

Dr.-Ing. Jakob Abeßer

Senior Scientist
Fraunhofer Institute for Digital Media Technologies (IDMT)
Ehrenbergstraße 31, 98693 Ilmenau, Germany
+49 3677 467288
jakob.abesser@idmt.fraunhofer.de

PUBLICATIONS *Publication Metrics*

- Zitate: 1680
- h-index: 21
- i10-index: 48¹

Theses

- Jakob Abeßer. *Automatic Transcription of Bass Guitar Tracks applied for Music Genre Classification and Sound Synthesis*. PhD thesis, Technische Universität Ilmenau, 2014

Books (edited)

- Martin Pfeleiderer, Klaus Frieler, Jakob Abeßer, Wolf-Georg Zaddach, and Benjamin Burkhart, editors. *Inside the Jazzomat - New Perspectives for Jazz Research*. Schott Campus, 2017

Proceedings (edited)

- Christian Dittmar, Jakob Abeßer, and Meinard Müller, editors. *Proceedings of the AES International Conference on Semantic Audio*, 2017

Journal Articles

- Jakob Abeßer, Zhiwei Liang, and Bernhard Seeber. Sound recurrence analysis for acoustic scene classification. *EURASIP Journal on Audio, Speech, and Music Processing*, 2025
- Jakob Abeßer, Sascha Grollmisch, and Meinard Müller. How robust are audio embeddings for polyphonic sound event tagging? *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, 31:2658–2667, 2023
- Jakob Abeßer, Asad Ullah, Sebastian Ziegler, and Sascha Grollmisch. Human and machine performance in counting sound classes in single-channel soundscapes. *Journal of the Audio Engineering Society (AES)*, 71(12):860–872, 2023
- Stefan Balke, Julian Reck, Christof Weiß, Jakob Abeßer, and Meinard Müller. JSD: A dataset for structure analysis in jazz music. *Transactions of the International Society for Music Information Retrieval (TISMIR)*, 5(1):156172, 2022
- Michael Taenzer, Stylianos I. Mimilakis, and Jakob Abeßer. Informing piano multi-pitch estimation with inferred local polyphony based on convolutional neural networks. *Electronics*, 10(7), 2021
- Jakob Abeßer and Meinard Müller. Jazz bass transcription using a U-Net architecture. *Electronics*, 10(6), 2021
- Jakob Abeßer. A review of deep learning based methods for acoustic scene classification. *Applied Sciences*, 10(6), 2020

¹<https://scholar.google.de/citations?user=15zM8xoAAAAJ&hl=de&oi=ao>

- Stefan Balke, Christian Dittmar, Jakob Abeßer, Klaus Frieler, Martin Pfeiderer, and Meinard Müller. Bridging the gap: Enriching YouTube videos with jazz music annotations. *Frontiers in Digital Humanities*, 5:1, 2018
- Jakob Abeßer and Gerald Schuller. Instrument-centered music transcription of solo bass guitar recordings. *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, 25(9):1741–1750, Sep. 2017
- Jakob Abeßer, Klaus Frieler, Estefanía Cano, Martin Pfeiderer, and Wolf-Georg Zaddach. Score-informed analysis of tuning, intonation, pitch modulation, and dynamics in jazz solos. *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, 25(1):168–177, Jan 2017
- Klaus Frieler, Martin Pfeiderer, Jakob Abeßer, and Wolf-Georg Zaddach. Middle-level analysis of monophonic jazz solos. A new approach to the study of improvisation. *Musicae Scientiae*, 20(2):143–162, 2016
- Klaus Frieler, Martin Pfeiderer, Jakob Abeßer, and Wolf-Georg Zaddach. Chasing the difference. Computer-aided comparison of improvisation in post-bop, hard bop, and bebop. *Jazzforschung / Jazz Research*, 46:249–274, 2017
- Jakob Abeßer. Automatic string detection for bass guitar and electric guitar. In Mitsuko Aramaki, Mathieu Barthet, Richard Kronland-Martinet, and Sølvi Ystad, editors, *From Sounds to Music and Emotions*, volume 7900 of *Lecture Notes in Computer Science*, pages 333–352. Springer, London, UK, 2012
- Jakob Abeßer, Hanna Lukashevich, and Paul Bräuer. Classification of Music Genres based on Repetitive Basslines. *Journal of New Music Research*, 41(3):239–257, 2012

Conference Papers (peer-reviewed)

- Pitchapa Ngamthipwatthana, András Kátai Marco Götze, and Jakob Abeßer. Towards Measuring and Forecasting Noise Exposure at the VELTINS-Arena in Gelsenkirchen, Germany. In *Proceedings of the 5th IEEE International Symposium on the Internet of Sounds*, Erlangen, Germany, 2024
- Amir Latifi Bidarouni and Jakob Abeßer. Towards domain shift in location-mismatch scenarios for bird activity detection. In *Proceedings of the European Signal Processing Conference (EUSIPCO)*, Lyon, France, 2024
- Konstantinos Apostolidis, Jakob Abeßer, Luca Cuccovillo, and Vasileios Mezaris. Visual and audio scene classification for detecting discrepancies in video: a baseline method and experimental protocol. In *Proceedings of the ACM International Workshop on Multimedia AI against Disinformation (MAD)*, Thessaloniki, Greece, 2024
- Amir Latifi Bidarouni and Jakob Abeßer. Unsupervised feature-space domain adaptation applied for audio classification. In *Proceedings of the 4th International Symposium on the Internet of Sounds*, 2023
- Sascha Grollmisch, Estefanía Cano, Hanna Lukashevich, and Jakob Abeßer. Uncertainty in semi-supervised audio classification - a novel extension for fix-match. In *Proceedings of the European Signal Processing Conference (EUSIPCO)*, Helsinki, Finland, 2023
- Hanna Lukashevich, Sascha Grollmisch, and Jakob Abeßer. Temperature scaling for reliable uncertainty estimation: Application to automatic music genre classification. In *Proceedings of the Uncertainty meets Explainability Workshop at the European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD)*, 2023

- Hanna Lukashevich, Sascha Grollmisch, Jakob Abeßer, Sebastian Stober, and Joachim Bös. How reliable are posterior class probabilities in automatic music classification? In *Proceedings of the Audio Mostly conference*, 2023
- Franca Bittner and Jakob Abeßer. An introduction to unsupervised domain adaptation in sound and music processing. In *Proceedings of the 49. Jahrestagung für Akustik (DAGA)*, 2023
- Sebastian Ribbecky, Hanna Lukashevich, and Jakob Abeßer. Multi-input architecture and disentangled representation learning for multi-dimensional modeling of music similarity. In *Proceedings of the 152nd AES Convention*, 2022
- Jakob Abeßer. Classifying Sounds in Polyphonic Urban Sound Scenes. In *Proceedings of the 152nd Audio Engineering Society (AES) Convention*, Online, 2022
- Christon R. Nadar, Michael Taenzer, and Jakob Abeßer. Towards Interpreting and Improving the Latent Space for Musical Chord Recognition. In *Proceedings of the International Computer Music Conference (ICMC)*, Limerick, Ireland, 2022
- Jakob Abeßer, Jaydeep Chauhan, Prateek Pradeep Pillai, Michael Taenzer, and Stylianos I. Mimilakis. Predominant jazz instrument recognition: Empirical studies on neural network architectures. In *Proceedings of the European Signal Processing Conference (EUSIPCO)*, 2021
- Jakob Abeßer, Saichand Gourishetti, András Kátai, Tobias Clauß, Prachi Sharma, and Judith Liebetrau. IDMT-Traffic: An open benchmark dataset for acoustic traffic monitoring research. In *Proceedings of the European Signal Processing Conference (EUSIPCO)*, 2021
- Alexandra Draghici, Jakob Abeßer, and Hanna Lukashevich. A study on spoken language identification using deep neural networks. In *Proceedings of the 15th International Conference on Audio Mostly*, pages 253–256, 2020
- David S. Johnson, Wolfgang Lorenz, Michael Taenzer, Stylianos Mimilakis, Sascha Grollmisch, Jakob Abeßer, and Hanna Lukashevich. DESED-FL and URBAN-FL: Federated learning datasets for sound event detection. In *Proceedings of the European Signal Processing Conference (EUSIPCO)*, 2021
- Matthias Nowakowski, Christof Weiß, and Jakob Abeßer. Towards deep learning strategies for transcribing electroacoustic music. In *Proceedings of the 15th International Symposium on Computer Music Multidisciplinary Research (CMMR)*, 2020
- Tobias Clauß and Jakob Abeßer. Identifikation urbaner Geräuschquellen mittels maschineller Lernverfahren. *Lärmbekämpfung*, (3), 2020
- Michael Taenzer, Jakob Abeßer, Stylianos Ioannis Mimilakis, Christof Weiß, Meinard Müller, and Hanna Lukashevich. Investigating CNN-based instrument family recording for western classical music recordings. In *Proceedings of the 20th International Society for Music Information Retrieval Conference (ISMIR)*, Delft, Netherlands, 2019
- Christon-Ragavan Nadar, Jakob Abeßer, and Sascha Grollmisch. Towards CNN-based acoustic modeling of seventh chords for recognition chord recognition. In *Proceedings of the 16th Sound & Music Computing Conference (SMC)*, Malaga, Spain, 2019
- Stylianos Ioannis Mimilakis, Christof Weiß, Vlora Arifi-Müller, Jakob Abeßer, and Meinard Müller. Cross-version singing voice detection in opera recordings: Challenges for supervised learning. In *Proceedings of the 12th International Workshop on Machine Learning and Music (MML)*, Würzburg, Germany, 2019

- Sascha Grollmisch, Jakob Abeßer, Judith Liebetrau, and Hanna Lukashevich. Sounding industry: Challenges and datasets for industrial sound analysis. In *Proceedings of the 27th European Signal Processing Conference (EUSIPCO)*, A Coruña, Spain, 2019
- Jakob Abeßer and Meinard Müller. Fundamental frequency contour classification: A comparison between hand-crafted and CNN-based features. In *Proceedings of the 44th IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Brighton, UK, 2019
- Jakob Abeßer and Sara Kepplinger. Smart solutions to cope with urban noise pollution. *ERCIM*, 2019
- Jakob Abeßer, Marco Götze, Tobias Clauß, Dominik Zapf, Christian Kühn, Hanna Lukashevich, Stephanie Kühnlenz, and Stylianos Ioannis Mimitakis. Urban noise monitoring in the Stadtlärm project - A field report. In *Proceedings of the Detection and Classification of Acoustic Scenes and Events (DCASE) Workshop*, New York, NY, USA, 2019
- Christof Weiß, Stefan Balke, Jakob Abeßer, and Meinard Müller. Computational corpus analysis: A case study on jazz solos. In *Proceedings of the 19th International Society for Music Information Retrieval Conference (ISMIR)*, pages 416–423, Paris, France, 2018
- Juan S. Gómez, Jakob Abeßer, and Estefanía Cano. Jazz solo instrument classification with convolutional neural networks, source separation, and transfer learning. In *Proceedings of the 19th International Society for Music Information Retrieval Conference (ISMIR)*, pages 577–584, Paris, France, 2018
- Tobias Clauß, Jakob Abeßer, Hanna Lukashevich, Robert Gräfe, Franz Häuser, Christian Kühn, and Thomas Sporer. Stadtlärm - a distributed system for noise level measurement and noise source identification in a smart city environment. In *Proceedings of the Deutsche Jahrestagung für Akustik (DAGA)*, pages 285–288, Munich, Germany, 2018
- Jakob Abeßer, Robert Gräfe, Christian Kühn, Tobias Clauß, Hanna Lukashevich, Marco Götze, and Stephanie Kühnlenz. A distributed sensor network for monitoring noise level and noise sources in urban environments. In *Proceedings of the 6th IEEE International Conference on Future Internet of Things and Cloud (FiCloud)*, pages 318–324, Barcelona, Spain, 2018
- Jakob Abeßer, Stefan Balke, and Meinard Müller. Improving bass saliency estimation using label propagation and transfer learning. In *Proceedings of the 19th International Society for Music Information Retrieval Conference (ISMIR)*, pages 306–312, Paris, France, 2018
- Jakob Abeßer, Stylianos Ioannis Mimitakis, Robert Gräfe, and Hanna Lukashevich. Acoustic scene classification by combining autoencoder-based dimensionality reduction and convolutional neural networks. In *Proceedings of the 2nd DCASE Workshop on Detection and Classification of Acoustic Scenes and Events*, Munich, Germany, 16-17 November 2017
- Jakob Abeßer, Stefan Balke, Klaus Frieler, Martin Pfeiderer, and Meinard Müller. Deep learning for jazz walking bass transcription. In *Proceedings of the AES International Conference on Semantic Audio*, Erlangen, Germany, 2017
- Stylianos Ioannis Mimitakis, Estefanía Cano, Jakob Abeßer, and Gerald Schuller. New sonorities for jazz recordings: separation and mixing using deep neural networks. In *Proceedings of the 2nd AES Workshop on Intelligent Music Production*, London, UK, 2016

- Stefan Balke, Jonathan Driedger, Jakob Abeßer, and Meinard Müller. Towards evaluating multiple predominant melody annotations in jazz recordings. In *Proceedings of the 17th International Society for Music Information Retrieval Conference (ISMIR)*, pages 246–252, New York, USA, 2016
- Carsten Bönsel, Jakob Abeßer, Sascha Grollmisch, and Stylianos Ioannis Mimi-lakis. Automatic best take detection for electric guitar and vocal studio recordings. In *Proceedings of the 2nd AES Workshop on Intelligent Music Production*, London, UK, 2016
- Daniel Matz, Estefanía Cano, and Jakob Abeßer. New sonorities for early jazz recordings using sound source separation and automatic mixing tools. In *Proceedings of the International Society for Music Information Retrieval Conference (ISMIR)*, pages 749–755, Málaga, Spain, 2015
- Jakob Abeßer, Estefanía Cano, Klaus Frieler, Martin Pfeiderer, and Wolf-Georg Zaddach. Score-informed analysis of intonation and pitch modulation in jazz solos. In *Proceedings of the International Society for Music Information Retrieval Conference (ISMIR)*, pages 823–829, Málaga, Spain, 2015
- Anna M. Kruspe, Jakob Abeßer, and Christian Dittmar. A GMM approach to singing language identification. In *Proceedings of the AES International Conference on Semantic Audio*, pages 140–148, London, UK, 2014
- Christian Kehling, Jakob Abeßer, Christian Dittmar, and Gerald Schuller. Automatic tablature transcription of electric guitar recordings by estimation of score- and instrument-related parameters. In *Proceedings of the International Conference on Digital Audio Effects (DAFx)*, Erlangen, Germany, 2014
- Arndt Eppler, Andreas Männchen, Jakob Abeßer, Christof Weiß, and Klaus Frieler. Automatic style classification of jazz records with respect to rhythm, tempo, and tonality. In *Proceedings of the Conference on Interdisciplinary Musicology (CIM)*, pages 162–167, Berlin, Germany, 2014
- Jakob Abeßer, Martin Pfeiderer, Klaus Frieler, and Wolf-Georg Zaddach. Score-informed tracking and contextual analysis of fundamental frequency contours in trumpet and saxophone jazz solos. In *Proceedings of the International Conference on Digital Audio Effects (DAFx)*, pages 181–186, Erlangen, Germany, 2014
- Jakob Abeßer, Estefanía Cano, Klaus Frieler, and Martin Pfeiderer. Dynamics in jazz improvisation - Score-informed estimation and contextual analysis of tone intensities in trumpet and saxophone solos. In *Proceedings of the Conference on Interdisciplinary Musicology (CIM)*, pages 156–161, Berlin, Germany, 2014
- Anna Marie Kruspe, Jakob Abeßer, and Christian Dittmar. Towards coarse-scale event detection in music. In *Proceedings of the Audio Mostly Conference on Interaction with Sound*, Piteå, Sweden, 2013
- Mikus Grasis, Jakob Abeßer, Christian Dittmar, and Hanna Lukashevich. A Multiple-Expert Framework for Instrument Recognition. In *Proceedings of the International Symposium on Computer Music Multidisciplinary Research (CMMR)*, Marseilles, France, 2013
- Klaus Frieler, Jakob Abeßer, Wolf-Georg Zaddach, and Martin Pfeiderer. Introducing the Jazzomat Project and the Melo(S)py Library. In *Proceedings of the International Workshop on Folk Music Analysis (FMA)*, pages 76–78, Utrecht, Netherlands, 2013

