Epicardial Electrograms of Patients with Atrial Fibrillation", 2017.
- S. Kotti, "Clock-Offset Invariant Beamforming in Wireless Acoustic Sensor Networks: A Generalized Eigenvalue Decomposition Approach", 2018.
- M. Sekeri, "Impedance-Based Bioassay for Characterization of Single Malignant Melanoma Cancer Cells using Cmos-Mea Systems: A Heterogeneity and Classification Assay Proposal", 2018.
- F. Ma, "Respiration monitoring based on information fusion from Impedance pneumography and Electrocardiography", 2018.
- C. Kokke, "Interferer selection for binaural cue preservation in joint binaural linearly constrained minimum variance beamforming", 2018.
- Y. Wang, "An automated ECG signal quality assessment method with supervised learning algorithm", 2018.
- J. van der Graaf, "Monitoring Electrode Array Tip Fold-over In Cochlear Implantation", 2019.
- M. Calis, "Privacy-preserving consensus averaging", 2019.
- B. Kölling, " Atrial activation time estimation using cross-correlation between higher order neighboring electrodes", 2019.
- V. Sathyapriyan, " Binaural beam-forming with dominant cue preservation for hearing aids", 2020.
- L. Buijs, " Clock skew invariant beamforming", 2020.
- Y. Yin, "Atrial Fibrillation classification from a short single lead ECG recording", 2020.
- S. Agarwal, "Quantifying the dynamic interactions between physiological signals to predict the exposure from chemicals", 2021.
- E. Riemens, "On the Integration of Acoustics and LiDAR", 2021.
- E. van Twist, "The area of a unipolar electrogram to identify the arrhythmogenic substrate", 2021.
- J. Roest, "Evaluating morphological patterns in atrial epicardial potentials", 2021.
- A. Kordes, "An Expanded IPFM Model for Heart Rhythm Analysis", 2021.
- N. de Koeijer, "Sound Zones with a Cost Function based on Human Hearing", 2021.
- T. Roest, "Loudspeakers as recording devices in public address systems", 2022.
- I. van der Werf, " Towards Gridless Sound Field Reconstruction", 2022.
- T. Moree, "Estimating atrial activity in epicardial electrograms", 2022.
- J. de Vries, "Estimation of Atrial Fibre Directions Based on Epicardial Electrograms", 2022.
- C. Kos, "Sensor-to-Cell Height Estimation for Conductivity Estimation in Cardiac Cells", 2022.
- W. Hunter, "Improving the Estimation of Epicardial Activation Times Using Spatial Information", 2022.

- S. Araya, ”Predicting noise attenuation level in the earplugs using Gaussian Process Regression”, 2022.
- I. Venema, ”Development and Evaluation of a New CI Pitch Perception Test - the Glide Tone Test”, 2022.
- K. Rodewijk, ”Array Processing in Atrial Fibrillation: Application of different signal models and LAT estimation techniques”, 2023.
- T. Licurici, ”Estimating Transmembrane Currents and Local Activation Times from Atrial Epicardial Electrograms”, 2023.
- A. Suresan, ”Location Estimation of Atrial Activity from Epicardial Electrogram measurements”, 2023.
- K. Stunnenberg, ”Using Tensor Decompositions To Obtain Biomarkers From Auditory Event-Related Potentials”, 2023.
- C. Wang, ”Interpretable Parametric Modelling of the Heart based on ECG Signals”, 2023.
- E. van Breukelen, ”Enhancing Fiber Direction Estimation from Electrograms”, 2023.
- M. Kraaijeveld, ”Using our tools backwards, AF detection by confusing time and frequency”, 2024.
- J. Vrijdag, ”Brain Disorder Analysis and Classification Using Tensor Representation of EEG Signals”, 2024.
- C. Molnar, ” Electro-acoustic heart interface for mapping 3D cardiac electro-mechanical coupling in arrhythmia”, 2024.
- M. Hussain, ”Decoding Emotions: Advanced Analysis of Vocal Expressions in Children With Hearing Impairment”, 2024.
- L. Xin, ”Dopple Group Chat (Dereverberation & Denoise in multi-channel full-duplex communication systems)”, 2025.

Ph.D. Students

Current

- I. van der Werf, ”Signal processing for underwater communication”, 2022-present.
- I. M. Venema (LUMC), ”Harmonie complex perception with Cochlear Implants”, 2023-present.
- J. de Vries, ”Personalized Auditory Scene Modification to Assist Hearing Impaired ”, 2022-present.
- G. Bologni, ”Joint estimation of acoustic scene parameters”, 2022-present.
- C. Li, ”Model Based Parameter Estimation to Assist Hearing Assistive Devices”, 2021-present.

