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Education

2005–2008: Ph.D. student, Audio Media Processing Group, Department of Intelligence Science and Technology, Graduate School of Informatics, Kyoto University

2003–2005: Master student, Audio Media Processing Group, Department of Intelligence Science and Technology, Graduate School of Informatics, Kyoto University

1999–2003: Undergraduate student, Undergraduate School of Informatics and Mathematical Science, Faculty of Engineering, Kyoto University

Job Experience

2018–now: Associate Professor, Speech and Audio Processing Group, Department of Intelligence Science and Technology, Graduate School of Informatics, Kyoto University

2017–now: Team Leader, Sound Scene Understanding Team, Center for Advanced Intelligence Project (AIP), RIKEN

2014–2018: Senior Lecturer, Speech and Audio Processing Group, Department of Intelligence Science and Technology, Graduate School of Informatics, Kyoto University

2013–2014: Senior Researcher, Media Interaction Research Group, Information Technology Research Institute (ITRI), National Institute of Advanced Industrial Science and Technology (AIST)

2008–2013: Research Scientist, Media Interaction Research Group, Information Technology Research Institute (ITRI), National Institute of Advanced Industrial Science and Technology (AIST)

Academic Experience

2019–now: Technical Committee Member, Audio and Acoustic Signal Processing (AASP), Signal Processing Society (SPS), IEEE

2014–now: Program Committee Member, International Society for Music Information Retrieval Conference (ISMIR)

2020, 2021: Area Chair, Music Information Retrieval and Music Language Processing, IEEE International Conference on Acoustics, Speech, & Signal Processing (ICASSP)

2009: Publication Chair, International Society for Music Information Retrieval Conference (ISMIR)

Review Experience

1. IEEE/ACM Transactions on Audio, Speech, and Language Processing (TASLP), since 2008.
2. IEEE Journal of Selected Topics in Signal Processing, since 2018.
3. IEEE Signal Processing Letters (SPL), since 2012.
4. EURASIP Journal on Audio, Speech, and Music Processing (JASMP), since 2017.
5. APSIPA Transactions on Signal and Information Processing (A-TSIP), since 2019.
6. APSIPA Annual Summit and Conference (APSIPA ASC), since 2018.
7. EURASIP European Signal Processing Conference (EUSIPCO), since 2015.
8. IEEE International Conference on Acoustics, Speech, & Signal Processing (ICASSP), since 2008.
9. International Society for Music Information Retrieval Conference (ISMIR), since 2008.
10. Other conferences (WASPAA, SMC, NIPS, ICML, AAI, IROS, and ICRA) related to music information processing, audio signal processing, and machine learning

Publications

Journal papers

1. Kouhei Sekiguchi, Yoshiaki Bando, Aditya Arie Nugraha, Mathieu Fontaine, [Kazuyoshi Yoshii](#), and Tatsuya Kawahara, "Autoregressive Moving Average Jointly-Diagonalizable Spatial Covariance Analysis for Joint Source Separation and Dereverberation", IEEE/ACM Transactions on Audio, Speech, and Language Processing, in print, 2022.
2. Yiming Wu and [Kazuyoshi Yoshii](#), "Joint Chord and Key Estimation Based on a Hierarchical Variational Autoencoder with Multi-Task Learning", APSIPA Transactions on Signal and Information Processing, in print, 2022.
3. Mathieu Fontaine, Kouhei Sekiguchi, Aditya Arie Nugraha, Yoshiaki Bando, and [Kazuyoshi Yoshii](#), "Generalized Fast Multichannel Nonnegative Matrix Factorization Based on Gaussian Scale Mixtures for Blind Source Separation", IEEE/ACM Transactions on Audio, Speech, and Language Processing, Vol. 30, pp. 1734–1748, 2022.
4. Yicheng Du, Robin Scheibler, Masahito Togami, [Kazuyoshi Yoshii](#), and Tatsuya Kawahara, "Computationally-Efficient Overdetermined Blind Source Separation Based on Iterative Source Steering", IEEE Signal Processing Letters, Vol. 29, pp. 927–931, 2021.
5. Yoshiaki Bando, Kouhei Sekiguchi, Yoshiki Masuyama, Aditya Arie Nugraha, Mathieu Fontaine, and [Kazuyoshi Yoshii](#), "Neural Full-Rank Spatial Covariance Analysis for Blind Source Separation", IEEE



