

YOSSI ADI - CURRICULUM VITAE

PERSONAL INFORMATION

Email yossiadi@huji.ac.il
Website <https://www.cs.huji.ac.il/~adiyoss/>
GitHub <https://github.com/adiyoss>
Scholar <http://bit.ly/2NFFoyw>

RESEARCH INTERESTS

Machine Learning; Deep Learning; Audio, Speech and Language Processing.

WORK EXPERIENCE

2022-present Assistant Professor (Senior Lecturer), School of Computer Science and Engineering, The Hebrew University of Jerusalem.

2019-present Research Scientist, FACEBOOK AI RESEARCH, TEL AVIV LAB. working on machine learning and deep learning research for audio and speech processing.

2017 Research Assistant, FACEBOOK AI RESEARCH, NEW YORK LAB. working on adversarial learning for letter based automatic speech recognition models, [\[paper\]](#).

2015-2016 Machine Learning Researcher, Machine Learning Technologies Group, IBM, HAIFA RESEARCH LABS. working on the analysis of deep unsupervised sentence embeddings models. [\[paper1\]](#), [\[paper2\]](#).

2013-2014 Software R&D, MEDUCE. developing data and process mining algorithms for patient medical records.

EDUCATION

2016-2019 Ph.D. in Computer Science, Department of Computer Science, Bar-Ilan University, Ramat-Gan, Israel.
Advisor: Professor Joseph Keshet.
Dissertation: *On the Robustness of Deep Neural Models and Their Applications to Speech Science*.

2014-2015 M.Sc in Computer Science, Department of Computer Science, Bar-Ilan University, Ramat-Gan, Israel.
Advisor: Professor Joseph Keshet.
Thesis topic: *Automatic Analysis of Speech and Language Data using Deep Structured Learning*.

2011-2013 B.Sc in Computer Science, Summa cum laude
School of Computer Science,
College of Management Academic Studies, Rishon-Le Zion, Israel.

AWARDS AND GRANTS

2024-2025 Smart Voice Compression - Israel Innovation Authority.

2023 Alon Scholarship for Outstanding Faculty Members.

2022-2026 Personal Research Grant - Israel Science Foundation (ISF).

2022-2023 Science Accelerator - Ministry of Innovation, Science, & Technology.

2022-2024 Modern Hebrew, Spoken Language Generation & Transcription Dataset - Israel Innovation Authority.

2022-2024	Seed Grant - Center of Interdisciplinary Data Science Research (CIDR).
2020	Best Doctoral Dissertation Award - The Israeli Association for Artificial Intelligence (IAAI).
2017	Rector's Award for Excellence in Academic Studies - Bar-Ilan University.
2016	President Award for Excellence (Ph.D Students) - Bar-Ilan University.
2014	Zvulun Hammer Scholarship.
2012	President Award for Excellence - College of Management Academic Studies.

