

Publikationen (peer reviewed) von Barbara Kühnlenz, geb. Gonsior

Internationale Fachzeitschriften

- [1] N. Spatola, B. Kühnlenz, and G. Cheng, “Perception and evaluation in human-robot interaction: The human-robot interaction evaluation scale (HRIES) – a multicomponent approach of anthropomorphism,” *Int. J. of Social Robotics*, pp. 1–23, 2021. <https://doi.org/10.1007/s12369-020-00667-4>.
- [2] K. Kühnlenz and B. Kühnlenz, “Motor interference of incongruent motions increases workload in close HRI,” *Advanced Robotics*, vol. 34, no. 6, pp. 400–406, 2020.
- [3] B. Kühnlenz and K. Kühnlenz, “A dialog switching strategy for information retrieval in noisy environments based on a confidence score,” *Advanced Robotics*, vol. 33, no. 1, pp. 49–59, 2019.
- [4] B. Kühnlenz, M. Erhart, M. Kainert, Z.-Q. Wang, J. Wilm, and K. Kühnlenz, “Impact of trajectory profiles on user stress in close human-robot interaction,” *at - Automatisierungstechnik*, vol. 66, no. 6, pp. 483–491, 2018.
- [5] N. Mirnig, E. Strasser, A. Weiss, B. Kühnlenz, D. Wollherr, and M. Tscheligi, “Can you read my face? – a methodological variation for assessing facial expressions of robotic heads,” *Int. J. of Social Robotics*, vol. 7, no. 1, pp. 63–76, 2015.
- [6] A. Weiss, N. Mirnig, U. Bruckenberger, E. Strasser, M. Tscheligi, B. Kühnlenz, D. Wollherr, and B. Stanczyk, “The interactive urban robot: User-centered development and final field trial of a direction requesting robot,” *Paladyn, Journal of Behavioral Robotics*, vol. 6, no. 1, 2015.
- [7] M. Buss, D. Carton, S. Khan, B. Kühnlenz, K. Kühnlenz, C. Landsiedel, R. de Nijs, A. Turnwald, and D. Wollherr, “IURO – Soziale Mensch-Roboter-Interaktion in den Straßen von München,” *at - Automatisierungstechnik*, vol. 63, no. 4, pp. 231–242, 2015.
- [8] B. Kühnlenz, S. Sosnowski, M. Buß, D. Wollherr, K. Kühnlenz, and M. Buss, “Increasing helpfulness towards a robot by emotional adaption to the user,” *International Journal of Social Robotics (IJSR)*, vol. 5, no. 4, pp. 457–476, 2013.
- [9] B. Gonsior, C. Landsiedel, N. Mirnig, S. Sosnowski, E. Strasser, J. Zlotowski, M. Buss, K. Kühnlenz, M. Tscheligi, A. Weiss, and D. Wollherr, “Impacts of multimodal feedback on efficiency of proactive information retrieval from task-related HRI,” *Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII), Special Issue on Cognitive Infocommunications*, vol. 16, no. 2, pp. 313–326, 2012.

Internationale Conference - Proceedings

- [1] K. Kühnlenz and B. Kühnlenz, “Study on the impact of situational explanations and prior information given to users on trust and perceived intelligence in autonomous driving in a video-based 2x2 design,” in *Proc. of the 2023 IEEE International Conference on Human and Robot Interactive Communication (RO-MAN)*, Busan., 2023.
- [2] K. Kühnlenz, U. Schmid, and B. Kühnlenz, “A video-based study on perceived intelligence, subjective performance and trust under variation of prior information given to users in autonomous driving,” in *2022 IEEE International Conference on Advanced Robotics and Its Social Impacts (ARSO)*, pp. 1–4, 2022.
- [3] K. Kühnlenz and B. Kühnlenz, “Towards the influence of human observer eye-movements on discriminating between perceived sociability of different robots,” in *ISR Europe 2022; 54th International Symposium on Robotics*, pp. 1–6, 2022.
- [4] K. Kühnlenz and B. Kühnlenz, “Visual perception of robot appearance attributes in the peripheral field of view depends on human observer eye-movement behaviors,” in *Proc. of the IEEE International Conference on Robotics and Automation (ICRA)*, 2022.
- [5] K. Kühnlenz, M. Westermann, and B. Kühnlenz, “Impact of human gaze behavior and robot appearance on motion uncertainty during cooperative hand movement tasks,” in *Proc. of the IEEE Int. Conf. on Robot and Human Interactive Communication (RO-MAN)*, 2020.
- [6] B. Kühnlenz and K. Kühnlenz, “Social bonding increases unsolicited helpfulness towards a bullied robot,” in *Proc. of the IEEE Int. Conf. on Robot and Human Interactive Communication (RO-MAN)*, 2020.
- [7] K. Kühnlenz, S. Hermann, K. Kalb, L. Marschollek, and B. Kühnlenz, “Progression of human hand trajectory variabilities during a pick- and-place task,” in *Proc. of the 16th International Conference on Informatics in Control, Automation and Robotics (ICINCO)*, 2019.
- [8] B. Kühnlenz, F. Busse, P. Förtsch, M. Wolf, and K. Kühnlenz, “Effect of explicit emotional adaptation on prosocial behavior of humans towards robots depends on prior robot experience,” in *Proc. of the IEEE Int. Conf. on Robot and Human Interactive Communication (RO-MAN)*, 2018.
- [9] B. Kühnlenz and K. Kühnlenz, “Impact of continuous eye contact of a humanoid robot on user experience and interactions with professional user background,” in *Proc. of the IEEE Int. Conf. on Robot and Human Interactive Communication (RO-MAN)*, 2017.
- [10] J. Schmölz, B. Kühnlenz, and K. Kühnlenz, “First experiences towards potential impact of an outdoor shopping assistant,” in *Proc. of the 17th Towards Autonomous Robotic Systems (TAROS)*, 2016.