Past

- L. van Staveren (EMC), ”Unraveling Atrial Fibrillation: The Role of Electrical Biomarkers in AF Progression”, (defense expected 2025).
- H. Moghaddasi, ”Model-based Feature engineering of atrial fibrillation”, 2019-2024 (defense June 18th 2024).
- M. Sun, ”Modelling and Analysis of Atrial Epicardial Electrograms, 2018-2022 (defense June 15th 2022.
- B. Abdikivanani, ”Atrial fibrillation fingerprinting”, 2017-2020 (defense October 27th 2021).
- J. Amini, ”Rate-constrained multi-microphone noise reduction for hearing aid devices”, 2015-2019 (defense April 13th 2021).
- A. Rajabzadeh, ”Accurate structural health monitoring in composites”, 2016-2020 (defense October 20th 2020).
- J. Zhang, ”Energy-aware noise reduction for wireless acoustic sensor networks”, Nov. 2015- Jan. 2019 (defense January 15th 2020).
- S. Van Kuyk, ”Speech Communication from an Information Theoretical Perspective” (PhD student at Victoria, New Zealand), 2016-2018 (defense March 14th 2019).
- A. Koutrouvelis, ”Multi-microphone noise reduction for hearing assistive devices”, 2015-2018 (defense December 21st 2018).
- Y. Zeng, ”Distributed Speech Enhancement in Wireless Acoustic Sensor Networks”, 2010-2014 (defense June 18th 2015).
- C. H. Taal, ”Intelligibility Enhancement of Noisy speech”, 2009-2012 (defense Jan. 25th 2013).
- J. A. Martinez Castaneda, ”Room Impulse Response Modeling”, 2009-2013 (advisor, defense Nov. 22nd 2013).

Ph.D. defences as opponent

- B. van Erp, ”Automated Bayesian Hearing Aid Design”, Eindhoven University of Technology, 2025.
- A. Fuglsig, ”Joint Far- and Near-end Speech- and Listening Enhancement with Minimum Processing”, Aalborg University, 2025.
- W. Yu, ”The estimation of acoustic parameters and representations based on room impulse responses”, Delft University of Technology, 2024.
- R. starreveld – Brand, ”Uncovering atrial fibrillation complexity: from signals to (bio)markers”, Erasmus Medical Center, 2021.
- D. Cherkassky, ”Robust Speech Processing using Ad-Hoc Microphone Arrays”, Bar Ilan University, 2018.
- E. Isufi, ”Graph-time signal processing filtering and sampling strategies”, Delft University of Technology, 2018.
- J. Taghia, ”Speech Intelligibility Prediction and Single-channel Noise Reduction based on Information Measures”, Bochum Ruhr University, 2016.
- M. Krawczyk-Becker, ”Phase-Aware Single-Channel Speech Enhancement”, Oldenburg University, 2016.

Research activities

Acquired Projects, Grants and Industrial contributions

As PI:

2022 - present	NLDA/TNO project ”Communication technology unlocking the ocean – UCOMMS at the edge (Cutting Edge)” (1 PhD student).
2022 - present	NWO/TTW project ”Personalized Auditory Scene Modification to Assist Hearing Impaired People” (2 PhD students).
2022	Contribution from Oldenburg University for NWO/TTW project ”Personalized Auditory Scene Modification to Assist Hearing Impaired People” (In-kind 60 kEuro for 1 Postdoc).
2021 - present	CSC project ”Model Based Parameter Estimation to Assist Hearing Assistive Devices” (1 PhD student).
2018 - 2021	Guangzhou Elites Scholarship Council project ”Signal processing for atrial fibrillation” (1 PhD student).
2015 - 2018	CSC project ”Correct Spatial Sound Reproduction of Warning Signals” (1 PhD student).
2015 - 2019	TKI project ”Smart Sensing in Composite Factories for the Future” (3 PhD students, of which 1 for CAS, 630 kEuro).
2014 - 2019	STW project ”Spatially Correct Multi-Microphone Noise Reduction Strategies Suitable for Hearing Aids”. A collaboration between Delft University of Technology and Oticon A/S (2 PhD students, 630 kEuro).
2014	Grant from Oticon foundation for STW research project ”Spatially Correct Multi-Microphone Noise Reduction Strategies Suitable for Hearing Aids” (cash and in-kind 300 kEuro).
2011	Industrial contribution from Bosch Security Systems B.V. for STW project ”Intelligibility Enhancement for Public Address Systems” (cash and in-kind 225 kEuro for 1 PhD student).
2010 - 2015	CSC project ”speech enhancement in wireless sensor networks” (1 PhD student).
2010 - present	Veni/STW project ”Intelligibility Enhancement for Speech Communication Systems” (250 kEuro).
2007	Grant from Oticon foundation for research visit (7.5 kEuro).

Not as PI:

2016 - present	STW/Hartstichting ”Atrial Fibrillation FIngerPrinting: Spotting Bio-Electrical Markers to Early Recognize Atrial Fibrillation by the Use of a Bottom-Up Approach” (4 PhD students, of which 1 for CAS, 1102 kEuro).

Projects as PhD student/Postdoc

2008 - 2011	STW project DIT.08051 ”Intelligibility Enhancement of Noisy speech”. A collaboration between Delft University of Technology and Oticon A/S.
2003 - 2008	STW project DET.6042 ”Single-Microphone Enhancement of Noisy Speech Signals”. A collaboration between Delft University of Technology and Philips Research.

International experience

March 2008 - Feb. 2009	Guest researcher at Oticon A/S, Smørum, Denmark.
Sept. 2005 - Dec. 2005	Guest researcher at the Institute of Communications Acoustics of Prof. dr. R. Martin, Ruhr University Bochum, Bochum, Germany.
April 2002 - June 2002	Traineeship as part of M.Sc. degree at the sound and image processing group of Prof. dr. W. B. Kleijn, KTH, Stockholm, Sweden.

Invited talks / shorter visits

Aug. 2025	Invited speaker at the International Symposium on Auditory and Audiological Research, Denmark.
Nov. 2023	Invited lecturer at GNResound, The Netherlands.
Aug. 2023	Invited lecturer at Bang & Olufsen, Denmark.
June. 2019	Invited lecturer at the International Hearing Instruments Developer Forum 2019, Oldenburg, Germany.
April 2019	Invited lecturer at yearly NVKF congress, the Netherlands.
Jan. 2019	Invited lecturer at SPIN2019, Ghent, Belgium.
Nov. 2016	Invited lecturer at ICSEE, Eilat, Israel.
Oct. 2016	Keynote speaker at ITG, Paderborn, Germany.
July 2016	Lecture at Bochum University, Bochum, Germany.
April 2015	Visit and invited lecture at University of Victoria, Wellington, New Zealand.
April 2015	Invited lecture at Callaghan Innovation, Wellington, New Zealand.
Sept. 2013	Invited presenter in special session at the European Signal Processing Conference 2013.
May 2012	Visit and invited lecture at Universität Oldenburg, Speech Signal Processing Group, Oldenburg.
July 2011	Visit and invited lecture at KTH, Sound and Image Processing Lab, Stockholm.

Awards

- Best (student) paper award, IWAENC, 2016
- 2016 IEEE Signal Processing Society Best Paper Award
- 2017 IEEE Trans. Audio Speech and Language Processing best associate editor award
- Best (student) paper award, IEEE SENSOR ARRAY AND MULTICHANNEL SIGNAL PROCESSING WORKSHOP (SAM), 2018
- Best (student) paper award, SPIE's Photonics Europe International Symposium, Strasbourg, France, 2018.
- 2020 IEEE Senior member

Other academic activities

Editorial activities and memberships:

- Elected member of the IEEE Signal Processing Society Technical Committee on Audio and Acoustic Signal Processing, 2019 - 2021.
- Associate Editor of IEEE Trans. on Audio, Speech and Lang. Proc. , 2015 - 2019.
- Associate Editor of Eurasip Journal of Advances in Signal Processing, 2015 - 2020.
- Board member IEEE Signal Processing Society Benelux Chapter, 2023 - now.
- Senior Associate Editor of IEEE Trans. on Audio, Speech and Lang. Proc. 2023 - now.
- Elected member of the IEEE Signal Processing Society Technical Committee on Audio and Acoustic Signal Processing, 2023 - now.

Conference organisation:

- Session chair: Interspeech 2009, Eusipco 2015, Eusipco 2017, SITB 2018, Eusipco 2020, ICASSP 2020, ICASSP 2023
- Area chair: Eusipco 2015, ICASSP 2021, ICASSP 2022, WASPAA2021, ICASSP 2023, ICASSP 2025, EUSIPCO 2025
- Organizer of special session: Eusipco 2020, Eusipco 2015.
- Member of scientific committee of Workshop on Speech Processing for Voice, Speech and Hearing Disorders (WSPD), 2018.
- Main organiser of Eusipco2020 and financial chair.

Peer Reviewing for Journals:

- Transactions on Audio, Speech and Language Processing
- IEEE Signal Processing Letters
- IEEE Transactions on Circuits and Systems
- Elsevier Signal Processing
- Eurasip Journal of Advances in Signal Processing
- EURASIP Journal on Audio, Speech, and Music Processing
- Biomedical Signal Processing and Control
- IEEE Journal of Biomedical and Health Informatics
- Computer Methods and Programs in Biomedicine
- Heliyon

Peer Reviewing for Conferences:

- ICASSP
- WASPAA
- IWAENC
- Eusipco
- Asilomar
- Interspeech

Summary of publications

Item	**Number**	
Total number of publications	151	
Number of publications as first author	30	
Number of publications as last author	64	
h-index (google scholar)	31	
Number of citations of top-5 publications (google scholar)	2522/1242/664/342/341	
Peer reviewed journals	62	
Books	2	
Patent applications	6	
Peer reviewed Conference papers	93	
Journal	**Number**	**Imp. fac. (2023)**
IEEE Signal Processing Magazine	1	14.9
IEEE Transactions on Audio, Speech and Language Processing	31	4.3
Elsevier Computers in Biology and Medicine	9	7.7
Elsevier Signal Processing	3	4.4
IEEE Signal Processing letters	6	3.9
Journal of the acoustical society of America	1	2.4
Journal of the American College of Cardiology: Clinical Electrophysiology	1	6.1

List of publications

See attachment.

List of Publications - Richard C. Hendriks

Books

[1] R. C. Hendriks, T. Gerkmann and J. Jensen. *DFT-Domain Based Single-Microphone Noise Reduction for Speech Enhancement - A Survey of the State of the Art*. Synthesis Lectures on Speech and Audio Processing, Morgan & Claypool publishers, 2013.

[2] R. C. Hendriks. *Advances in DFT-Based Single-Microphone Speech Enhancement*. Ph. D. thesis, Delft University of Technology, Delft, The Netherlands, Feb. 2008, ISBN 978-90-9022690-3.

Patent Applications

[1] J. Jensen, M. Guo, R. Heusdens, R. C. Hendriks and J. Amini. A Binaural beamformer filtering unit, a hearing system and a hearing device Patent, US, EP EP 3306956A1, US 20180098, 2018. Assignee: Oticon AS.

[2] W. B. Kleijn and R. C. Hendriks. Mutual Information Based Intelligibility Enhancement, Patent, WO2015157010A1 , filed March 26th, 2015. Applicant: Google Inc. Filed 2014.

[3] R. Heusdens, G. Zhang, R. C. Hendriks, Y. Zeng, and W. B. Kleijn. Distributed Beamforming based on Message Passing, Patent, US US9584909 B2, February 2017. Assignee: Google Inc.

[4] R. Heusdens, R. C. Hendriks, H. Oosterom and H. van der Schaar. System and method for emitting and especially controlling an audio signal in an environment using an objective intelligibility measure, Patent, US US9659571 B2, May 2017. Assignee: Robert Bosch Gmbh.

[5] C. H. Taal, R. C. Hendriks, R. Heusdens, U. Kjems and J. Jensen. Speech Intelligibility Predictor and Applications Thereof, Patent, US9,064,502B2, Jun. 23, 2015. Assignee: Oticon A/S.

[6] R. C. Hendriks, J. Jensen, U. Kjems and R. Heusdens. Noise spectrum tracking in noisy acoustical signals, Patent US8,712,074B2, Apr. 29, 2014. Assignee: Oticon A/S.

Journals

[J1] C. Li and R. C. Hendriks, "Multimicrophone signal parameter estimation in a multi-source noisy reverberant scenario," *Trans. Audio, Speech and Lang. Proc.*, 2025.

[J2] G. Bologni, R. C. Hendriks, and R. Heusdens, "Wideband relative transfer function (rtf) estimation exploiting frequency correlations," *Trans. Audio, Speech and Language Processing*, 2025.

[J3] N. de Koeijer, M. Moller, J. Martinez, P. Martinez, and R. C. Hendriks, "Block-based perceptually adaptive sound zones with reproduction error constraints," *Trans. Audio, Speech and Language Processing*, 2024.

[J4] J. W. de Vries, S. van de Par, G. Leus, R. Heusdens, and R. C. Hendriks, "Binaural beamforming taking into account spatial release from masking," *Trans. Audio, Speech and Language Processing, 2024.*, 2024.

[J5] H. Moghaddasi, R. Hendriks, B. Hunyadi, P. Knops, M. van Schie, N. de Groot, and A. van der Veen, "A singular-value-based map to highlight abnormal regions associated with atrial fibrillation using high-resolution electrograms and multi-lead ecg," *IEEE Trans. Biomedical Eng.*, 2024.

[J6] C. Li, J. A. Martinez., and R. C. Hendriks, "Joint maximum likelihood estimation of microphone array parameters for a reverberant single source scenario," *Trans. Audio, Speech and Language Processing*, vol. 31, pp. 695 – 705, 2023.

[J7] S. Difrancesco, J. U. V. Baardewijk, A. S. Cornelissen, C. Varon, R. C. Hendriks, and A. M. Brouwer, "Exploring the use of granger causality for the identification of chemical exposure based on physiological data," *Frontiers in Network Physiology*, vol. 3, 2023.

[J8] L. N. van Staveren, R. C. Hendriks, Y. J. H. J. Taverne, and N. M. S. de Groot, "High dominant frequencies and fractionated potentials do not indicate focal or rotational activation during af," *Journal of the American College of Cardiology: Clinical Electrophysiology*, 2023.

[J9] C. Li and R. C. Hendriks, "Alternating least-squares-based microphone array parameter estimation for a single-source reverberant and noisy acoustic scenario," *IEEE Trans. Audio, speech and Lang. Proc.*, 2023.

[J10] I. van der Werf, H. S. Dol, K. C. H. Blom, R. Heusdens, R. C. Hendriks, and G. J. T. Leus, "On the equivalence of OSDM and OTFS," *Elsevier Signal Processing*, 2023.

[J11] F. J. Wesselius, M. S. Schie, N. M. S. de Groot, and R. C. Hendriks, "An accurate and efficient method to train classifiers for atrial fibrillation detection in ecgs: Learning by asking better questions," *Computers in Biology and Medicine*, vol. 143, April 2022.

[J12] M. Sun, N. de Groot, and R. C. Hendriks, "Joint cardiac tissue conductivity and activation time estimation using confirmatory factor analysis," *Computers in Biology and Medicine*, vol. 144, May 2022.

[J13] H. Moghaddasi, R. C. Hendriks, A.-J. van der Veen, N. M. de Groot, and B. Hunyadi, "Classification of de novo post-operative and persistent atrial fibrillation using multi-channel ecg recordings," *Computers in Biology and Medicine*, vol. 143, April 2022.

[J14] M. Calis, S. van de Par, R. Heusdens, and R. C. Hendriks, "Localization based on enhanced low frequency interaural level difference," *IEEE Trans. Audio, Speech and Language processing*, pp. 3025 – 3039, Sep. 2021.

[J15] B. Abdi, M. S. van Schie, N. M. S. de Groot, and R. C. Hendriks, "Analyzing the effect of electrode size on electrogram and activation map properties," *Computers in Biology and Medicine*, vol. 134, July 2021.

[J16] M. Sun, N. M. de Groot, and R. C. Hendriks, "Cardiac tissue conductivity estimation using confirmatory factor analysis," *Computers in Biology and Medicine*, vol. 135, Aug. 2021.

[J17] A. Albaba, N. Simoes-Capela, Y. Wang, R. C. Hendriks, W. D. Raedt, and C. V. Hoof, "Assessing the signal quality of electrocardiograms from varied acquisition sources: A generic machine learning pipeline for model generation," *Computers in Biology and Medicine*, vol. 130, March 2021.

[J18] F. J.Wesselius, M. S. van Schie, N. M. S. de Groot, and R. C. Hendriks, "Digital biomarkers and algorithms for detection of atrial fibrillation using surface electrocardiograms: A systematic review," *Computers in Biology and Medicine*, 2021.

[J19] B. Abdi, R. C. Hendriks, A.-J. van der Veen, and N. M. de Groot, "Improved local activation time annotation of fractionated atrial electrograms for atrial mapping," *Computers in Biology and Medicine*, vol. 117, February 2020. ISSN: 0010-4825.

[J20] J. Zhang, H. Chen, L.-R. Dai, and R. C. Hendriks, "A study on reference microphone selection for multi-microphone speech enhancement," *IEEE Trans. Audio, Speech and Language Processing*, vol. 29, pp. 671 – 683, Nov. 2020.

[J21] J. Amini, R. C. Hendriks, R. Heusdens, M. Guo, and J. Jensen, "Spatially correct rate-constrained noise reduction for binaural hearing aids in wireless acoustic sensor networks," *IEEE Trans. Audio, Speech and Language processing*, vol. 28, pp. 2731–2742, Oct. 2020.

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