JOURNAL PUBLICATIONS

2024	Vineel PRATAP, Andros TJANDRA, Bowen SHI, Paden TOMASELLO, Arun BABU, Sayani KUNDU, Ali ELKAHKY, Zhaoheng NI, Apoorv VYAS, Maryam FAZEL-ZARANDI, Alexei BAEVSKI, Yossi Adi , Xiaohui ZHANG, Wei-Ning Hsu, Alexis CONNEAU, Michael AULI. Scaling Speech Technology to 1,000+ Languages. <i>Journal of Machine Learning Research (JMLR)</i> .
2023	Tu Anh NGUYEN, Eugene KHARITONOV, Jade COPET, Yossi Adi , Wei-Ning Hsu, Ali ELKAHKY, Paden TOMASELLO, Robin ALGAYRES, Benoit SAGOT, Abdelrahman MOHAMED, Emmanuel DUPOUX. Generative Spoken Dialogue Language Modeling. <i>Transactions of the Association for Computational Linguistics (TACL)</i> .
2023	*Alexandre DEFOSSEZ, *Jade COPET, *Gabriel SYNNAEVE, * Yossi Adi . High Fidelity Neural Audio Compression. <i>Transactions on Machine Learning Research (TMLR)</i> .
2022	*Alexandre DÉFOSSEZ, * Yossi Adi , Gabriel SYNNAEVE. Differentiable Model Compression via Pseudo Quantization Noise. <i>Transactions on Machine Learning Research (TMLR)</i> .
2022	Efthymios TZINIS, Yossi Adi , Vamsi KRISHNA, ITHAPU, Buye XU, Paris SMARAGDIS, Anurag KUMAR. RemixIT: Continual Self-Training of Speech Enhancement Models via Bootstrapped Remixing. <i>IEEE Journal of Selected Topics in Signal Processing</i> .
2021	Kushal LAKHOTIA*, Eugene KHARITONOV*, Wei-Ning Hsu, Yossi Adi , Adam POLYAK, Benjamin BOLTE, Tu-Anh NGUYEN, Jade COPET, Alexei BAEVSKI, Michael AULI, Alexis CONNEAU, Adelrahman MOHAMED, Emmanuel DUPOUX. On Generative Spoken Language Modeling from Raw Audio. <i>Transactions of the Association for Computational Linguistics (TACL)</i> .
2020	Ke TAN, Buye XU, Anurag KUMAR, Eliya NACHMANI, Yossi Adi . SAGRNN: Self-Attentive Gated RNN for Binaural Speaker Separation with Interaural Cue Preservation. <i>IEEE Signal Processing Letters</i> .
2019	Jacob T. COHEN, Alma COHEN, Limor BENYAMINI, Yossi Adi , Joseph KESHET. Predicting Glottal Closure Insufficiency using Fundamental Frequency Contour Analysis. <i>Head & neck Journal</i> .
2018	Matthew GOLDRICK, Rhonda McCLAIN Baum, Emily CIBELLI, Yossi Adi , Erin GUSTAFSON, Cornelia MOERS and Joseph KESHET. The Influence of Lexical Selection Disruptions on Articulation. <i>Journal of Experimental Psychology: Learning, Memory, and Cognition</i> .
2017	Yossi Adi , Einat KERMANY, Yonatan BELINKOV, Ofer LAVI and Yoav GOLDBERG. Analysis of sentence embedding models using prediction tasks in natural language processing. <i>IBM Journal of Research and Development</i> .
2016	Yossi Adi , Joseph KESHET, Emily CIBELLI, Erin GUSTAFSON, Cynthia CLOPPER and Matt GOLDRICK. Automatic Measurement of Vowel Duration via Structured Prediction. <i>Journal of the Acoustical Society of America (JASA)</i> .
2016	Yossi Adi and Joseph KESHET. StructED: Risk Minimization in Structured Prediction. <i>Journal of Machine Learning Research (JMLR)</i> .

CONFERENCES AND WORKSHOPS PROCEEDINGS

- 2024 Or TAL*, Alon ZIV*, Itai GAT, Felix KREUK, **Yossi Adi**. Joint Audio and Symbolic Conditioning for Temporally Controlled Text-to-Music Generation. *The 25th International Society for Music Information Retrieval (ISMIR) Conference*.
- 2024 Simon Rouard, Jade Copet, Axel Roebel, **Yossi Adi**, Alexandre Defossez. Audio Conditioning for Music Generation via Discrete Bottleneck Features. *The 25th International Society for Music Information Retrieval (ISMIR) Conference*.
- 2024 Shoval MESSICA, **Yossi Adi**. NAST: Noise Aware Speech Tokenization for Speech Language Models. *The 25th Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2024 Xuankai CHANG, Jiatong SHI, Shinji WATANABE, **Yossi Adi**, Xie CHEN, Qin JIN. The Interspeech 2024 Challenge on Speech Processing Using Discrete Units. *The 25th Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2024 Shiran AZIZ, **Yossi Adi**, Shmuel PELEG. Audio Enhancement from Multiple Crowdsourced Recordings: A Simple and Effective Baseline. *The 25th Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2024 Amit ROTH, Arnon TURETZKY, **Yossi Adi**. A Language Modeling Approach to Diacritic-Free Hebrew TTS. *The 25th Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2024 Arnon TURETZKY, Or TAL, Yael SEGAL-FELDMAN, Yehoshua DISSEN, Ella ZELDES, Amit ROTH, Eyal COHEN, Yosi SHREM, Bronya R. CHERNYAK, Olga SELEZNOVA, Joseph KESHET, **Yossi Adi**. HebDB: a Weakly Supervised Dataset for Hebrew Speech Processing. *The 25th Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2024 Jean-Marie LEMERCIER*, Simon ROUARD*, Jade COPET, **Yossi Adi**, Alexandre Defossez. An Independence-promoting Loss for Music Generation with Language Models. *The 41st International Conference on Machine Learning (ICML)*.
- 2024 Alon ZIV, Itai GAT, Gael LE LAN, Tal REMEZ, Felix KREUK, Alexandre DEFOSSEZ, Jade COPET, Gabriel SYNNAEVE, **Yossi Adi**. Masked Audio Generation using a Single Non-Autoregressive Transformer. *International Conference on Learning Representations (ICLR)*.
- 2024 Guy YARIV, Itai GAT, Sagie BENAİM, Lior WOLF, Idan SCHWARTZ, **Yossi Adi**. Diverse and Aligned Audio-to-Video Generation via Text-to-Video Model Adaptation. *The Thirty-Eighth AAAI Conference on Artificial Intelligence (AAAI)*.
- 2024 Guy LORBERBOM, Itai GAT, **Yossi Adi**, Alex SCHWING, Tamir HAZAN. Layer Collaboration in the Forward-Forward Algorithm. *The Thirty-Eighth AAAI Conference on Artificial Intelligence (AAAI)*.
- 2023 Po-chun HSU, Ali ELKAHKY, Wei-Ning HSU, **Yossi Adi**, Tu Anh NGUYEN, Jade COPET, Emmanuel DUPOUX, Hung-yi LEE, Abdelrahman MOHAMED. Low-Resource Self-Supervised Learning with SSL-Enhanced TTS. *Workshop on Speech Foundation Models and their Performance Benchmarks (SPARKS)*.
- 2023 Robin ALGAYRES, **Yossi Adi**, Tu Anh NGUYEN, Jade COPET, Gabriel SYNNAEVE, Benoit SAGOT, Emmanuel DUPOUX. Generative Spoken Language Model Based on Continuous Word-sized Audio Tokens. *Conference on Empirical Methods in Natural Language Processing (EMNLP)*.
- 2023 Gallil MAIMON, **Yossi Adi**. Speaking Style Conversion With Discrete Self-Supervised Units. *Findings of Empirical Methods in Natural Language Processing (EMNLP)*.
- 2023 Michael HASSID, Tal REMEZ, Tu Anh NGUYEN, Itai GAT, Alexis CONNEAU, Felix KREUK, Jade COPET, Alexandre DEFOSSEZ, Gabriel SYNNAEVE, Emmanuel