- [11] B. Kühnlenz and K. Kühnlenz, “Reduction of heart rate by robot trajectory profiles in cooperative HRI,” in *Proc. of the International Symposium of Robotics (ISR)*, 2016.
- [12] B. Gonsior, M. Buß, S. Sosnowski, D. Wollherr, K. Kühnlenz, and M. Buss, “Towards transferability of theories on prosocial behavior from social psychology to HRI,” in *Proc. of the IEEE Int. Workshop on Advanced Robotics and its Social Impacts (ARSO)*, (Munich), pp. 101–103, 2012.
- [13] B. Gonsior, S. Sosnowski, M. Buß, D. Wollherr, and K. Kühnlenz, “An emotional adaption approach to increase helpfulness towards a robot,” in *Proc. of the IEEE Int. Conf. on Intelligent Robots and Systems (IROS)*, pp. 2429–2436, 2012.
- [14] N. Mirnig, B. Gonsior, S. Sosnowski, C. Landsiedel, D. Wollherr, A. Weiss, and M. Tscheligi, “Feedback guidelines for multimodal human-robot interaction: How should a robot give feedback when asking for directions?,” in *Proceedings of the IEEE International Symposium on Robot and Human Interactive Communication (Ro-Man)*, pp. 533–538, 2012.
- [15] B. Gonsior, S. Sosnowski, C. Mayer, J. Blume, B. Radig, D. Wollherr, and K. Kühnlenz, “Improving aspects of empathy and subjective performance for HRI through mirroring facial expressions,” in *Proc. of IEEE Int. Symp. on Robot and Human Interactive Communication (RO-MAN)*, (Atlanta, GA, USA), pp. 350–356, 2011.
- [16] B. Gonsior, C. Landsiedel, A. Glaser, D. Wollherr, and M. Buss, “Dialog strategies for handling miscommunication in task-related HRI,” in *Proc. of IEEE Int. Symp. on Robot and Human Interactive Communication (Ro-Man)*, (Atlanta, GA, USA), pp. 369–375, 2011.
- [17] M. Buss, D. Carton, B. Gonsior, K. Kühnlenz, C. Landsiedel, N. Mitsou, R. de Nijs, J. Zlotowski, S. Sosnowski, E. Strasser, M. Tscheligi, A. Weiss, and D. Wollherr, “Towards proactive human-robot interaction in human environments,” in *Proc. of the Int. Conf. on Cognitive Infocommunications (CogInfoCom)*, 2011.
- [18] R. de Nijs, M. Julia, N. Mitsou, B. Gonsior, D. Wollherr, K. Kühnlenz, and M. Buss, “Following route graphs in urban environments,” in *IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN)*, 2011.
- [19] N. Mirnig, B. Gonsior, D. Wollherr, A. Weiss, and M. Tscheligi, “Feedback in human-robot interaction: How to display a robot’s internal system status,” in *Proceedings of the 3rd International Conference on Social Robotics (ICSR)*, 2011.
- [20] B. Gonsior, D. Wollherr, and M. Buss, “Towards a dialog strategy for handling miscommunication in human-robot dialog,” in *Proc. of IEEE Int. Symp. on Robot and Human Interactive Communication (Ro-Man)*, (Viareggio, Italy), pp. 284–289, 2010.
- [21] A. Bauer, B. Gonsior, D. Wollherr, and M. Buss, “Heuristic rules for human-robot interaction based on principles from linguistics - asking for directions,” in *Proc. of AISB Convention - Int. Symp. on New Frontiers in Human-Robot Interaction (Best student poster award)*, pp. 24–30, 2009.

Bücher und Buchkapitel

- [1] B. Kühnlenz, *ZukunftsDesign*, ch. Wirtschaftspsychologie und technologische Innovation. 2021.
- [2] B. Kühnlenz and K. Kühnlenz, *Industrie 4.0*, vol. 6, ch. Gesundheitsförderung in kooperativer Mensch-Roboter Interaktion durch den Einsatz von menschenähnlichen Bewegungsprofilen bei Industrierobotern, pp. 81–90. Cuvillier, 2016.
- [3] B. Kühnlenz, *Alignment Strategies for Information Retrieval in Prosocial Human-Robot Interaction*. PhD thesis, Department of Electrical Engineering and Information Technology, 2013.

Posterpräsentationen

- Sept. 2020 "Social Bonding Increases Unsolicited Helpfulness Towards A Bullied Robot", IEEE International Conference on Robot and Human Interactive Communication (RO-MAN), Neapel, Italien (virtuell).
- Nov. 2009 "Heuristic Rules for Human-Robot Interaction based on Principles from Linguistics - Asking for Directions", AISB Convention - International Symposium on New Frontiers in Human-Robot Interaction (Best Student Poster Award), Edinburgh, Schottland.