Curriculum Vitae: Angelika Peer

PERSONAL INFORMATION

Family name, First name: Peer, Angelika

EDUCATION

2008	PhD with distinction, Technical University of Munich, Germany
1999 – 2003	Studies of Electrical Engineering and Information Technology, Technical University of Munich, Germany

ACADEMIC POSITIONS

2017 – dato	Full Professor, Free University of Bozen-Bolzano, Italy
2014 – 2017	Full Professor, Bristol Robotics Laboratory, University of the West of England, UK
2011 – 2014	TUM-IAS Junior Research Fellow Institute of Advanced Studies, Technical University of Munich, Germany
2008 – 2011	Postdoctoral Researcher, Chair of Automatic Control Engineering, Technical University of Munich, Germany
2004 – 2008	Research Assistant, Chair of Automatic Control Engineering, Technical University of Munich, Germany

INSTITUTIONAL RESPONSIBILITIES

2023 – dato	Vice Dean for Research of Faculty of Engineering
2017 – dato	Head of Human-centered Technologies and Machine Intelligence Lab, Free University of Bolzano, Italy
2020 – dato	Responsible for SMACT Live Demo of Bolzano
2018 – dato	Member of Disciplinary Committee, Free University of Bolzano, Italy
2010 – 2014	Vice Women Advocacy Officer of the Faculty Electrical Engineering and Information Technology of the Technical University of Munich, Germany

COMMISSIONS OF TRUST

- Distinguished Lecturer for IEEE-Robotics and Automation Society, 2018-dato
- (Co-)Chair of IEEE-RAS Technical Committee on Telerobotics, 2007-2010, Chair: 2010-2012
- Co-chair RAS Education Committee (2016)
- Secretary of the Executive Committee of the Eurohaptics Society, 2010-2018
- Guest editor of the special issue “New Vistas and Challenges in Telerobotics” (2008) in the “Robotics Automation Magazine”, guest editor of the special issue “Design and Control Methodologies in Telerobotics” (2010) of the “Mechatronics” journal, guest editor of the special issue “Haptic Human-Robot Interaction” in the IEEE Transactions on Haptics (2012), guest editor of the special issue “Autonomous physical human-robot interaction” in International Journal of Robotics Research (2012)
- Book editor of “The sense of Touch and Its Rendering” (2008) and “Immersive Multimodal Interactive Presence” (2012)
- Editor of Robotics and Automation Letters (2021-dato)
- Associate Editor: Robotics and Autonomous Systems (March 2017 – 2020), IEEE Transactions on Human-Machine Systems (November 2014 - 2020) and IEEE Transactions on Haptics (2014-2016)

RESEARCH GRANTS (selected)

- PI in EFRE project “Human-centered Technologies and Machine Intelligence Lab (MELANIE)“, 457 kEuro, duration: Sep 2020 – Dec 2022
- Co-I in Euregio project “Open-ended learning for interactive robots”, 141 kEuro, Sep 2019 - Aug 2022
- PI in EFRE project “Process robustness optimization for compaction presses in powder metallurgy by adaptive press control”, 317 kEuro, Jan 2019 - Sep 2022
- Coordinator and PI in EU project “Remote Medical Diagnostician (ReMeDi)”, No 610902, Instrument: STREP, 3.08 MEuro (600 kEuro TUM/UWE), duration: Dec 2013 - Feb 2017
- Coordinator and PI in EU project “Intelligent Active Mobility Assistance Robot integrating Multimodal Sensory Processing, Proactive Autonomy and Adaptive Interaction (MOBOT)”, No 600796, Instrument: STREP, 3.15 MEuro (750 kEuro TUM/UWE), duration: Feb 2013 - July 2016
- PI in DFG project “VR system for visuo-haptic stimulation during fMRI studies” funded by German Research Foundation, 340 kEuro, duration: Feb 2014 - Sep 2017
- PI in DFG transfer project “Haptics of control elements and interior equipment in the car” funded by German Research Foundation, 480 kEuro, duration: Jan 2011 - Dec 2013
- PI in EU Project “Virtual Embodiment and Robotic Re-Embodiment (VERE)”, No 257695, Instrument: IP, 8.5 MEuro (750 kEuro TUM), duration: Jun 2010 – Jun 2015

PUBLICATIONS (selected)

[1] M. Sobhani, J. Smith, A. Pipe, Peer A. A Novel Mirror Neuron Inspired Decision-Making Architecture for Human–Robot Interaction, International Journal of Social Robotics, 2023.

[2] E. Ganthaler, H. MoradiMaryamnegari, T. Villgrattner, A. Peer. Automatic Trajectory Adaptation for the Control of Quality Characteristics in a Powder Compaction Process, Journal of Manufacturing Processes, 107:268-279, 2023.

[3] F.A. Van Horenbeke Echevarria FA, Peer A. NILRNN: A Neocortex-Inspired Locally Recurrent Neural Network for Unsupervised Feature Learning in Sequential Data, Cognitive Computation, 15(5):1549-1565, 2023.

[4] H. MoradiMaryamnegari, M. Frego, A. Peer. Model Predictive Control-Based Reinforcement Learning Using Expected Sarsa, IEEE Access, 2022.

[5] I. Barradas, R. Tschiesner, A. Peer, Towards a dynamic model for the prediction of emotion intensity from peripheral physiological signals, Lecture Notes in Computer Science (LNCS,volume 13519), 2022.

[6] G.A., H. Stüber, K.E. Friedl, I.R. Summers, A. Peer, “A simulation environment for studying transcutaneous electrotactile stimulation”, PLoS ONE, 2019.

[7] R. Jenke and A. Peer. A Cognitive Architecture for Modeling Emotion Dynamics: Intensity Estimation from Physiological Signals. Cognitive Systems Research, 49:128–141, 2018.

[8] T. Schauß, A. Peer, and M. Buss. Parameter-Space Stability Analysis of LTI Time-Delay Systems with Parametric Uncertainties. IEEE Transactions on Automatic Control, 63(11): 3927–3934, 2018.

[9] L. Alkurdi, C. Busch, and A. Peer, “Dynamic Contextualization and Comparison as the basis of Biologically-inspired Action Understanding,” Paladyn. Journal of Behavioral Robotics, 2018.

[10] M. Abu-Alqumsan, C. Kapeller, C. Hintermüller, C. Guger, and A. Peer, “Invariance and variability in interaction error-related potentials and their consequences for classification,” Journal of Neural Engineering, vol. 14, no. 6, 2017.

[11] M. Geravand, P. Z. Korondi, C. Werner, K. Hauer, and A. Peer. Human sit-to-stand transfer modeling towards intuitive and biologically-inspired robot assistance. Autonomous Robots, 41(3):575–592, 2017.

[12] M. Geravand, C. Werner, K. Hauer, and A. Peer, “An integrated decision making approach for adaptive shared control of mobility assistance robots,” Int. J. of Social Rob., 8(5), 631-648, 2016.

[13] M. Abu-Alqumsan, F. Ebert, and A. Peer, “Goal-recognition-based Adaptive Brain-Computer Interface for Navigating in Immersive Robotic Systems,” J. of Neural Engineering, 14(3), 2017.

[14] R. Jenke, A. Peer, and M. Buss. Feature extraction and selection for emotion recognition from EEG. Transactions on Affective Computing, 5(3):327–339, 2014.

[15] C. Passenberg and A. Peer, “Exploring the Design Space of Haptic Assistants: the Assistance Policy Module,” IEEE Transactions on Haptics, vol. 6, no. 4, pp. 440–452, 2013.