

List of Publications

Prof. Dr. Reinhold Häb-Umbach

Books

- [1] J. Li, L. Deng, R. Haeb-Umbach and Y. Gong, *Robust Automatic Speech Recognition – a Bridge to Practical Applications*, Elsevier, Print Book ISBN 9780128023983, 2015. [Homepage of Book](#) , [Elsevier Webpage about book](#)
- [2] D. Kolossa and R. Haeb-Umbach (Editors.), *Robust Speech Recognition of Uncertain or Missing Data – Theory and Applications*, Springer, ISBN 978-3-642-21316-8, 2011. [Homepage of Book](#)

Journal Publications

- [3] V. Despotovic, O. Walter, R. Haeb-Umbach, “Machine Learning Techniques for semantic analysis of dysarthric speech: An experimental study”, *Speech Communication*, Volume 99, May 2018, Pages 242 – 251, <https://doi.org/10.1016/j.specom.2018.04.005>
- [4] J. Heymann, L. Drude, R. Haeb-Umbach, “A generic neural acoustic beamforming architecture for robust multi-channel speech processing”, *Computer Speech & Language*, [Volume 46](#), November 2017, Pages 374-385 <http://dx.doi.org/10.1016/j.csl.2016.11.007>
- [5] A. Plinge, F. Jacob, R. Haeb-Umbach, G.A. Fink, “Acoustic Microphone Geometry Calibration: An Overview and Experimental Evaluation of State-of-the-art Algorithms A Combined Hardware-Software Approach for Acoustic Sensor Network Synchronization”, *IEEE Signal Processing Magazine*, vol. 33, no. 4, pp 14 – 29, July 2016
- [6] K. Kinoshita, M. Delcroix, S. Gannot, E. A. P. Habets, R. Haeb-Umbach, W. Kellermann, V. Leutnant, R. Maas, T. Nakatani, B. Raj, A. Sehr, T. Yoshioka, “A summary of the REVERB challenge: state-of-the-art and remaining challenges in reverberant speech processing research”, *EURASIP Journal on Advances in Signal Processing*, 2016, <https://doi.org/10.1186/s13634-016-0306-6>
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- [8] J. Schmalenstroer, P. Jebranzik and R. Haeb-Umbach, “A Combined Hardware-Software Approach for Acoustic Sensor Network Synchronization”, *Elsevier Signal Processing*, vol. 107, Special issue on ad hoc microphone arrays and wireless acoustic sensor networks, pp 171 – 184, Feb. 2015, <https://doi.org/10.1016/j.sigpro.2014.06.030>
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- [10] V. Leutnant, A. Krueger and R. Haeb-Umbach, “A New Observation Model in the Logarithmic Mel Power Spectral Domain for the Automatic Recognition of Noisy Reverberant Speech”, *IEEE Trans. Audio, Speech and Language Processing*, vol. 22, no. 1, pp. 95 - 109, Jan. 2014
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Book Chapters

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