

# List of publications

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June 2, 2021

## 1 Articles in journals

1. Cerva, P., Mateju, L., Zdansky, J., Safarik, R., Nouza, J.: Identification of related languages from spoken data: Moving from off-line to on-line scenario, In: *Computer Speech and Language*, 68, 2021
2. Bohac, M., Kucharova, M., Callejas, Z., Nouza, J., Cerva, P.: A cross-lingual adaptation approach for rapid development of speech recognizers for learning disabled users, In: *Eurasip Journal on Audio, Speech, and Music Processing*, 2014 (1), art. no. 39, pp. 1-13, 2014
3. Nouza, J., Cerva, P., Kucharova, M.: Cost-efficient development of acoustic models for speech recognition of related languages, In: *Radioengineering*, 22 (3), pp. 866-873, 2013
4. Cerva, P., Silovsky, J., Zdansky, J., Nouza, J., Seps, L.: Speaker-adaptive speech recognition using speaker diarization for improved transcription of large spoken archives, In: *Speech Communication*, 55 (10), pp. 1033-1046, 2013
5. Nouza, J., Blavka, K., Cerva, P., Zdansky, J., Silovsky, J., Bohac, M., Prazak, J.: Making Czech historical Radio archive accessible and searchable for wide public, In: *Journal of Multimedia*, 7 (2), pp. 159-169, 2012
6. Silovsky, J., Cerva, P., Zdansky, J.: Comparison of generative and discriminative approaches for speaker recognition with limited data, In: *Radioengineering*, 18 (3), pp. 307-316, 2009
7. Callejas, Z., Nouza, J., Cerva, P., Lopez-Cozar, R.: Cost-efficient cross-lingual adaptation of a speech recognition system, In: *Advances in Intelligent and Soft Computing*, 57, pp. 331-338, 2009
8. Cerva, P., Nouza, J.: MAP based speaker adaptation in very large vocabulary speech recognition of Czech, In: *Radioengineering*, 13 (3), pp. 42-46, 2004

## 2 Articles in proceedings of international conferences

1. Mateju L., Kynych, F., Cerva, P., Zdansky, J., and Malek, J.: “Using X-vectors for Speech Activity Detection in Broadcast Streams”. In: *Proceedings of the Annual Conference of the International Speech Communication Association, INTERSPEECH, Brno, Czech Republic*, 2021, Accepted to.
2. Cerva, P., Mateju, L., Kynych, F., Zdansky, J., and Nouza, J.: “Identification of Scandinavian Languages from Speech Using Bottleneck Features and X-vectors.” In: *24th International Conference on Text, Speech, and Dialogue (TSD)*, 2021, Accepted to.
3. Chaloupka, J., Palecek, K., Cerva, P., Zdansky, J.: “Optical character recognition for audio-visual broadcast transcription system”, In: *11th IEEE International Conference on Cognitive Infocommunications, CogInfoCom 2020 - Proceedings*, art. no. 9237867, pp. 229-232, 2020

4. Cerva, P., Volna, V., Weingartova, L.: “Dealing with Newly Emerging OOVs in Broadcast Programs by Daily Updates of the Lexicon and Language Model”, In: *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 12335 LNAI, pp. 97-107, 2020
5. Nouza, J., Cerva, P., Zdansky, J.: “Very fast keyword spotting system with real time factor below 0.01”, In: *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 12284 LNAI, pp. 426-436, 2020
6. Mateju, L., Cerva, P., Zdansky, J.: “An approach to online speaker change point detection using DNNs and WFSTs”, In: *Proceedings of the Annual Conference of the International Speech Communication Association, INTERSPEECH, 2019-September*, pp. 649-653, 2019
7. Malek, J., Zdansky, J., Cerva, P.: “Robust recognition of speech with background music in acoustically under-resourced scenarios”, In: *ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings, 2018-April*, art. no. 8462674, pp. 5624-5628, 2018
8. Mateju, L., Cerva, P., Zdansky, J., Safarik, R.: “Using deep neural networks for identification of slavic languages from acoustic signal”, In: *Proceedings of the Annual Conference of the International Speech Communication Association, INTERSPEECH, 2018-September*, pp. 1803-1807, 2018
9. Malek, J., Zdansky, J., Cerva, P.: “Robust recognition of conversational telephone speech via multi-condition training and data augmentation”, In: *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 11107 LNAI, pp. 324-333, 2018
10. Nouza, J., Cerva, P., Safarik, R.: “Cross-Lingual Adaptation of Broadcast Transcription System to Polish Language Using Public Data Sources”, In: *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 10930 LNAI, pp. 31-41, 2018
11. Malek, J., Zdansky, J., Cerva, P.: “Robust Automatic Recognition of Speech with background music”, In: *ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings*, art. no. 7953150, pp. 5210-5214, 2017
12. Mateju, L., Cerva, P., Zdansky, J., Malek, J.: “Speech Activity Detection in online broadcast transcription using Deep Neural Networks and Weighted Finite State Transducers”, In: *ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings*, art. no. 7953200, pp. 5460-5464, 2017
13. Mateju, L., Cerva, P., Zdansky, J.: “Investigation into the Use of WFSTs and DNNs for Speech Activity Detection in Broadcast Data Transcription”, In: *Communications in Computer and Information Science*, 764, pp. 341-358, 2017
14. Rott, M., Cerva, P.: “Speech-to-text summarization using automatic phrase extraction from recognized text”, In: *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 9924 LNCS, pp. 101-108, 2016
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16. Malek, J., Cerva, P., Seps, L., Nouza, J.: “Study on the use and adaptation of bottleneck features for robust speech recognition of nonlinearly distorted speech”, In: *ICETE 2016 - Proceedings of the 13th International Joint Conference on e-Business and Telecommunications*, 5, pp. 65-71, 2016

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20. Mateju, L., Cerva, P., Zdansky, J.: “Investigation into the use of deep neural networks for LVCSR of Czech”, In: *Proceedings of the 2015 IEEE International Workshop of Electronics, Control, Measurement, Signals and their Application to Mechatronics, ECMSM 2015*, art. no. 7208708, , 2015
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26. Nouza, J., Cerva, P., Silovsky, J.: “Adding controlled amount of noise to improve recognition of compressed and spectrally distorted speech”, In: *ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings*, art. no. 6639232, pp. 8046-8050, 2013
27. Rott, M., Cerva, P.: “SummEC: A summarization engine for Czech”, In: *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 8082 LNAI, pp. 527-535, 2013
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