Publications by Björn W. Schuller

15 September 2018

Current h-index: 68 (source: Google Scholar)
Current citation count: 20,136 (source: Google Scholar)

Citations are only provided for papers with citation count ≥100.
(IF): Journal Impact Factor according to Journal Citation Reports, Thomson Reuters.
(IF³): Conference Impact Factor according to http://citescholar.org. Acceptance rates and impact factors of satellite workshops may be subsumed with the main conference.

A) BOOKS

Books Authored (6):

4) B. Schuller and A. Batliner, Computational Paralinguistics: Emotion, Affect and Personality in Speech and Language Processing, Wiley, November 2013. (>100 citations)

Books Edited (5):


Contributions to Books (45):


B) REFEREE JOURNAL PAPERS (133)


72) F. B. Pokorny, K. D. Barti-Pokornya, C. Einspieler, D. Zhang,


in Signal Processing, Special Issue on End-to-End Speech and Language Processing, 2017. 9 pages, to appear (IF: 5.301 (2016))


J. Krajewski, S. Schneider, D. Sommer, A. Batliner, and B. Schuller, “Applying Multiple Classifiers and Non-Linear Dynamics Features for Detecting Sleepiness from Speech,” *Neurocomputing, Special Issue From neuron to behavior: evidence from behavioral measurements*, vol. 84, pp. 65–75, May 2012. (acceptance rate: 31 %, IF: 2.005 (2013))


guistic Cues,” Journal on Multimodal User Interfaces, Special Issue on Real-Time Affect Analysis and Interpretation: Closing the Affective Loop in Virtual Agents and Robots, vol. 3, pp. 7–12, March 2010. (IF: 1.140, 5-year IF: 0.872 (2017))


C) REFEREED CONFERENCE PROCEEDINGS

Contributions to Conference Proceedings (440):


201) G. Hagerer, N. Cummins, F. Eyben, and B. Schuller, “Robust Laughter Detection for Mobile Wellbeing Sensing on Wearable Devices,” in Proceedings of the 8th International Conference on


213) G. Keren, J. Han, and B. Schuller, “Scaling Speech Enhancement in Unseen Environments with Noise Embeddings,” in Proceedings The 5th International Workshop on Speech Processing in Everyday Environments held in conjunction with Interspeech 2018, (Hyderabad, India), ISCA, ISCA, September 2018. 3 pages, to appear


224) Z. Ren, N. Cummins, V. Pandit, J. Han, K. Qian, and...


242) S. Amiriparian, M. Freitag, N. Cummins, and B. Schuller, “Feature Selection in Multimodal Continuous Emotion Prediction,” in Proc. 2nd International Workshop on Automatic Sentiment Analysis in the Wild (WASA 2017) held in conjunction with the 7th biannual Conference on Affective Computing and Intelligent Interaction (ACII 2017), (San Antonio, TX), pp. 30–37, AAAC, IEEE, October 2017


244) S. Amiriparian, M. Gerczuk, S. Otlt, N. Cummins, M. Freitag, S. Pugachevskiy, and B. Schuller, “Snore Sound Classification


B. Vlasenko, H. Sagha, N. Cummins, and B. Schuller, “Implemen- 
ting gender-dependent vowel-level analysis for boost-
ing speech-based depression recognition,” in Proceedings IN-
TERSPEECH 2017, 17th Annual Conference of the Interna-
tional Speech Communication Association, (Stockholm, 
Sweden), pp. 3266–3270, ISCA, ISCA, August 2017. (acceptance 
rate: 51 %)

291) R. Walecki, O. Rudovic, V. Pavlovic, B. Schuller, and M. 
Pantic, “Deep Structured Ordinal Regression for Facial Action Unit 
Intensity Estimation,” in Proceedings IEEE Conference on Com-
puter Vision and Pattern Recognition, CVPR 2017, (Honolulu, 
HI), IEEE, IEEE, July 2017. (acceptance rate: 20 %, IF* 5.97 
(2010))

292) Y. Zhang, W. McGehee, M. Schmitt, F. Eyben, and B. Schuller, 
“A Paralinguistic Approach To Holistic Speaker Diarisation – 
Using Age, Gender, Voice Likability and Personality Traits,” in 
Proceedings of the 25th ACM International Conference on Multi-
media, MM 2017, (Mountain View, CA), ACM, ACM, 
October 2017. 6 pages, to appear (acceptance rate: 28 %)