- DUPOUX, Roy SCHWARTZ, **Yossi Adi**. Textually Pretrained Speech Language Models. *The 37th Annual Conference on Neural Information Processing Systems (NeurIPS)*.
- 2023 Robin San ROMAN, **Yossi Adi**, Antoine DELEFORGE, Romain SERIZEL, Gabriel SYNNAEVE, Alexandre DEFOSSEZ. From Discrete Tokens to High-Fidelity Audio Using Multi-Band Diffusion. *The 37th Annual Conference on Neural Information Processing Systems (NeurIPS)*.
- 2023 Jade COPET, Felix KREUK, Itai GAT, Tal REMEZ, David KANT, Gabriel SYNNAEVE, **Yossi Adi**, Alexandre DEFOSSEZ. Simple and Controllable Music Generation. *The 37th Annual Conference on Neural Information Processing Systems (NeurIPS)*.
- 2023 Matthew LE, Apoorv VYAS, Bowen SHI, Brian KARRER, Leda SARI, Rashel MORITZ, Mary WILLIAMSON, Vimal MANOHAR, **Yossi Adi**, Jay MAHADEOKAR, Wei-Ning Hsu. Voicebox: Text-Guided Multilingual Universal Speech Generation at Scale. *The 37th Annual Conference on Neural Information Processing Systems (NeurIPS)*.
- 2023 Itai GAT, Felix KREUK, Ann LEE, Jade COPET, Gabriel SYNNAEVE, Emmanuel DUPOUX, **Yossi Adi**. Augmentation Invariant Discrete Representation for Generative Spoken Language Modeling. *The 20th International Conference on Spoken Language Translation*.
- 2023 Guy YARIV, Itai GAT, Lior WOLF, **Yossi Adi***, Idan SCHWARTZ*. Adaptation of Text-Conditioned Diffusion Models for Audio-to-Image Generation. *The 24th Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2023 Tu Anh NGUYEN, Wei-Ning Hsu, Antony d'AVIRRO, Bowen SHI, Itai GAT, Maryam FAZEL-ZARANDI, Tal REMEZ, Jade COPET, Gabriel SYNNAEVE, Michael HASSID, Felix KREUK, **Yossi Adi***, Emmanuel DUPOUX*. EXPRESSO: A Benchmark and Analysis of Discrete Expressive Speech Resynthesis. *The 24th Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2023 Wei-Ning Hsu, