

# Bibliography: Nicholas Cummins

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## A) THESIS (1):

- 1) N. Cummins, *Automatic assessment of depression from speech: Paralinguistic analysis, modelling and machine learning*. PhD thesis, University of New South Wales, School of Electrical Engineering and Telecommunications, 2016

## B) BOOK CHAPTERS (5)

- 2) M. Pateraki, K. Fysarakis, V. Sakkalis, G. Spanoudakis, I. Varlamis, M. Maniadakis, M. Lourakis, S. Ioannidis, N. Cummins, B. Schuller, E. Loutsetis, and D. Koutsouris, "Challenges and opportunities from the use of biosensors and IoT for smart healthcare applications," in *Wearable and Implantable Medical Devices: Applications and Challenges* (N. Dey, A. S. Ashour, S. J. Fong, and B. C., eds.), ch. 2, pp. 25–53, London, U.K.: Elsevier Academic Press, 4th ed., 2020. Invited contribution, to appear
- 3) N. Cummins, Z. Ren, A. Mallol-Ragolta, and B. Schuller, "Machine learning in digital health, recent trends and ongoing challenges," in *Artificial Intelligence in Precision Health* (D. Barh, ed.), ch. 5, London, U.K.: Elsevier Academic Press, 1st ed., 2019. 10 pages, invited contribution, to appear
- 4) N. Cummins, F. Matcham, J. Klapper, and B. Schuller, "Artificial Intelligence to aid the early detection of Mental Illness," in *Artificial Intelligence in Precision Health* (D. Barh, ed.), ch. 10, London, U.K.: Elsevier Academic Press, 1st ed., 2019. 10 pages, invited contribution, to appear
- 5) N. Cummins and B. Schuller, "Latest Advances in Computational Speech Analysis for Mobile Sensing," in *Digital Phenotyping and Mobile Sensing* (H. Baumeister and C. Montag, eds.), Studies in Neuroscience, Psychology and Behavioral Economics, ch. 9, Berlin Heidelberg: Springer, 1st ed., 2019. 10 pages, invited contribution, to appear
- 6) J. Cohn, N. Cummins, J. Epps, R. Goecke, J. Joshi, and S. Scherer, "Multimodal assessment of depression and related disorders based on behavioral signals," in *Handbook of Multimodal-Multisensor Interfaces* (S. Oviatt, B. Schuller, P. Cohen, D. Sonntag, G. Potamianos, and A. Krüger, eds.), vol. 2, ch. 12, pp. 375–417, New York, NY, USA: ACM Books, Morgan & Claypool, 1st ed., 2018. invited contribution

## C) REFEREED JOURNAL PAPERS (16):

- 7) Z. Zhao, Z. Bao, Z. Zhang, J. Deng, N. Cummins, H. Wang, J. Tao, and B. Schuller, "Automatic Assessment of Depression from Speech via a Hierarchical Attention Transfer Network and Attention Autoencoders," *IEEE Journal of Selected Topics in Signal Processing*, 2019. 11 pages, to appear (IF: 6.688, 5-year IF: 7.015 (2018))
- 8) Z. Zhao, Z. Bao, Y. Zhao, Z. Zhang, N. Cummins, Z. Ren, and B. Schuller, "Exploring Deep Spectrum Representations via Attention-based Recurrent and Convolutional Neural Networks for Speech Emotion Recognition," *IEEE Access*, vol. 7, pp. 97515–97525, 2019. (IF: 4.098, 5-year IF: 4.540 (2018))
- 9) K. Grabowski, A. Rynkiewicz, A. Lassalle, S. Baron-Cohen, B. Schuller, N. Cummins, A. E. Baird, J. Podgórska-Bednarsz, A. Pieniazek, and I. Lucka, "Emotional expression in psychiatric conditions – new technology for clinicians," *Psychiatry and Clinical Neurosciences*, vol. 73, no. 2, pp. 50–62, 2019. (IF: 3.489, 5-year IF: 3.283 (2018))
- 10) S. Amiriparian, N. Cummins, M. Gerczuk, S. Pugachevskiy, S. Ottl, and B. Schuller, "“Are You Playing a Shooter Again?!” Deep Representation Learning for Audio-based Video Game Genre Recognition," *IEEE Transactions on Games*, vol. 11, 2019. 11 pages, to appear