293) Y. Zhang, F. Weninger, and B. Schuller, “Cross-Domain Classi-
ﬁcation of Drowsiness in Speech: The Case of Alcohol Intoxi-
cation and Sleep Deprivation,” in Proceedings INTERSPEECH 
2017, 18th Annual Conference of the International Speech 
Communication Association, (Stockholm, Sweden), pp. 3152– 
3156, ISCA, ISCA, August 2017. (acceptance rate: 51 %)

294) H. S. O. Strömfelt, Y. Zhang, and B. Schuller, “Emotion-
Augmented Machine Learning: Overview of an Emerging Do-
main,” in Proc. 7th biannual Conference on Affective Comput-
ing and Intelligent Interaction (ACII 2017), (San Antonio, TX), 
pp. 305–312, AAAC, IEEE, October 2017. (acceptance rate 
oral: 27 %)

295) Y. Zhang, Y. Liu, F. Weninger, and B. Schuller, “Multi-Task 
Deep Neural Network with Shared Hidden Layers: Breaking 
Down the Wall between Emotion Representations,” in Pro-
cedings 42nd IEEE International Conference on Acoustics, 
Speech, and Signal Processing, ICASSP 2017, (New Orleans, 
rate: 49 %, IF* 1.16 (2010))

296) Y. Zhang, F. Weninger, M. Willmer, J. Han, and B. Schuller, 
“Towards Intoxicated Speech Recognition,” in Proceedings 30th 
International Joint Conference on Neural Networks (IJCNN), 
(acceptance rate: 67 %)

297) B. Schuller, “7 Essential Principles to Make Multimodal Sen-
timent Analysis Work in the Wild,” in Proceedings of the 4th 
Workshop on Sentiment Analysis where AI meets Psychology 
(SAAIP 2016) , satellite of the 25th International Joint Con-
ference on Artiﬁcial Intelligence, IJCAI 2016 (S. Bandypadhyay, 
D. Das, E. Cambria, and B. G. Patra, eds.), vol. 1619, (New 
York City, NY), p. 1, IJCAI/AAAI, CEUR, July 2016. invited 
contribution

298) B. Schuller, J.-G. Ganascia, and L. Devillers, “Multimodal 
Sentiment Analysis in the Wild: Ethical considerations on Data 
Collection, Annotation, and Exploitation,” in Proceedings of the 
1st International Workshop on ETHics In Corpus Collection, 
Annotation and Application (ETHI-CA2 2016), satellite of the 
10th Language Resources and Evaluation Conference (LREC 
2016) (L. Devillers, B. Schuller, E. Mower Provost, P. Robin-
son, J. Mariani, and A. Delaborde, eds.), (Portoroz, Slovenia), 
pp. 29–34, ELRA, ELRA, May 2016

299) B. Schuller and M. McTear, “Sociocognitive Language Processing – 
Emphasising the Soft Factors,” in Proceedings of the Seventh 
International Workshop on Spoken Dialogue Systems (IWSDS), (Saarislä, Finland), January 2016. 6 pages

300) B. Schuller, S. Steidl, A. Batliner, J. Hirschberg, J. K. Bur-
goorn, A. Baird, A. Elkins, Y. Zhang, E. Coutinho, and 
K. Evanini, “The INTERSPEECH 2016 Computational Paraling-
guistics Challenge: Deception, Sincerity & Native Language,” in Proceedings INTERSPEECH 2016, 17th Annual Conference of 
the International Speech Communication Association, (San 
(acceptance rate: 50 %)

301) I. Abdić, L. Fridman, D. McDuff, E. Marchi, B. Reimer, and 
B. Schuller, “Driver Frustration Detection From Audio and 
Video,” in Proceedings of the 25th International Joint 
Conference on Artiﬁcial Intelligence, IJCAI 2016, (New York 
City, NY), pp. 1354–1360, IJCAI/AAAI, July 2016. (acceptance 
rate: 25 %)

302) I. Abdić, L. Fridman, D. E. Brown, W. Angell, B. Reimer, 
E. Marchi, and B. Schuller, “Detecting Road Surface Wetness 
from Audio: A Deep Learning Approach,” in Proceedings 23rd 
International Conference on Pattern Recognition (ICPR 2016), 
(Cancun, Mexico), pp. 3458–3463, IAPR, IAPR, December 
2016