- Signal Processing Letters, Vol. 28, pp. 1670–1674, 2021.
6. Ryoto Ishizuka, Ryo Nishikimi, and [Kazuyoshi Yoshii](#), "Global Structure-Aware Drum Transcription Based on Self-Attention Mechanisms", *Signals*, Vol. 2, No. 3, pp. 508–526, 2021.
 7. Pasrawin Taechawattananant, [Kazuyoshi Yoshii](#), and Yasushi Ishihama, "Peak Identification and Quantification by Proteomic Mass Spectrogram Decomposition", *Journal of Proteome Research*, Vol. 20, No. 5, pp. 2291–2298, 2021.
 8. Kentaro Shibata, Eita Nakamura, and [Kazuyoshi Yoshii](#), "Non-Local Musical Statistics as Guides for Audio-to-Score Piano Transcription", *Information Sciences*, Vol. 566, pp. 262–280, 2021.
 9. Takayuki Nakatsuka, [Kazuyoshi Yoshii](#), Yuki Koyama, Satoru Fukayama, Masataka Goto, and Shigeo Morishima, "MirrorNet: A Deep Reflective Approach to 2D Pose Estimation for Single-Person Images", *Journal of Information Processing*, Vol. 29, pp. 406–423, 2021.
 10. Eita Nakamura and [Kazuyoshi Yoshii](#), "Musical Rhythm Transcription Based on Bayesian Piece-Specific Score Models Capturing Repetitions", *Information Sciences*, Vol. 572, pp. 482–500, 2021.
 11. Ryo Nishikimi, Eita Nakamura, Masataka Goto, and [Kazuyoshi Yoshii](#), "Audio-to-Score Singing Transcription Based on a CRNN-HSMM Hybrid Model", *APSIPA Transactions on Signal and Information Processing*, Vol. 10, No. e7, pp. 1–13, 2021.
 12. Aditya Arie Nugraha, Kouhei Sekiguchi, Mathieu Fontaine, Yoshiaki Bando, and [Kazuyoshi Yoshii](#), "Flow-Based Independent Vector Analysis for Blind Source Separation", *IEEE Signal Processing Letters*, Vol. 27, pp. 2173–2177, 2020.
 13. Yiming Wu, Tristan Carsault, Eita Nakamura, and [Kazuyoshi Yoshii](#), "Semi-supervised Neural Chord Estimation Based on a Variational Autoencoder with Latent Chord Labels and Features", *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, Vol. 28, pp. 2956–2966, 2020.
 14. Kouhei Sekiguchi, Yoshiaki Bando, Aditya Arie Nugraha, [Kazuyoshi Yoshii](#), and Tatsuya Kawahara, "Fast Multichannel Nonnegative Matrix Factorization with Directivity-Aware Jointly-Diagonalizable Spatial Covariance Matrices for Blind Source Separation", *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, Vol. 28, pp. 2610–2625, 2020.
 15. Ryo Nishikimi, Eita Nakamura, Masataka Goto, Katsutoshi Itoyama, and [Kazuyoshi Yoshii](#), "Bayesian Singing Transcription Based on a Hierarchical Generative Model of Keys, Musical Notes, and Fo Trajectories", *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, Vol. 28, pp. 1678–1691, 2020.
 16. Hiroaki Tsushima, Eita Nakamura, Katsutoshi Itoyama, and [Kazuyoshi Yoshii](#), "Bayesian Melody Harmonization Based on a Tree-Structured Generative Model of Chord Sequences and Melodies", *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, Vol. 28, pp. 1644–1655, 2020.
 17. Aditya Arie Nugraha, Kouhei Sekiguchi, and [Kazuyoshi Yoshii](#), "A Flow-Based Deep Latent Variable Model for Speech Spectrogram Modeling and Enhancement", *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, Vol. 28, pp. 1104–1117, 2020.
 18. Eita Nakamura, Yasuyuki Saito, and [Kazuyoshi Yoshii](#), "Statistical Learning and Estimation of Piano Fingering", *Information Sciences*, Vol. 517, pp. 68–85, 2020.
 19. Kouhei Sekiguchi, Yoshiaki Bando, Aditya Arie Nugraha, [Kazuyoshi Yoshii](#), and Tatsuya Kawahara, "Semi-supervised Multichannel Speech Enhancement with a Deep Speech Prior", *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, Accepted, 2019.
 20. Kazuki Shimada, Yoshiaki Bando, Masato Mimura, Katsutoshi Itoyama, [Kazuyoshi Yoshii](#), and

- Tatsuya Kawahara, "Unsupervised Speech Enhancement Based on Multichannel NMF-Informed Beamforming for Noise-Robust Speech Recognition", *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, Vol. 27, No. 5, pp. 960–971, 2019.
21. Yuta Ojima, Eita Nakamura, Katsutoshi Itoyama, and [Kazuyoshi Yoshii](#), "Chord-Aware Automatic Music Transcription Based on Hierarchical Bayesian Integration of Acoustic and Language Models", *APSIPA Transactions on Signal and Information Processing*, Vol. 7, No. e14, pp. 1–14, 2018.
 22. Eita Nakamura and [Kazuyoshi Yoshii](#), "Statistical Piano Reduction Controlling Performance Difficulty", *APSIPA Transactions on Signal and Information Processing*, Vol. 7, No. e13, pp. 1–12, 2018.
 23. Hiroaki Tsushima, Eita Nakamura, Katsutoshi Itoyama, and [Kazuyoshi Yoshii](#), "Generative Statistical Models with Self-Emergent Grammar of Chord Sequences", *Journal of New Music Research*, pp. 1–23, 2018.
 24. Kousuke Itakura, Yoshiaki Bando, Eita Nakamura, Katsutoshi Itoyama, [Kazuyoshi Yoshii](#), and Tatsuya Kawahara, "Bayesian Multichannel Audio Source Separation Based on Integrated Source and Spatial Models", *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, Vol. 26, No. 4, pp. 831–846, 2018.
 25. Yoshiaki Bando, Katsutoshi Itoyama, Masashi Konyo, Satoshi Tadokoro, Kazuhiro Nakadai, and [Kazuyoshi Yoshii](#), Tatsuya Kawahara, Hiroshi G. Okuno, "Speech Enhancement Based on Bayesian Low-Rank and Sparse Decomposition of Multichannel Magnitude Spectrograms", *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, Vol. 26, No. 2, pp. 215–230 2018.
 26. Eita Nakamura, [Kazuyoshi Yoshii](#), and Simon Dixon, "Note Value Recognition for Rhythm Transcription Using a Markov Random Field Model for Musical Scores and Performances of Piano Music", *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, Vol. 25, No.9, pp. 1846–1858, 2017.
 27. Eita Nakamura, [Kazuyoshi Yoshii](#), and Shigeki Sagayama, "Rhythm Transcription of Polyphonic Music Based on Merged-Output HMM for Multiple Voices", *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, Vol. 25, No. 4, pp. 794–806, 2017.
 28. Karim Youssef, Katsutoshi Itoyama, and [Kazuyoshi Yoshii](#), "Simultaneous Identification and Localization of Immobile and Moving Speakers Based on Binaural Sound Acquisition", *Journal of Robotics and Mechatronics*, Vol. 29, No. 1, pp. 59–71, 2017.
 29. Misato Ohkita, Yoshiaki Bando, Yukara Ikemiya, Eita Nakamura, Katsutoshi Itoyama, and [Kazuyoshi Yoshii](#), "Audio-Visual Beat Tracking Based on a State-Space Model for a Robot Dancer Performing with a Human Dancer", *Journal of Robotics and Mechatronics*, Vol. 29, No. 1, pp. 125–136, 2017.
 30. Kouhei Sekiguchi, Yoshiaki Bando, Katsutoshi Itoyama, and [Kazuyoshi Yoshii](#), "Layout Optimization of Cooperative Distributed Microphone Arrays Based on Estimation of Source Separation Performance", *Journal of Robotics and Mechatronics*, Vol. 29, No. 1, pp. 83–93, 2017.
 31. Yoshiaki Bando, Hiroshi Saruwatari, Nobutaka Ono, Shoji Makino, Katsutoshi Itoyama, Daichi Kitamura, Masaru Ishimura, Moe Takakusaki, Narumi Mae, Kouei Yamaoka, Yutaro Matsui, Yuichi Ambe, Masashi Konyo, Satoshi Tadokoro, [Kazuyoshi Yoshii](#), and Hiroshi G. Okuno, "Low-Latency and High-Quality Two-Stage Human-Voice-Enhancement System for a Hose-Shaped Rescue Robot", *Journal of Robotics and Mechatronics*, Vol. 29, No. 1, pp. 198–212, 2017.

32. Yukara Ikemiya, Katsutoshi Itoyama, and [Kazuyoshi Yoshii](#), "Singing Voice Separation and Vocal F0 Estimation Based on Mutual Combination of Robust Principal Component Analysis and Subharmonic Summation", *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, Vol. 24, No. 11, pp. 2084–2095, 2016.
33. Tomoyasu Nakano, [Kazuyoshi Yoshii](#), and Masataka Goto, "Musical Similarity and Commonness Estimation Based on Probabilistic Generative Models", *International Journal of Semantic Computing*, Vol. 10, No. 1, pp. 27–52, 2016.
34. Izaya Nishimuta, Katsutoshi Itoyama, [Kazuyoshi Yoshii](#), and Hiroshi G. Okuno, "Toward a Quizmaster Robot for Speech-Based Multiparty Interaction", *Advanced Robotics*, Vol. 29, No. 18, pp. 1205–1219, 2015.
35. Akira Maezawa, Katsutoshi Itoyama, [Kazuyoshi Yoshii](#), and Hiroshi G. Okuno, "Nonparametric Bayesian Dereverberation of Power Spectrograms Based on Infinite-Order Autoregressive Processes", *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, Vol. 22, No. 12, pp. 1918–1930, 2014.
36. Matthew E. P. Davies, Philippe Hamel, [Kazuyoshi Yoshii](#), and Masataka Goto, "AutoMashUpper: Automatic Creation of Multi-Song Music Mashups", *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, Vol. 22, No. 12, pp. 1726–1737, 2014.
37. [Kazuyoshi Yoshii](#) and Masataka Goto, "A Nonparametric Bayesian Multipitch Analyzer Based on Infinite Latent Harmonic Allocation", *IEEE Transactions on Audio, Speech and Language Processing*, Vol. 20, No. 3, pp. 717–730, 2012.
38. [Kazuyoshi Yoshii](#), Masataka Goto, Kazunori Komatani, Tetsuya Ogata, and Hiroshi G. Okuno, "An Efficient Hybrid Music Recommender System Using an Incrementally Trainable Probabilistic Generative Model", *IEEE Transactions on Audio, Speech and Language Processing*, Vol. 16, No. 2, pp. 435–447, 2008.
39. [Kazuyoshi Yoshii](#), Masataka Goto, Kazunori Komatani, Tetsuya Ogata, and Hiroshi G. Okuno, "Drumix: An Audio Player with Real-Time Drum-Part Rearrangement Functions for Active Music Listening", *IPSJ Digital Courier*, Vol. 3, pp. 134–144, 2007.
40. [Kazuyoshi Yoshii](#), Masataka Goto, and Hiroshi G. Okuno, "Drum Sound Recognition for Polyphonic Audio Signals by Adaptation and Matching of Spectrogram Templates with Harmonic Structure Suppression", *IEEE Transactions on Audio, Speech and Language Processing*, Vol. 15, No. 1, pp. 333–345, 2007.

Conference papers

41. Moyu Terao, Yuki Hiramatsu, Ryoto Ishizuka, Yiming Wu, and [Kazuyoshi Yoshii](#), "Difficulty-Aware Neural Band-to-Piano Score Arrangement Based on Note- and Statistic-Level Criteria", *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, pp. 196–200, May 2022.
42. Aditya Arie Nugraha, Kouhei Sekiguchi, Mathieu Fontaine, Yoshiaki Bando, and [Kazuyoshi Yoshii](#), "Flow-Based Fast Multichannel Nonnegative Matrix Factorization for Blind Source Separation", *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, pp. 501–505, May 2022.
43. Takehisa Oyama, Ryoto Ishizuka, and [Kazuyoshi Yoshii](#), "Phase-Aware Joint Beat and Downbeat

- Estimation Based on Periodicity of Metrical Structure", International Society for Music Information Retrieval Conference (ISMIR 2021), pp. 493–499, November 2021.
44. Yuki Hiramatsu, Eita Nakamura, and [Kazuyoshi Yoshii](#), "Joint Estimation of Note Values and Voices for Audio-to-Score Piano Transcription", International Society for Music Information Retrieval Conference (ISMIR 2021), pp. 278–284, November 2021.
 45. Mathieu Fontaine, Kouhei Sekiguchi, Aditya Arie Nugraha, Yoshiaki Bando, and [Kazuyoshi Yoshii](#), "Alpha-Stable Autoregressive Fast Multichannel Nonnegative Matrix Factorization for Joint Speech Enhancement and Dereverberation", Annual Conference of the International Speech Communication Association (Interspeech 2021), pp. 601–665, August 2021.
 46. Yoshiaki Bando, Kouhei Sekiguchi, and [Kazuyoshi Yoshii](#), "Gamma Process FastMNMF for Separating an Unknown Number of Sound Sources", European Signal Processing Conference (EUSIPCO 2021), Accepted, August 2021.
 47. Kouhei Sekiguchi, Yoshiaki Bando, Aditya Arie Nugraha, Mathieu Fontaine, and [Kazuyoshi Yoshii](#), "Autoregressive Fast Multichannel Nonnegative Matrix Factorization for Joint Blind Source Separation and Dereverberation", IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2021), pp. 511–515, June 2021.
 48. Yuki Hiramatsu, Go Shibata, Ryo Nishikimi, Eita Nakamura, and [Kazuyoshi Yoshii](#), "Statistical Correction of Transcribed Melody Notes Based on Probabilistic Integration of a Music Language Model and a Transcription Error Model", IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2021), pp. 256–260, June 2021.
 49. Keitaro Tanaka, Ryo Nishikimi, Yoshiaki Bando, [Kazuyoshi Yoshii](#), and Shigeo Morishima, "Pitch-Timbre Disentanglement of Musical Instrument Sounds Based on VAE-Based Metric Learning", IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2021), pp. 111–115, June 2021.
 50. [Kazuyoshi Yoshii](#), Kouhei Sekiguchi, Yoshiaki Bando, Mathieu Fontaine, and Aditya Arie Nugraha, "Fast Multichannel Correlated Tensor Factorization for Blind Source Separation", European Signal Processing Conference (EUSIPCO 2021), pp. 306–310, January 2021.
 51. Yicheng Du, Kouhei Sekiguchi, Yoshiaki Bando, Aditya Arie Nugraha, Mathieu Fontaine, [Kazuyoshi Yoshii](#), and Tatsuya Kawahara, "Semi-supervised Multichannel Speech Separation Based on a Phone- and Speaker-Aware Deep Generative Model of Speech Spectrograms", European Signal Processing Conference (EUSIPCO 2021), pp. 870–874, January 2021.
 52. Ryoto Ishizuka, Ryo Nishikimi, Eita Nakamura, and [Kazuyoshi Yoshii](#), "Tatum-Level Drum Transcription Based on a Convolutional Recurrent Neural Network with Language Model-Based Regularized Training", Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC 2020), pp. 359–364, December 2020.
 53. Yiming Wu, Eita Nakamura, and [Kazuyoshi Yoshii](#), "A Variational Autoencoder for Joint Chord and Key Estimation from Audio Chromagrams", Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC 2020), pp. 500–506, December 2020.
 54. Masaya Wake, Masahito Togami, [Kazuyoshi Yoshii](#), and Tatsuya Kawahara, "Integration of Semi-blind Speech Source Separation and Voice Activity Detection for Flexible Spoken Dialogue", Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC 2020), pp. 775–780, December 2020.

55. Masahito Togami, Yoshiki Masuyama, Tatsuya Komatsu, [Kazuyoshi Yoshii](#), and Tatsuya Kawahara, "Computer-Resource-Aware Deep Speech Separation with a Run-Time-Specified Number of BLSTM Layers", Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC 2020), pp. 788–793, December 2020.
56. Jeongwoo Woo, Masato Mimura, [Kazuyoshi Yoshii](#), and Tatsuya Kawahara, "End-to-End Music-Mixed Speech Recognition", Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC 2020), pp. 800–804, December 2020.
57. Yoshiaki Bando, Kouhei Sekiguchi, and [Kazuyoshi Yoshii](#), "Adaptive Neural Speech Enhancement with a Denoising Variational Autoencoder", Annual Conference of the International Speech Communication Association (Interspeech 2020), pp. 2437–2441, October 2020.
58. Mathieu Fontaine, Kouhei Sekiguchi, Aditya Arie Nugraha, and [Kazuyoshi Yoshii](#), "Unsupervised Robust Speech Enhancement Based on Alpha-Stable Fast Multichannel Nonnegative Matrix Factorization", Annual Conference of the International Speech Communication Association (Interspeech 2020), pp. 4541–4545, October 2020.
59. Go Shibata, Ryo Nishikimi, and [Kazuyoshi Yoshii](#), "Music Structure Analysis Based on an LSTM-HSMM Hybrid Model", International Society for Music Information Retrieval Conference (ISMIR 2020), pp. 15–22, October 2020.
60. Keitaro Tanaka, Takayuki Nakatsuka, Ryo Nishikimi, [Kazuyoshi Yoshii](#), and Shigeo Morishima, "Multi-Instrument Music Transcription Based on Deep Spherical Clustering of Spectrograms and Pitchgrams", International Society for Music Information Retrieval Conference (ISMIR 2020), pp. 327–334, October 2020.
61. Florian Thalmann, [Kazuyoshi Yoshii](#), Wiggins Geraint, and Mark B. Sandler, "A Method for Analysis of Shared Structure in Large Music Collections Using Techniques from Genetic Sequencing and Graph Theory", International Society for Music Information Retrieval Conference (ISMIR 2020), pp. 343–350, October 2020.
62. Andrew McLeod, James Owers, and [Kazuyoshi Yoshii](#), "The MIDI Degradation Toolkit: Symbolic Music Augmentation and Correction", International Society for Music Information Retrieval Conference (ISMIR 2020), pp. 846–850, October 2020.
63. Go Shibata, Ryo Nishikimi, Eita Nakamura, and [Kazuyoshi Yoshii](#), "Statistical Music Structure Analysis Based on a Homogeneity- and Repetitiveness-Aware Hierarchical Hidden Semi-Markov Model", International Society for Music Information Retrieval Conference (ISMIR 2019), pp. 268–275, November 2019.
64. Adrien Ycart, Andrew McLeod, Emmanouil Benetos, and [Kazuyoshi Yoshii](#), "Blending Acoustic and Language Model Predictions for Automatic Music Transcription", International Society for Music Information Retrieval Conference (ISMIR 2019), pp. 454–461, November 2019.
65. Ryo Nishikimi, Eita Nakamura, Masataka Goto, and [Kazuyoshi Yoshii](#), "End-to-End Melody Note Transcription Based on a Beat-Synchronous Attention Mechanism", IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA 2019), pp. 26–30, October 2019.
66. Tomoyasu Nakano, [Kazuyoshi Yoshii](#), Yiming Wu, Ryo Nishikimi, Kin Wah Edward Lin, and Masataka Goto, "Joint Singing Pitch Estimation and Voice Separation Based on a Neural Harmonic Structure Renderer", IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA 2019), pp. 160–164, October 2019.

67. Tristan Carsault, Andrew McLeod, Philippe Esling, Jérôme Nika, Eita Nakamura, and [Kazuyoshi Yoshii](#), "Multi-Step Chord Sequence Prediction Based on Aggregated Multi-Scale Encoder-Decoder Networks", IEEE International Workshop on Machine Learning for Signal Processing (MLSP 2019), pp. 1–6, October 2019.
68. Yoshiaki Bando, Yoko Sasaki, and [Kazuyoshi Yoshii](#), "Deep Bayesian Unsupervised Source Separation Based on a Complex Gaussian Mixture Model", IEEE International Workshop on Machine Learning for Signal Processing (MLSP 2019), pp. 1–6, October 2019.
69. Aaron Chau, Kouhei Sekiguchi, Aditya Arie Nugraha, [Kazuyoshi Yoshii](#), and Kotaro Funakoshi, "Audio-Visual SLAM towards Human Tracking and Human-Robot Interaction in Indoor Environments", IEEE International Conference on Robot and Human Interactive Communication (ROMAN 2019), pp. 1–8, October 2019.
70. Yiming Wu, Tristan Carsault, and [Kazuyoshi Yoshii](#), "Automatic Chord Estimation Based on a Frame-wise Convolutional Recurrent Neural Network with Non-Aligned Annotations", European Signal Processing Conference (EUSIPCO 2019), pp. 1–5, September 2019.
71. Kouhei Sekiguchi, Aditya Arie Nugraha, Yoshiaki Bando, and [Kazuyoshi Yoshii](#), "Fast Multichannel Source Separation Based on Jointly Diagonalizable Spatial Covariance Matrices", European Signal Processing Conference (EUSIPCO 2019), pp. 1–5, September 2019.
72. Mathieu Fontaine, Aditya Arie Nugraha, Roland Badeau, [Kazuyoshi Yoshii](#), and Antoine Liutkus, "Cauchy Multichannel Speech Enhancement with a Deep Speech Prior", European Signal Processing Conference (EUSIPCO 2019), pp. 1–5, September 2019.
73. Ryo Nishikimi, Eita Nakamura, Satoru Fukayama, Masataka Goto, and [Kazuyoshi Yoshii](#), "Automatic Singing Transcription Based on Encoder-Decoder Recurrent Neural Networks with a Weakly-Supervised Attention Mechanism", IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2019), pp. 161–165, May 2019.
74. Kentaro Shibata, Ryo Nishikimi, Satoru Fukayama, Masataka Goto, Eita Nakamura, Katsutoshi Itoyama, and [Kazuyoshi Yoshii](#), "Joint Transcription of Lead, Bass, and Rhythm Guitars Based on a Factorial Hidden Semi-Markov Model", IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2019), pp. 236–240, May 2019.
75. Shun Ueda, Kentaro Shibata, Yusuke Wada, Ryo Nishikimi, Eita Nakamura, and [Kazuyoshi Yoshii](#), "Bayesian Drum Transcription Based on Nonnegative Matrix Factor Decomposition with a Deep Score Prior", IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2019), pp. 456–460, May 2019.
76. Eita Nakamura, Kentaro Shibata, Ryo Nishikimi, and [Kazuyoshi Yoshii](#), "Unsupervised Melody Style Conversion", IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2019), pp. 196–200, May 2019.
77. Andrew McLeod, Eita Nakamura, and [Kazuyoshi Yoshii](#), "Improved Metrical Alignment of MIDI Performance Based on a Repetition-Aware Online-Adapted Grammar", IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2019), pp. 186–190, May 2019.
78. Aditya Arie Nugraha, Kouhei Sekiguchi, and [Kazuyoshi Yoshii](#), "A Deep Generative Model of Speech Complex Spectrograms", IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2019), pp. 905–909, May 2019.
79. Kouhei Sekiguchi, Yoshiaki Bando, [Kazuyoshi Yoshii](#), and Tatsuya Kawahara, "Bayesian

- Multichannel Speech Enhancement with a Deep Speech Prior", Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC 2018), pp. 1233–1239, November 2018.
80. Eita Nakamura, Ryo Nishikimi, Simon Dixon, and [Kazuyoshi Yoshii](#), "Probabilistic Sequential Patterns for Singing Transcription", Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC 2018), pp. 1905–1912, November 2018.
 81. Yusuke Wada, Ryo Nishikimi, Eita Nakamura, Katsutoshi Itoyama, and [Kazuyoshi Yoshii](#), "Sequential Generation of Singing FO Contours from Musical Note Sequences Based on WaveNet", Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC 2018), pp. 983–989, November 2018.
 82. Hiroaki Tsushima, Eita Nakamura, Katsutoshi Itoyama, and [Kazuyoshi Yoshii](#), "Interactive Arrangement of Chords and Melodies Based on a Tree-Structured Generative Model", International Society for Music Information Retrieval Conference (ISMIR 2018), pp. 145–151, September 2018.
 83. [Kazuyoshi Yoshii](#), Koichi Kitamura, Yoshiaki Bando, Eita Nakamura, and Tatsuya Kawahara, "Independent Low-Rank Tensor Analysis for Audio Source Separation", European Signal Processing Conference (EUSIPCO 2018), pp. 1671–1675, September 2018.
 84. Eita Nakamura, Emmanouil Benetos, [Kazuyoshi Yoshii](#), and Simon Dixon, "Towards Complete Polyphonic Music Transcription: Integrating Multi-Pitch Detection and Rhythm Quantization", IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2018), pp. 101–105, April 2018.
 85. Yoshiaki Bando, Masato Mimura, Katsutoshi Itoyama, [Kazuyoshi Yoshii](#), and Tatsuya Kawahara, "Statistical Speech Enhancement Based on Probabilistic Integration of Variational Autoencoder and Nonnegative Matrix Factorization", IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2018), pp. 716–720, April 2018.
 86. [Kazuyoshi Yoshii](#), "Correlated Tensor Factorization for Audio Source Separation", IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2018), pp. 731–735, April 2018.
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Awards

1. IEEE International Conference on Robot and Human Interactive Communication (ROMAN), Best Conference Paper Award, 2019/10/17.
2. IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR 2015), Most Innovative Paper Award, 2015/10/19.
3. IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR 2015), People's Choice Demo Award, 2015/10/19.
4. The 10th Annual Music Information Retrieval Evaluation eXchange (MIREX 2014), Winner of the Singing Voice Separation Track, 2014/10/14.
5. The 14th International Society for Music Information Retrieval Conference (ISMIR 2013) Best Oral Presentation Award, 2013/11/7.
6. Award for Entertainment Robots and Systems (IROS 2008 NTF Award) Nomination Finalist, 2008/9/24.
7. Award for Entertainment Robots and Systems (IROS 2008 NTF Award) Nomination Finalist, 2008/9/24.

8. The 1st Annual Music Information Retrieval Evaluation eXchange (MIREX 2005), Winner of the Audio Drum Detection Track (Best-in-Class Award), 2005/9/14.