- Christian Dittmar, Andreas Männchen, and Jakob Abeßer. Real-time guitar string detection for music education software. In *Proceedings of the International Workshop on Image Analysis for Multimedia Interactive Services (WIAMIS)*, Paris, France, 2013
- Jakob Abeßer, Patrick Kramer, Christian Dittmar, and Gerald Schuller. Parametric Audio Coding of Bass Guitar Recordings using a Tuned Physical Modeling Algorithm. In *Proceedings of the International Conference on Digital Audio Effects (DAFx)*, Maynooth, Ireland, 2013
- Jakob Abeßer, Johannes Hasselhorn, Christian Dittmar, Andreas Lehmann, and Sascha Grollmisch. Automatic Quality Assessment of Vocal and Instrumental Performances of Ninth-grade and Tenth-grade Pupils. In *Proceedings of the International Symposium on Computer Music Multidisciplinary Research (CMMR)*, Marseilles, France, 2013
- Jakob Abeßer, Klaus Frieler, Martin Pfeleiderer, and Wolf-Georg Zaddach. Introducing the Jazzomat project - Jazz solo analysis using Music Information Retrieval methods. In *Proceedings of the International Symposium on Computer Music Multidisciplinary Research (CMMR)*, Marseilles, France, 2013
- Johannes Krasser, Jakob Abeßer, Holger Großmann, Christian Dittmar, and Estefanía Cano. Improved Music Similarity Computation based on Tone Objects. In *Proceedings of the Audio Mostly Conference on Interaction with Sound*, Corfu, Greece, 2012
- Christian Dittmar, Jakob Abeßer, Sascha Grollmisch, Johannes Hasselhorn, and Andreas Lehmann. Automatic singing assessment of pupil performances. In *Proceedings of the International Conference on Music Perception and Cognition and the 8th Triennial conference of the European Society for the Cognitive Sciences of Music (ICMPC-ESCOM)*, pages 263–264, Thessaloniki, Greece, 2012
- Vedant Dhandhania, Jakob Abeßer, Anna Kruspe, and Holger Großmann. Automatic and manual annotation of time-varying perceptual properties in movie soundtracks. In *Proceedings of the Sound and Music Computing Conference (SMC)*, pages 461–466, Copenhagen, Denmark, 2012
- Anna Kruspe, Hanna Lukashevich, Jakob Abeßer, Holger Großmann, and Christian Dittmar. Automatic classification of music pieces into global cultural areas. In *Proceedings of the AES International Conference on Semantic Audio*, pages 44–53, Ilmenau, Germany, 2011
- Anna Kruspe, Hanna Lukashevich, and Jakob Abeßer. Artist Filtering for Non-western Music Classification. In *Proceedings of the Audio Mostly Conference: A Conference on Interaction with Sound*, pages 82–87, Coimbra, Portugal, 2011
- Jakob Abeßer, Olivier Lartillot, Christian Dittmar, Tuomas Eerola, and Gerald Schuller. Modeling Musical Attributes to Characterize Ensemble Recordings using Rhythmic Audio Features. In *Proceedings of the IEEE Conference on Acoustics, Speech and Signal Processing (ICASSP)*, pages 189–192, Praha, Czech Republic, 2011
- Jakob Abeßer, Christian Dittmar, and Gerald Schuller. Automatic Recognition and Parametrization of Frequency Modulation Techniques in Bass Guitar Recordings. In *Proceedings of the Audio Engineering Society (AES) International Conference on Semantic Audio*, pages 1–8, Ilmenau, Germany, 2011
- Thomas Völkel, Jakob Abeßer, Christian Dittmar, and Holger Großmann. Automatic Genre Classification of Latin American Music using Characteristic Rhythmic Patterns. In *Proceedings of the Audio Mostly Conference on Interaction with Sound*, Piteå, Sweden, 2010

- Michael Stein, Jakob Abeßer, Christian Dittmar, and Gerald Schuller. Automatic Detection of Audio Effects in Guitar and Bass Recordings. In *Proceedings of the Audio Engineering Society (AES) Convention*, pages 522–533, London, UK, 2010
- Christian Dittmar, Sascha Grollmisch, Hanna Lukashevich, Holger Großmann, Estefanía Cano, and Jakob Abeßer. Songs2See and GlobalMusic2One: Two Ongoing Projects in Music Information Retrieval Research at Fraunhofer IDMT. In *Proceeding of the International Symposium on Computer Music Modeling and Retrieval (CMMR)*, pages 259–272, Málaga, Spain, 2010. Springer-Verlag
- Jakob Abeßer, Paul Bräuer, Hanna Lukashevich, and Gerald Schuller. Bass Playing Style Detection Based on High-level Features and Pattern Similarity. In *Proceedings of the International Society for Music Information Retrieval Conference (ISMIR)*, pages 93–98, Utrecht, Netherlands, 2010
- Jakob Abeßer, Hanna Lukashevich, and Gerald Schuller. Feature-based Extraction of Plucking and Expression Styles of the Electric Bass Guitar. In *Proceedings of the IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, pages 2290–2293, Dallas, USA, 2010
- Jakob Abeßer, Hanna Lukashevich, Christian Dittmar, Paul Bräuer, and Fabienne Krause. Rule-based classification of musical genres from a global cultural background. In *Proceedings of the International Symposium on Computer Music Modeling and Retrieval (CMMR)*, Málaga, Spain, 2010
- Jakob Abeßer, Hanna Lukashevich, Christian Dittmar, and Gerald Schuller. Genre Classification using Bass-Related High-Level Features and Playing Styles. In *Proceedings of the International Society for Music Information Retrieval Conference (ISMIR)*, pages 453–458, Kobe, Japan, 2009
- Jakob Abeßer, Christian Dittmar, and Holger Großmann. Automatic Genre and Artist Classification by Analyzing Improvised Solo Parts from Musical Recordings. In *Proceedings of the Audio Mostly Conference on Interaction with Sound*, pages 127–131, Piteå, Sweden, 2008

Conference Papers (non peer-reviewed)

- Yuxuan He, Alexander Raake, and Jakob Abeßer. Integrating multiscale representation and re-evaluating channel shuffling in efficient time-frequency separate networks for acoustic scene classification. In *Proceedings of the DAS/DAGA 2025 - 51st Annual Meeting on Acoustics, 2025*
- Claudia Lenk, Alexander Raake, Kathy Lüdge, Lina Jaurigue, Stefan Schöneich, Manuela Nowotny, Daniel Beer, Jakob Abeßer, Tino Hutschenreuther, and Martin Ziegler. Neurosensear: Neuromorphic acoustic sensing for the high-performance hearing aids of tomorrow. In *Proceedings of the DAS/DAGA 2025 - 51st Annual Meeting on Acoustics, 2025*
- Sascha Grollmisch, Ravi Kumar, and Jakob Abeßer. Semi-supervised learning for acoustic scene classification using fixmatch. In *Proceedings of the DAS/DAGA 2025 - 51st Annual Meeting on Acoustics, 2025*
- Sascha Grollmisch, Jakob Abeßer, and Joachim Bös. Selbstüberwachtes vor-training zur verbesserung automatischer audioklassifikationsalgorithmen. In *Proceedings of the 50. Jahrestagung für Akustik (DAGA)*, 2024
- Jakob Abeßer, Sascha Grollmisch, and Joachim Bös. Aktuelle forschungsschwerpunkte in der akustischen ereignisdetektion. In *Proceedings of the 50. Jahrestagung für Akustik (DAGA)*, 2024

- Juan Manuel Rodríguez Mejía, Jakob Abeßer, Luca Cuccovillo, and Patrick Aichroth. Siren sounds as acoustic landmarks for content verification. In *Proceedings of the 50. Jahrestagung für Akustik (DAGA)*, 2024
- Hanna Lukashevich, Sascha Grollmisch, and Jakob Abeßer. Quantifying uncertainty in music genre classification. In *Proceedings of the 49. Jahrestagung für Akustik (DAGA)*, 2023
- Franca Bittner and Jakob Abeßer. An introduction to unsupervised domain adaptation in sound and music processing. In *Proceedings of the 49. Jahrestagung für Akustik (DAGA)*, 2023
- Sascha Grollmisch, Estefanía Cano, and Jakob Abeßer. Audio augmentations for semi-supervised learning with fixmatch. In *Late-Breaking Demo of the International Society for Music Information Retrieval Conference (ISMIR)*, 2022
- Jakob Abeßer, Xiaoyi Wang, Svenja Bänsch, Christoph Scherber, and Hanna Lukashevich. Analyzing Bird and Bat Activity in Agricultural Environments using AI-driven Audio Monitoring. In *Proceedings of the 48th Annual Conference on Acoustics (DAGA)*, Stuttgart, Germany, 2022
- Jakob Abeßer, Alexander Loos, and Prachi Sharpi. Construction-sAI: Multi-modal AI-driven technologies for construction site monitoring. In *Proceedings of the 48th Annual Conference on Acoustics (DAGA)*, Stuttgart, Germany, 2022