303) I. Abdić, L. Fridman, D. McDuff, E. Marchi, B. Reimer, 
and B. Schuller, “Driver Frustration Detection From Audio 
and Video (Extended Abstract),” in Ki 2016: Advances in 
Artiﬁcial Intelligence 39th Annual German Conference on AI 
GAI, Springer, September 2016. (acceptance rate: 45 %)

304) S. Aminiparvarian, J. Pohjalainen, E. Marchi, S. Pugachewsky, and 
B. Schuller, “Is deception emotional? An emotion-driven pre-
dictive approach,” in Proceedings INTERSPEECH 2016, 17th 
Annual Conference of the International Speech Communication 
Association, (San Francisco, CA), pp. 2011–2015, ISCA, ISCA, 
September 2016. nominated for best student paper award (12 
nominations for 3 awards, acceptance rate overall conference: 
50 %)

305) E. Cambria, S. Poria, R. Bajpai, and B. Schuller, “SenticNet4: A 
Semantic Resource for Sentiment Analysis Based on Conceptual 
Primitives,” in Proceedings of the 26th International Confer-
nce on Computational Linguistics, COLING, (Osaka, Japan), 
pp. 2666–2677, ICCL, ANLP, December 2016

306) E. Coutinho, F. Hönig, Y. Zhang, S. Hantke, A. Batliner, 
E. Nóth, and B. Schuller, “Assessing the Prosody of Non-
Native Speakers of English: Measures and Feature Sets,” in Pro-
cedings 10th Language Resources and Evaluation Conference 
(LREC 2016), (Portoroz, Slovenia), pp. 1328–1332, ELRA, 
ELRA, May 2016

307) J. Deng, N. Cummins, J. Han, X. Xu, Z. Ren, V. Pandit, 
Z. Zhang, and B. Schuller, “The University of Passau Open 
Emotion Recognition System for the Multimodal Emotion 
Challenge,” in Proceedings of the 7th Chinese Conference on 
Pattern Recognition, CPCR, (Chengdu, P.R. China), pp. 652– 
666, Springer, November 2016

308) B. Dong, Z. Zhang, and B. Schuller, “Empirical Mode Decom-
position: A Data-Enrichment Perspective on Speech Emotion 
Recognition,” in Proceedings of the 6th International Workshop 
on Emotion and Sentiment Analysis (ESA 2016), satellite of the 
10th Language Resources and Evaluation Conference (LREC 
2016) (J. F. Sánchez-Rada and B. Schuller, eds.), (Portoroz, 
Slovenia), pp. 71–75, ELRA, ELRA, May 2016. (acceptance 
rate: 74 %)

309) J. Guo, K. Qian, H. Xu, C. Janott, B. W. Schuller, and S. Mat-
suoka, “GPU-Based Fast Signal Processing for Large Amounts 
of Snore Sound Data,” in Proceedings IEEE 5th Global Con-
ference on Consumer Electronics, GCCE 2016, (Kyoto, Japan), 
pp. 523–524, IEEE, IEEE, October 2016. (acceptance rate: 
66 %)

310) S. Hantke, A. Batliner, and B. Schuller, “Ethics for Crowd-
sourced Corpus Collection, Data Annotation and its Application 
in the Web-based Game iHEARu-PLAY,” in Proceedings of the 
1st International Workshop on ETHics In Corpus Collection, 
Annotation and Application (ETHI-CA2 2016), satellite of the
10th Language Resources and Evaluation Conference (LREC 2016) (L. Devillers, B. Schuller, E. Mower Provost, P. Robinson, J. Marian, and A. Delaborde, eds.), (Portorož, Slovenia), pp. 54–59, ELRA, ELRA, May 2016. (oral acceptance rate: 45 %)


313) G. Kerem and B. Schuller, “Convolutional RNN: an Enhanced Model for Extracting Features from Sequential Data,” in Proceedings 2016 International Joint Conference on Neural Networks (IJCNN) as part of the IEEE World Congress on Computational Intelligence (IEEE WCCI), (Vancouver, Canada), pp. 3412–3419, IEEE, IEEE, July 2016


425) F. Eyben, F. Weninger, L. Paletta, and B. Schuller, “The acoustics of eye contact - Detecting visual attention from conversational audio cues,” in Proceedings 6th Workshop on Eye Gaze in Intelligent Human Machine Interaction: Gaze in Multimodal Interaction (GazeIN 2013), held in conjunction with the 15th International Conference on Multimodal Interaction, ICMI 2013, (Sydney, Australia), pp. 7–12, ACM, ACM, December 2013. (acceptance rate: 38 %, IF* 1.77 (2010)).


