



Curriculum vitae with track record - Jim Tørresen

Updated: March 2026

Personal information

First name, Surname:	Jim Tørresen		
Date of birth:	06.12.64	Sex:	Male
Nationality:	Norway		
Researcher unique identifier(s)	ORCID: 0000-0003-0556-0288		
LinkedIn	http://www.linkedin.com/in/jim-tørresen-50919b10		
URL for personal website:	https://jimtoer.no		

Education

Year	Faculty/department - University/institution - Country
1996	Ph.D. (Dr. Ing.) from Department of Computer and Information Science, Norwegian University of Science and Technology (NTNU), Trondheim, Norway
1992	Master (Siv. Ing.) from Department of Computer and Information Science, Norwegian University of Science and Technology (NTNU), Trondheim, Norway

Positions - current and previous

Year	Job title - Employer - Country
1999-	Professor (Assoc. Prof. 1999-2005), Department of Informatics, Univ. of Oslo, Norway
1998-1999	R&D Engineer of Satellite-based landing system, Navia Aviation, Oslo, Norway
1996-1998	R&D Engineer of Power line carrier system, NERA Telecommunications, Oslo, Norway

Project management experience (last 10 years)

Year	Project - Topic - Role - Funder
2020-2028	Predictive and Intuitive Robot Companion (PIRC) - Psychology-inspired computing for robot assistants - Project coordinator/manager - Funded by the Research Council of Norway (RCN) (2 PhD and 1 postdoc (PD))
2019-2026	Vulnerability in the Robot Society (VIROS) - Develop technology and proposals for regulatory measures to reduce vulnerabilities regarding robotics - Technical research leader - Funder: RCN (1 PhD and 1 PD)
2015-2021	Multimodal Elderly Care Systems (MECS) - Create and evaluate multimodal mobile human supportive systems that are able to sense, learn and predict future events - Proj. coordinator/manager - Funding: RCN (1 PhD and 2 PD)
2016-2019	Engineering Predictability with Embodied Cognition (EPEC) - Project coordinator - Funder: RCN (1 PhD and 2 Postdocs)

Supervision of students (finished/current)

M.Sc.	Ph.D.	Postdocs	University/institution - Country
93/5	24/7	12/2	University of Oslo - Norway

Other relevant professional experiences

Research & Innovation activities

Year	Project - Topic - Role - Funder
2017-2027	Centre for Interdisciplinary Studies in Rhythm, Time and Motion (RITMO) – study human and robot rhythm mechanisms in perception, cognition and acting – Principal Investigator – Centre of Excellence (CoE) – funded by the RCN (multiple PhD and Postdocs)
2016-2021	INtroducing personalized TReatment Of Mental health problems using Adaptive Technology (INTROMAT) – Increase access to mental health services for common mental health problems by developing smartphone technology which can guide patients – WP leader – Funder: RCN (2 Postdocs)
2010-2014	Engineering Proprioception in Computing Systems (EPiCS) – Enhancing computing systems with inspiration from human internal models – WP leader and partner coordinator – Funder EU integrated project (IP) in ICT FP7 FET Proactive Call

National/International Collaboration/Networking experience

Year	Project - Topic - Role - Funder
2017-2026	<i>Collaboration on Intelligent Machines Norway (COINMAC)</i> – Collaboration within research and teaching with universities and research institutes in Brazil, Japan and US – Project coordinator/manager – INTPART project funded by the RCN (MNOK 7 ~ k€ 620). Covers short term meetings for faculty staff (46 guest lectures given) and long-term exchange of Master/PhD students (8 incoming and 21 outgoing), resulting in 31 peer-reviewed papers.

Other relevant professional experiences

Year	Description - Role
2006-	Co-initiator of the <i>Robotics and Intelligent Systems (ROBIN)</i> research group in 2006 and group leader 2007-2025.
2009-	I have been much involved in establishing labs equipped with internationally state-of-the-art equipment (funded by UiO and the Research Council of Norway for a total of m€ 1.3 for motion capture (2 labs) and 3D-printing of robotics parts (2 labs).
2023-	Corresponding chair of IEEE Technical Committee on Robot Ethics
2025-	Chair/member of IEEE Computational Intelligence Society Conf. Strategic Planning Subcom.
2019	General Chair 9 th <i>Joint IEEE International Conference of Developmental Learning and Epigenetic Robotics</i> , 19-22 August 2019 in Oslo, Norway, 170 participants
2019-2020	Task force leader of <i>Evolutionary Developmental Systems and Robotics</i> in the IEEE Technical Committee on Cognitive and Developmental System
2018-2024	Main organiser of four workshops at international conferences (ICRA 2018, ECMR 2023, ICRA 2024 and IROS 2024) and co-organiser of two (at IEEE CAI 2023 and RO-MAN 2024)
2015-2022	Contact guest editor for four journal special issues (IEEE Computer, 2015; Microp. and Microsystems, 2019; IEEE Trans. on Cognitive and Dev. Systems, 2022, IEEE RAM, 2025)
2023	Norwegian AI Research Consortium (NORA) Award for Lifetime Achievement
2018-2025	Member of the <i>National Committee for Research Ethics in Science and Technology (NENT)</i>
2017-	Member of the <i>Norwegian Academy of Technological Sciences (NTVA)</i>
2015-2025	50 invited talks/keynotes at international conferences and institutions and 21 tutorials at international conferences last 10 years
2015	Local Co-chair of the <i>HiPEAC Computing Systems Week</i> organized at the University of Oslo, European project conference with thematic sessions and project reviews, 285 participants

2012	General Chair <i>22nd International Conference on Field Programmable Logic and Applications (FPL)</i> organized at University of Oslo, Norway, IEEE, 270 participants
2012-	External evaluator of PhD thesis at NTNU (2012, 2015, 2024, 2025), Univ. of Agder (2022-24), Univ. of Bergen (2012+2022), Univ. of Paderborn, Germany (2013), ENSTA Paris (2024), National Univ. of Ireland, Galway, Ireland (2013), Mid Sweden Univ. (2014), Chalmers, Sweden (2018), Univ. Laval, Canada (2020), Univ of Agder (2020), Vrije Univ. Ams., NL (2020)
2010-2011	Visiting prof. (12 months) <i>Cornell Creative Machines Lab</i> , USA.
2025-2026	Visiting prof. (8 months) Kyoto University, Japan
2009-	Editorial Board of journals: <i>IEEE Trans. on Cognitive and Developmental Systems</i> , 2019-2022; <i>IEEE Trans. on AI</i> 2021-; <i>Frontiers in Evolutionary Robotics and AI</i> , 2014-; <i>IEEE Robotics and Automation Letters</i> 2021-; <i>Memetic Computing</i> (Springer), 2009-2019
2005-	Program committee member with review of about 10 int. conferences annually
1993-1994	Visiting Doctor Student (13 months) Kyoto University, Japan
2007-2025	Proposal evaluation for the EU FP7 and H2020 calls, Human Brain Project, Croucher Found.
1991 -	Senior member <i>IEEE</i> (regular member until 2016)

Track record

Publication statistics

- Published: 5 conference proceedings (editor), 2 books, 8 book chapters, 80 journal papers, 240 papers in peer-reviewed conference proceedings. Thus, in total more than 328 papers in peer-reviewed int. conferences, journals and books.
- Google Scholar (11.01.2026): Total: **h-index= 44** citations= 8,119; Last 5 yrs: h-index= 29, citat.= 3,838
- Four best paper awards at international conferences/journal (2010, 2020 and 2024).

Most cited paper: E. Garcia-Ceja, M. Riegler, T. Nordgreen, P. Jakobsen, KJ. Oedegaard, J. Torresen (2018), "Mental health monitoring with multimodal sensing and machine learning: A survey", *Pervasive and Mobile Computing*, Volume 51, 2018, pages 1-26, (430 citations) and got "Best Survey Paper 2018-2020" from the journal.

Selected peer-reviewed journal and conference publications 2015 - 2025 (see a [full list at Google Scholar](#)):

- (1) P.R. Lewis, A. Chandra, ..., J. Torresen, X. Yao, "Architectural Aspects of Self-Aware and Self-Expressive Computing Systems: From Psychology to Engineering", *IEEE Computer*, vol.48, no. 8, pp. 62-70, Aug. 2015 <http://doi.org/10.1109/MC.2015.235> (173 citations). Prop. a framework for designing Self-Aware and Self-Expressive systems.
- (2) J Torresen, "A review of future and ethical perspectives of robotics and AI", *Frontiers in Robotics and AI*, vol 4, p 75, January 2018 (268 citations). Reviews work considering both the future potential of robotics and AI systems, and ethical considerations that need to be taken into account. <https://doi.org/10.3389/frobt.2017.00075>
- (3) E. Garcia-Ceja, M. Riegler, T. Nordgreen, P. Jakobsen, KJ. Oedegaard, J. Torresen (2018), "Mental health monitoring with multimodal sensing and machine learning: A survey", *Pervasive and Mobile Computing*, Volume 51, 2018, pages 1-26, <https://doi.org/10.1016/j.pmcj.2018.09.003> (430 citations)
- (4) J Torresen, T Schulz, Z Uddin, W Khaksar, E Prestes (2018). "Robot Companions for Older People - Ethical Concerns", ICRES 2018: Int. Conf. on Robot Ethics and Standards, CLAWER Assoc., <https://doi.org/10.13180/icres.2018.20-21.08.016>
- (5) J Torresen, DAC Barone, "Improving Internationalization of Higher Education in Informatics: A Brazilian-Norwegian Experience", 2018 28th EAEEIE Annual Conference (EAEEIE). IEEE

- (6) Farzan Majeed Noori, Michael Riegler, Md Zia Uddin, and Jim **Torresen**. 2020. "Human Activity Recognition from Multiple Sensors Data Using Multi-fusion Representations and CNNs." *ACM Trans. Multimedia Comput. Commun. Appl.* 16, 2, Article 45 (May 2020), 19 pages. <https://doi.org/10.1145/3377882> (64 citations).
- (7) Comparison of different fusion techniques for multi-modal sensor analysis. W. Khaksar, M. Neggers, E. Barakova and J. **Torresen**, "Generation Differences in Perception of the Elderly Care Robot," *2021 30th IEEE International Conference on Robot & Human Interactive Communication (RO-MAN)*, Vancouver, BC, Canada, 2021, pp. 551-558, <https://doi.org/10.1109/RO-MAN50785.2021.9515534>
- (8) Nygaard, T.F., Martin, C.P., **Torresen**, J. et al. "Real-world embodied AI through a morphologically adaptive quadruped robot." *Nature Machine Intelligence* 3, 410-419 (2021). <https://doi.org/10.1038/s42256-021-00320-3> (85 citations). Real-world robot training published in a very high-impact journal (journal Impact Factor: 18.8).
- (9) Saplacan, D., **Tørresen**, J. (2022). Robots as Welfare Technologies to Reduce Falls Amongst Older Adults: An Explorative Study from Norway. In: Gao, Q., Zhou, J. (eds) *Human Aspects of IT for the Aged Population. Technology in Everyday Living. HCII 2022. Lecture Notes in Computer Science*, vol 13331. Springer, Cham. https://doi.org/10.1007/978-3-031-05654-3_6
- (10) J. **Torresen**, D. Saplacan, A. Baselizadeh and T. Mahler, "Machine Excellence Tradeoffs to Ethical and Legal Perspectives," *2023 IEEE Conference on Artificial Intelligence (CAI)*, Santa Clara, CA, USA, 2023, pp. 237-240, <https://doi.org/10.1109/CAI54212.2023.00109> (7 citations).
- (11) M. van Otterdijk, B. Laeng, D. S. Lindblom and J. **Torresen**, "The Effect of Expressive Robot Behavior on Users' Mental Effort: A Pupillometry Study," in *IEEE Trans. on Cognitive and Developmental Systems*, vol. 16, no. 2, pp. 474-484, April 2024, <https://doi.org/10.1109/TCDS.2024.3352893> (7 citations)
- (12) Thorsen, O., Esem, E., Hemaz, S., Ellefsen, K.O., Herrebrøden, H., Arnim, H.A., & **Tørresen**, J. (2024). Can machine learning help reveal the competitive advantage of elite beach volleyball players? *Scandinavian Conference on AI*.
- (13) R. Maeda, A. Baselizadeh, S. Watanabe, R. Kurazume and J. **Torresen**, "Adaptive Tidying Robots: Learning from Interaction and Observation," *2025 IEEE/SICE Int. Symposium on System Integration (SII)*, Munich, Germany, 2025, pp. 185-192, <https://doi.org/10.1109/SII59315.2025.10871003>
- (14) Weria Khaksar, Diana Saplacan Lindblom, Lee Andrew Bygrave, and Jim **Torresen**. 2025. Robotics in Elderly Healthcare: A Qualitative Analysis of 20 Recent European Research Projects. *J. Hum.-Robot Interact.* 14, 2, Article 35 (June 2025), 38 pages. <https://doi.org/10.1145/3711936>
- (15) Orten, Kristine F., et al., **Torresen**, Jim and Herrebrøden, Henrik, "Can machine learning distinguish between elite and non-elite rowers?" *International Journal of Computer Science in Sport*, vol. 24, no. 1, Sciendo, 2025, pp. 118-132. <https://doi.org/10.2478/ijcss-2025-0007>

Peer-reviewed books and book chapters (selection):

- P. Lewis, M. Platzner, B. Rinner, J. **Torresen** and Xin Yao (editors). "Self-Aware Computing Systems: an Engineering Approach", Springer, Berlin, 2016.
- J. **Torresen**. "What is artificial intelligence" (in Norwegian), Universitetsforlaget, Norway, 2013.

Invited presentations/keynotes at internationally conferences and institutions schools (selection)

- "AI Ethics – Challenges and Opportunities" *WCCI/FUZZ-IEEE keynote*, Yokohama, Japan, 4 July, 2024
- "Human Intuition and its Impact on Human–Robot Interaction Regarding Safety and Accountability" invited talk at *Workshop on Interpretable AI in human-machine interaction*, 23-24 October 2023, Chalmers University of Technology, Gothenburg, Sweden
- "Robots-assistants that Care about Privacy, Security and Safety", *invited talk at the Geriatrics workshop at IEEE/RSJ Int. Conf. on Intelligent Robots and Systems (IROS) 2023*, Detroit, USA, 1 Oct 2023
- "From Adapting Robot Body and Control Using Rapid-Prototyping to Human–Robot Interaction with TIAGo", guest lecture at *Imperial College*, London, UK, 25 July 2023
- "Intelligent Robots and Systems for Foundational and Applied Healthcare Research", Guest lecture at *Nagoya University*; 28 January 2020
- "Adaptive Robot Body and Control for Real-World Environments". co-presenters: Kyrre Glette and Kai Olav Ellefsen, *JPL Robotics Section seminar*; Pasadena, US, 28 October 2019

- “Introduction to Different Challenges in Ethical AI and Possible Ways of Addressing Them”, keynote at *IJCNN (Int. Joint Conf. on Neural Netw.) worksh. “Ethical AI Challenges”*, Budap., Hungary, 19 July 2019
- “Artificial intelligence - a human technology?” *TEDx Oslo*, May 2017.

International tutorials at international conferences (selection):

- “AI Ethical challenges and considerations”, tutorial with Xin Yao at *WCCI 2024, 2024-06-30, IEEE International Joint Conference on Neural Networks (WCCI IJCNN-2024)*.
- “Ethical, Legal and User Perspectives on Robots and Systems (ELAUPORAS) – Assessments and Potential Measures Related to Robots and Systems”, co-organised with Atsushi Nakazawa, Diana Saplacan, Edson Prestes, Tobias Mahler and Yueh Hsuan Weng, 35th IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS-2022), 23 October 2022, Kyoto, Japan
- Ethical and Technical Challenges and Considerations of Robots and Systems – Session I: Ethical and technical perspectives”, co-organised with Diana Saplacan, Phoebe Li and Yueh-Hsuan Weng, 31st IEEE International Conference on Robot & Human Interactive Communication (RO-MAN 2022), Napoli, Italy, August 2022
- “Addressing Ethical Challenges within Evolutionary Computation Applications”, tutorial at *Genetic and Evolutionary Computation Conference (GECCO 2020)*, July 8th-12th 2020, Cancun, Mexico (virtual)
- “Prediction, Interaction, and User Behaviour” (co-organized with Enrique Garcia-Ceja, Kai O Ellefsen, Charles P. Martin), *IEEE World Congress on Computational Intelligence (WCCI)*, 8-13 July, 2018

Organisation of international conferences in the field of the applicant

2019	General Chair <i>9th Joint IEEE International Conference of Developmental Learning and Epigenetic Robotics</i> , 19-22 August 2019 in Oslo, Norway, 170 participants
2015	Local Co-chair of the <i>HiPEAC Computing Systems Week</i> organized at the University of Oslo, European project conference with thematic sessions and project reviews, 285 participants
2012	General Chair <i>22nd International Conference on Field Programmable Logic and Applications (FPL)</i> organized at University of Oslo, Norway, IEEE, 270 participants

Major contributions to the early careers of excellent researchers (selection)

- Enrique Garcia Ceja, PI was Postdoctoral researcher supervisor 2018–2019, Ceja continued at SINTEF. Currently he is a Professor at Tecnológico de Monterrey University, Mexico
- Arjun Chandra: PI was Postdoctoral researcher supervisor 2011-2015, Chandra has been a researcher at the Telenor AI research group and with Graphcore (develops HPC machines for machine learning)
- Kyrre Glette: PI was main PhD-supervisor 2004 – 2008, Postdoctoral researcher supervisor 2008-2012, and since 2012 Glette has been Associate Professor at University of Oslo (Full Prof., since 2022)
- Kristian Nymoen: PI was main PhD-supervisor 2008 – 2012, Postdoctoral researcher supervisor 2012-2014, and 2014–2021 Nymoen has been Associate Professor at University of Oslo
- Dirk Koch: PI was Postdoctoral researcher supervisor 2009-2013, and since 2013 Koch has been a Lecturer at University of Manchester. He is currently a full Professor at Heidelberg University