- 11) J. Han, Z. Zhang, N. Cummins, and B. Schuller, "Adversarial Training in Affective Computing and Sentiment Analysis: Recent Advances and Perspectives," *IEEE Computational Intelligence Magazine, Special Issue on Computational Intelligence for Affective Computing and Sentiment Analysis*, vol. 14, no. 2, pp. 68–81, 2019. (IF: 5.857, 5-year IF: 6.644 (2018))
- 12) N. Cummins, A. Baird, and B. W. Schuller, "The increasing impact of deep learning on speech analysis for health: Challenges and Opportunities," *Methods, Special Issue on on Translational data analytics and health informatics*, vol. 151, pp. 41–54, 2018. (IF: 3.998, 5-year IF: 3.936 (2017))
- 13) S. Hantke, A. Abstreiter, N. Cummins, and B. Schuller, "Trustability-based Dynamic Active Learning for Crowdsourced Labelling of Emotional Audio Data," *IEEE Access*, vol. 6, pp. 42142–42155, 2018. (IF: 4.098, 5-year IF: 4.540 (2018))
- 14) G. Keren, N. Cummins, and B. Schuller, "Calibrated Prediction Intervals for Neural Network Regressors," *IEEE Access*, vol. 6, pp. 54033–54041, 2018. (IF: 4.098, 5-year IF: 4.540 (2018))
- 15) A. Baird, S. H. Jorgensen, E. Parada-Cabaleiro, S. Hantke, N. Cummins, and B. Schuller, "Listener Perception of Vocal Traits in Synthesized Voices: Age, Gender, and Human-Likeness," *Journal of the Audio Engineering Society, Special Issue on Augmented and Participatory Sound and Music Interaction using Semantic Audio*, vol. 66, no. 4, pp. 277–285, 2018. (IF: 0.927, 5-year IF: 0.899 (2018))
- 16) M. Freitag, S. Amiriparian, S. Pugachevskiy, N. Cummins, and B. Schuller, "auDeep: Unsupervised learning of representations from audio with deep recurrent neural networks," *Journal of Machine Learning Research*, vol. 18, no. 173, pp. 1–5, 2018. (IF: 4.091, 5-year IF: 8.246 (2018))
- 17) N. Cummins, V. Sethu, J. Epps, J. R. Williamson, T. F. Quatieri, and J. Krajewski, "Generalized two-stage rank regression framework for depression score prediction from speech," *IEEE Transactions on Affective Computing*, 2017. 12 pages, in press, (IF: 3.149, 5-year IF: 4.728 (2016))
- 18) Z. Zhang, N. Cummins, and B. Schuller, "Advanced data exploitation in speech analysis – an overview," *IEEE Signal Processing Magazine*, vol. 34, pp. 107–129, July 2017. (IF: 9.564, 5-year IF: 10.559 (2016))
- 19) H. Sagha, N. Cummins, and B. Schuller, "Autoencoders for sentiment analysis: A review," *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery*, vol. 7, pp. 1942–4795, Sept./Oct. 2017. e1212, Invited review article (IF: 2.111, 5-year IF: 3.110 (2016))
- 20) X. Xu, J. Deng, N. Cummins, Z. Zhang, C. Wu, L. Zhao, and B. Schuller, "A two-dimensional framework of multiple kernel subspace learning for recognising emotion in speech," *IEEE/ACM Transactions on Audio, Speech and Language Processing*, vol. 25, pp. 1436–1449, July 2017. (IF: 2.491, 5-year IF: 2.501 (2016))
- 21) J. Han, Z. Zhang, N. Cummins, F. Ringeval, and B. Schuller, "Strength modelling for real-world automatic continuous affect recognition from audiovisual signals," *Image and Vision Computing, Special Issue on Multimodal Sentiment Analysis and Mining in the Wild*, vol. 65, pp. 76–86, Sept. 2016. (IF: 2.671, 5-year IF: 2.939 (2016))
- 22) N. Cummins, V. Sethu, J. Epps, S. Schnieder, and J. Krajewski, "Analysis of acoustic space variability in speech affected by depression," *Speech Communication*, vol. 75, pp. 27–49, Dec. 2015. (IF: 1.768, 5-year IF: 1.769 (2016))
- 23) N. Cummins, S. Scherer, J. Krajewski, S. Schnieder, J. Epps, and T. F. Quatieri, "A review of depression and suicide risk assessment using speech analysis," *Speech Communication*, vol. 71, pp. 10–49, July 2015. > 150 citations, (IF: 1.768, 5-year IF: 1.769 (2016))

## D) REFEREED CONFERENCE PROCEEDINGS

*Contributions to Conference Proceedings (64):*

- 24) F. Ringeval, B. Schuller, M. Valstar, N. Cummins, R. Cowie, M. Soleymani, M. Schmitt, S. Amiriparian, E.-M. Messner, L. Tavabi, S. Song, S. Alisamir, S. Lui, Z. Zhao, and M. Pantic, "AVEC 2019 Workshop and Challenge: State-of-Mind, Depression with AI, and Cross-Cultural Affect Recognition," in *Proceedings of the 9th International Workshop on Audio/Visual Emotion Challenge, AVEC'19, co-located with the 27th ACM International Conference on Multimedia, MM 2019* (F. Ringeval, B. Schuller, M. Valstar, N. Cummins, R. Cowie, and M. Pantic, eds.), (Niece, France), ACM, ACM, October 2018. 10 pages, to appear
- 25) L. Stappen, V. Karas, N. Cummins, F. Ringeval, K. Scherer, and B. Schuller, "From Speech to Facial Activity: Towards Cross-modal Sequence-to-Sequence Attention Networks," in *Proceedings IEEE 21st International Workshop on Multimedia Signal Processing, MMSP 2019*, (Kuala Lumpur, Malaysia), IEEE, IEEE, September 2019. 6 pages, best paper award
- 26) A. Baird, S. Amiriparian, N. Cummins, S. Strumbauer, J. Janson, E.-M. Messner, H. Baumeister, N. Rohleder, and B. W. Schuller, "Using Speech to Predict Sequentially Measured Cortisol Levels During a Trier Social Stress Test," in *Proceedings INTERSPEECH 2019, 20th Annual Conference of the International Speech Communication Association*, (Graz, Austria), pp. 534–538, ISCA, ISCA, September 2019. (acceptance rate: 49%)
- 27) A. Mallol-Ragolta, Z. Zhao, L. Stappen, N. Cummins, and B. W. Schuller, "A Hierarchical Attention Network-Based Approach for Depression Detection from Transcribed Clinical Interviews," in *Proceedings INTERSPEECH 2019, 20th Annual Conference of the International Speech Communication Association*, (Graz, Austria), pp. 221–225, ISCA, ISCA, September 2019. (acceptance rate: 49%)
- 28) M. Schmitt, N. Cummins, and B. W. Schuller, "Continuous Emotion Recognition in Speech – Do We Need Recurrence?," in *Proceedings INTERSPEECH 2019, 20th Annual Conference of the International Speech Communication Association*, (Graz, Austria), pp. 2808–2812, ISCA, ISCA, September 2019
- 29) X. Xu, J. Deng, N. Cummins, Z. Zhang, L. Zhao, and B. W. Schuller, "Autonomous emotion learning in speech: A view of zero-shot speech emotion recognition," in *Proceedings INTERSPEECH 2019, 20th Annual Conference of the International Speech Communication Association*, (Graz, Austria), pp. 949–953, ISCA, ISCA, September 2019
- 30) Z. Zhao, Z. Bao, Z. Zhang, N. Cummins, H. Wang, and B. W. Schuller, "Attention-enhanced Connectionist Temporal Classification for Discrete Speech Emotion Recognition," in *Proceedings INTERSPEECH 2019, 20th Annual Conference of the International Speech Communication Association*, (Graz, Austria), pp. 206–210, ISCA, ISCA, September 2019. (acceptance rate: 49%)
- 31) C. Li, Q. Zhang, Z. Zhao, L. Gu, N. Cummins, and B. Schuller, "Analysing and Inferring of Intimacy Based on fNIRS Signals and Peripheral Physiological Signals," in *Proceedings 32nd International Joint Conference on Neural Networks (IJCNN)*, (Budapest, Hungary), INNS/IEEE, IEEE, July 2019. 8 pages
- 32) V. Pandit, M. Schmitt, N. Cummins, and B. Schuller, "I know how you feel now, and here's why!: Demystifying Time-continuous High Resolution Text-based Affect Predictions In the Wild," in *Proceedings of the 32nd IEEE International Symposium on Computer-Based Medical Systems (CBMS 2019)*, (Córdoba, Spain), pp. 465–470, IEEE, IEEE, June 2018
- 33) L. Stappen, N. Cummins, E.-M. Rathner, H. Baumeister, J. Dineley, and B. Schuller, "Context Modelling Using Hierarchical Attention Networks for Sentiment and Self-Assessed Emotion Detection in Spoken Narratives," in *Proceedings 44th IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2019*, (Brighton, UK), pp. 6680–6684, IEEE, IEEE, May 2019. (acceptance rate: 46.5%, IF\* 1.16 (2010))
- 34) A. Mallol-Ragolta, M. Schmitt, A. Baird, N. Cummins, and B. Schuller, "Performance Analysis of Unimodal and Multimodal Models in Valence-Based Empathy Recognition," in *Workshop Proceedings 14th IEEE International Conference on Automatic Face & Gesture Recognition, FG 2019*, (Lille, France), IEEE, IEEE, May 2019. 5 pages
- 35) F. Ringeval, B. Schuller, M. Valstar, R. Cowie, H. Kaya, M. Schmitt, S. Amiriparian, N. Cummins, D. Lalanne, A. Michaud, E. Ciftci, H. Gülec, A. A. Salah, and M. Pantic, "AVEC 2018 Workshop and Challenge: Bipolar Disorder and Cross-Cultural Affect Recognition," in *Proceedings of the 8th International Workshop on Audio/Visual Emotion Challenge, AVEC'18, co-located with the 26th ACM International Conference on Multimedia, MM 2018* (F. Ringeval, B. Schuller, M. Valstar, R. Cowie, and M. Pantic, eds.), (Seoul, South Korea), pp. 3–13, ACM, ACM, October 2018
- 36) B. Sertolli, N. Cummins, A. Sengur, and B. Schuller, "Deep End-to-End Representation Learning for Food Type Recognition from Speech," in *Proceedings of the 20th ACM International Conference on Multimodal Interaction, ICMI*, (Boulder, CO), pp. 574–578, ACM, ACM, October 2018
- 37) S. Amiriparian, M. Freitag, N. Cummins, M. Gerzcuk, S. Pugachevskiy, and B. W. Schuller, "A Fusion of Deep Convolutional Generative Adversarial Networks and Sequence to Sequence Autoencoders for Acoustic Scene Classification," in *Proceedings 26th European Signal Processing Conference (EUSIPCO)*, (Rome, Italy), pp. 977–981, EURASIP, IEEE, September 2012
- 38) S. Amiriparian, A. Baird, S. Julka, A. Alcorn, S. Ottl, S. Petrović, E. Ainger, N. Cummins, and B. Schuller, "Recognition of Echolalic Autistic Child Vocalisations Utilising Convolutional Recurrent Neural Networks," in *Proceedings INTERSPEECH 2018, 19th Annual Conference of the International Speech Communication Association*, (Hyderabad, India), pp. 2334–2338, ISCA, ISCA, September 2018
- 39) A. Baird, E. Parada-Cabaleiro, S. Hantke, F. Burkhardt, N. Cummins, and B. Schuller, "The Perception and Analysis of the Likeability and Human Likeness of Synthesized Speech," in *Proceedings INTERSPEECH 2018, 19th Annual Conference of the International Speech Communication Association*, (Hyderabad, India), pp. 2863–2867, ISCA, ISCA, September 2018
- 40) E.-M. Rathner, J. Djamali, Y. Terhorst, B. Schuller, N. Cummins, G. Salamon, C. Hunger-Schoppe, and H. Baumeister, "How did you like 2017? Detection of language markers of depression and narcissism in personal narratives," in *Proceedings INTERSPEECH 2018, 19th Annual Conference of the International Speech Communication Association*, (Hyderabad, India), pp. 3388–3392, ISCA, ISCA, September 2018
- 41) E.-M. Rathner, Y. Terhorst, N. Cummins, B. Schuller, and H. Baumeister, "State of mind: Classification through self-reported affect and word use in speech," in *Proceedings INTERSPEECH 2018, 19th Annual Conference of the International Speech Communication Association*, (Hyderabad, India), pp. 267–271, ISCA, ISCA, September 2018
- 42) V. Pandit, M. Schmitt, N. Cummins, F. Graf, L. Paletta, and B. Schuller, "How Good Is Your Model 'Really'? On 'Wildness' of the In-the-wild Speech-based Affect Recognisers," in *Proceedings 20th International Conference on Speech and Computer, SPECOM 2018*, (Leipzig, Germany), pp. 490–500, ISCA, Springer, September 2018
- 43) Z. Ren, N. Cummins, J. Han, S. Schnieder, J. Krajewski, and B. Schuller, "Evaluation of the Pain Level from Speech: Introducing a Novel Pain Database and Benchmarks," in *Proceedings 13th ITG Conference on Speech Communication*, (Oldenburg, Germany), ITG/VDE, IEEE/VDE, October 2018. 5 pages
- 44) S. Amiriparian, M. Schmitt, N. Cummins, K. Qian, F. Dong,

- and B. Schuller, “Deep Unsupervised Representation Learning for Abnormal Heart Sound Classification,” in *Proceedings of the 40th Annual International Conference of the IEEE Engineering in Medicine & Biology Society, EMBC 2018*, (Honolulu, HI), pp. 4776–4779, IEEE, IEEE, July 2018
- 45) F. Demir, A. Sengur, N. Cummins, S. Amiriparian, and B. Schuller, “Low Level Texture Features for Snore Sound Discrimination,” in *Proceedings of the 40th Annual International Conference of the IEEE Engineering in Medicine & Biology Society, EMBC 2018*, (Honolulu, HI), pp. 413–416, IEEE, IEEE, July 2018
  - 46) S. Amiriparian, M. Gerczuk, S. Ottl, N. Cummins, S. Pugachevskiy, and B. Schuller, “Bag-of-Deep-Features: Noise-Robust Deep Feature Representations for Audio Analysis,” in *Proceedings 31st International Joint Conference on Neural Networks (IJCNN)*, (Rio de Janeiro, Brazil), IEEE, IEEE, July 2018. 7 pages
  - 47) V. Pandit, N. Cummins, M. Schmitt, S. Hantke, F. Graf, L. Paletta, and B. Schuller, “Tracking Authentic and In-the-wild Emotions using Speech,” in *Proceedings of the first Asian Conference on Affective Computing and Intelligent Interaction (ACII Asia 2018)*, (Beijing, P.R. China), AAAC, IEEE, May 2018. 6 pages, (oral acceptance rate: 29%)
  - 48) H.-J. Vögel, C. Süß, V. Ghaderi, R. Chadowitz, E. André, N. Cummins, B. Schuller, J. Härri, R. Troncy, B. Huet, M. Önen, A. Ksentini, J. Conradt, A. Adi, A. Zadorojnyi, J. Terken, J. Beskow, A. Morrison, K. Eng, F. Eyben, S. A. Moubayed, and S. Müller, “Emotion-awareness for intelligent Vehicle Assistants: a research agenda,” in *2018 IEEE/ACM 1st International Workshop on Software Engineering for AI in Autonomous Systems (SEFAIAS)* (R. Stolle, M. Broy, and S. Scholz, eds.), (Gothenburg, Sweden), pp. 11–15, IEEE/ACM, IEEE/ACM, May 2018
  - 49) N. Cummins, S. Amiriparian, S. Ottl, M. Gerczuk, M. Schmitt, and B. Schuller, “Multimodal Bag-of-Words for Cross Domains Sentiment Analysis,” in *Proceedings 43rd IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2018*, (Calgary, Canada), pp. 4954–4958, IEEE, IEEE, April 2018
  - 50) S. Hantke, N. Cummins, and B. Schuller, “What is my dog trying to tell me? The automatic recognition of the context and perceived emotion of dog barks,” in *Proceedings 43rd IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2018*, (Calgary, Canada), pp. 5134–5138, IEEE, IEEE, April 2018. (acceptance rate: 48%, IF\* 1.16 (2010))
  - 51) 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 Digital Health, DH 2018*, (Lyon, France), pp. 156–157, ACM, ACM, April 2018
  - 52) Z. Ren, N. Cummins, V. Pandit, J. Han, K. Qian, and B. Schuller, “Learning Image-based Representations for Heart Sound Classification,” in *Proceedings of the 8th International Conference on Digital Health, DH 2018*, (Lyon, France), pp. 143–147, ACM, ACM, April 2018
  - 53) S. Amiriparian, S. Julka, N. Cummins, and B. Schuller, “Deep Convolutional Recurrent Neural Networks for Rare Sound Event Detection,” in *Proceedings 44. Jahrestagung für Akustik, DAGA 2008*, (Munich, Germany), pp. 1522–1525, DEGA, DEGA, March 2018
  - 54) S. Amiriparian, M. Freitag, N. Cummins, and B. Schuller, “Sequence to sequence autoencoders for unsupervised representation learning from audio,” in *Proceedings of the Detection and Classification of Acoustic Scenes and Events 2017 Workshop, DCASE2017*, (Munich, Germany), pp. 17–21, IEEE, Nov. 2017. (oral acceptance rate: 25%)
  - 55) N. Cummins, S. Amiriparian, G. Hagerer, A. Batliner, S. Steidl, and B. Schuller, “An image-based deep spectrum feature representation for the recognition of emotional speech,” in *Proceedings of the 25th ACM International Conference on Multimedia, MM 2017*, (Mountain View, CA), pp. 478–484, ACM, Oct. 2017. (oral acceptance rate: 7.5%)
  - 56) F. Ringeval, B. Schuller, M. Valstar, J. Gratch, R. Cowie, S. Scherer, S. Mozgai, N. Cummins, M. Schmitt, and M. Pantic, “AVEC 2017 – Real-life depression, and affect recognition workshop and challenge,” in *Proceedings of the 7th International Workshop on Audio/Visual Emotion Challenge, AVEC’17, co-located with the 25th ACM International Conference on Multimedia, MM 2017* (F. Ringeval, M. Valstar, J. Gratch, B. Schuller, R. Cowie, and M. Pantic, eds.), (Mountain View, CA), pp. 3–9, ACM, Oct. 2017. > 100 citations
  - 57) S. Amiriparian, S. Pugachevskiy, N. Cummins, S. Hantke, J. Pohjalainen, G. Keren, and B. Schuller, “CAST a database: Rapid targeted large-scale big data acquisition via small-world modelling of social media platforms,” in *Proceedings of the 7th biannual Conference on Affective Computing and Intelligent Interaction, ACII 2017*, (San San Antonio, TX), pp. 340–345, IEEE, Oct. 2017
  - 58) S. Amiriparian, N. Cummins, S. Ottl, M. Gerczuk, and B. Schuller, “Sentiment analysis using image-based deep spectrum features,” in *Proceedings of the 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 San Antonio, TX), pp. 26–29, IEEE, Oct. 2017
  - 59) S. Amiriparian, M. Freitag, N. Cummins, S. Ottl, M. Gerczuk, and B. Schuller, “Feature selection in multimodal continuous emotion prediction,” in *Proceedings of the 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 2015*, (San San Antonio, TX), pp. 30–37, IEEE, Oct. 2017
  - 60) A. Baird, S. H. Jorgensen, E. Parada-Cabaleiro, S. Hantke, N. Cummins, and B. Schuller, “Perception of paralinguistic traits in synthesized voices,” in *Proceedings of the 11th Audio Mostly Conference on Interaction with Sound (Audio Mostly)*, (London, U.K.), ACM, Aug. 2017. Article No. 17, 5 pages
  - 61) S. Amiriparian, M. Gerczuk, S. Ottl, N. Cummins, M. Freitag, S. Pugachevskiy, and B. Schuller, “Snore sound classification using image-based deep spectrum features,” in *Proceedings of INTERSPEECH 2017, 18th Annual Conference of the International Speech Communication Association*, (Stockholm, Sweden), pp. 3512–3516, ISCA, Aug. 2017. > 50 citations, (acceptance rate: 50%)
  - 62) A. Baird, S. Amiriparian, N. Cummins, A. M. Alcorn, A. Batliner, S. Pugachevskiy, M. Freitag, M. Gerczuk, and B. Schuller, “Automatic classification of autistic child vocalisations: A novel database and results,” in *Proceedings of INTERSPEECH 2017, 18th Annual Conference of the International Speech Communication Association*, (Stockholm, Sweden), pp. 849–853, ISCA, Aug. 2017. (acceptance rate: 50%)
  - 63) M. Freitag, S. Amiriparian, N. Cummins, M. Gerczuk, and B. Schuller, “An ‘end-to-evolution’ hybrid approach for snore sound classification,” in *Proceedings of INTERSPEECH 2017, 18th Annual Conference of the International Speech Communication Association*, (Stockholm, Sweden), pp. 3507–3511, ISCA, Aug. 2017. (acceptance rate: 50%)
  - 64) G. Hagerer, N. Cummins, F. Eyben, and B. Schuller, ““did you laugh enough today?” – Deep neural networks for mobile and wearable laughter trackers,” in *Proceedings of INTERSPEECH 2017, 18th Annual Conference of the International Speech Communication Association*, (Stockholm, Sweden), pp. 2044–2045, ISCA, Aug. 2017. Show & Tell demonstration, (acceptance rate: 50%)
  - 65) S. Hantke, H. Sagha, N. Cummins, and B. Schuller, “Emotional speech of mentally and physically disabled individuals: Introducing the EmotAsS database and first findings,” in *Proceed-*

- ings of *INTERSPEECH 2017, 18th Annual Conference of the International Speech Communication Association*, (Stockholm, Sweden), pp. 3137–3141, ISCA, Aug. 2017. (acceptance rate: 50 %)
- 66) E. Parada-Cabaleiro, A. Baird, A. Batliner, N. Cummins, S. Hantke, and B. Schuller, “The perception of emotions in noisified non-sense speech,” in *Proceedings of INTERSPEECH 2017, 18th Annual Conference of the International Speech Communication Association*, (Stockholm, Sweden), pp. 3246–3250, ISCA, Aug. 2017. (acceptance rate: 50 %)
  - 67) F. Pokorný, B. Schuller, P. Marschik, R. Brückner, P. Nyström, N. Cummins, S. Bölte, C. Einspieler, and T. Falck-Ytter, “Earlier identification of children with autism spectrum disorder: An automatic vocalisation-based approach,” in *Proceedings of INTERSPEECH 2017, 18th Annual Conference of the International Speech Communication Association*, (Stockholm, Sweden), pp. 309–313, ISCA, Aug. 2017. (acceptance rate: 50 %)
  - 68) B. Vlasenko, H. Sagha, N. Cummins, and B. Schuller, “Implementing gender-dependent vowel-level analysis for boosting speech-based depression recognition,” in *Proceedings of INTERSPEECH 2017, 18th Annual Conference of the International Speech Communication Association*, (Stockholm, Sweden), pp. 3266–3270, ISCA, Aug. 2017. (acceptance rate: 50 %)
  - 69) N. Cummins, M. Schmitt, S. Amiriparian, J. Krajewski, and B. Schuller, “You sound ill, take the day off: Classification of speech affected by upper respiratory tract infection,” in *Proceedings of the 39th Annual International Conference of the IEEE Engineering in Medicine & Biology Society, EMBC 2017*, (Jeju Island, South Korea), pp. 3806–809, IEEE, July 2017
  - 70) K. Qian, C. Janott, J. Deng, C. Heiser, W. Hohenhorst, N. Cummins, and B. Schuller, “Snore sound recognition: On wavelets and classifiers from deep nets to kernels,” in *Proceedings of the 39th Annual International Conference of the IEEE Engineering in Medicine & Biology Society, EMBC 2017*, (Jeju Island, South Korea), pp. 3737–3740, IEEE, July 2017
  - 71) E. Parada-Cabaleiro, A. E. Baird, N. Cummins, and B. Schuller, “Stimulation of psychological listener experiences by semi-automatically composed electroacoustic environments,” in *Proceedings of the 18th IEEE International Conference on Multimedia and Expo, ICME 2017*, (Hong Kong, P.R. China), pp. 1051–1056, IEEE, July 2017. (acceptance rate: 30 %, IF\* 0.88 (2010))
  - 72) J. Deng, N. Cummins, M. Schmitt, K. Qian, F. Ringeval, and B. Schuller, “Speech-based diagnosis of autism spectrum condition by generative adversarial network representations,” in *Proceedings of the 7th International Digital Health Conference, DH 2017*, (London, U.K.), pp. 53–57, ACM, July 2017
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