427) F. Eyben, F. Weninger, F. Groß, and B. Schuller, “Recent


nal Conference of the International Speech Communication Association, (Portland, OR), ISCA, ISCA, September 2012. 4 pages (acceptance rate: 52 %, IF* 1.05 (2010))


489) M. Wöllmer and B. Schuller, “Enhancing Spontaneous Speech Recognition with BLSTM Features,” in Advances in Nonlinear


(acceptance rate: 49.0 %, IF* 1.16 (2010))


International Conference on Intelligent User Interfaces, IUI 2014

668) L. Paletta, B. Schuller, P. Robinson, and N. Sabouret, eds., Proceedings of the 2nd International Workshop on Digital Games for Empowerment and Inclusion, IDGEI 2014, (Haifa, Israel), ACM, ACM, February 2014. held in conjunction with the 19th International Conference on Intelligent User Interfaces, IUI 2014


681) L. Paletta, L. Itti, B. Schuller, and F. Fang, eds., Proceedings of the 6th International Symposium on Attention in Cognitive Systems 2013, ISACS 2013, LNAI, (Beijing, P.R. China), arxiv.org, Springer, August 2013. held in conjunction with the 23rd International Joint Conference on Artificial Intelligence, IJCAI 2013


Abstracts in Journals (6):


Abstracts in Conference/Challenge Proceedings (28)

696) B. Schuller, “Emotion Sensing at Your Wrist,” in *2nd Workshop on emotion awareness for pervasive computing with mobile and wearable devices (EmotionAware 2018)* in conjunction with the 2018 *IEEE International Conference on Pervasive Computing and Communications (PerCom 2018)*, (Athens, Greece), IEEE, IEEE, March 2018. 1 page, to appear


700) B. Schuller, “Mental health monitoring in the pocket as a life changer? The AI view,” in *Proceedings 9th Scientific Meeting of the International Society for Research on Internet Interventions, ISRII 2017*, (Berlin, Germany), Society for Research on Internet Interventions (SRII), Elsevier, October 2017. 1 page


703) J. Guo, K. Qian, B. Schuller, and S. Matsuoka, “GPU Processing Accelerates Training Autoencoders for Bird Sounds Data,” in *Proceedings 2017 GPU Technology Conference (GTC)*, (San Jose, CA), NVIDIA, May 2017. 1 page


715) B. Schuller, “Interfaces Seeing and Hearing the User,” in Proceedings The Rank Prize Funds Symposium on Natural User Interfaces, Augmented Reality and Beyond: Challenges at the Intersection of HCI and Computer Vision, (Grasmere, UK), The Rank Prize Funds, The Rank Prize Funds, November 2013. invited contribution, 1 page


720) F. Eyben and B. Schuller, “Music Classification with the Munich openSMILE Toolkit,” in Proceedings Annual Meeting of the MIREX 2010 community as part of the 11th International Conference on Music Information Retrieval, (Utrecht, Netherlands), ISMIR, ISMIR, August 2010. 2 pages (acceptance rate: 61 %)

721) F. Eyben and B. Schuller, “Tempo Estimation from Tatum and Meter Vectors,” in Proceedings Annual Meeting of the MIREX 2010 community as part of the 11th International Conference on Music Information Retrieval, (Utrecht, Netherlands), ISMIR, ISMIR, August 2010. 1 page (acceptance rate: 61 %)


724) S. Böck, F. Eyben, and B. Schuller, “Tempo Detection with Bidirectional Long Short-Term Memory Neural Networks,” in Proceedings Annual Meeting of the MIREX 2010 community as part of the 11th International Conference on Music Information Retrieval, (Utrecht, Netherlands), ISMIR, ISMIR, August 2010. 3 pages (acceptance rate: 61 %)


Forewords (5):


759) R. Cowie, Q. Ji, J. Tao, J. Gratch, and B. Schuller, “Foreword ACII 2015 – Affective Computing and Intelligent Interaction at Xi’an,” in Proc. 6th biennial Conference on Affective Computing and Intelligent Interaction (ACII 2015), (Xi’an, P.R. China), AAAC, IEEE, September 2015. 2 pages


Reviewed Technical Newsletter Contributions (5):


Technical Reports (19):


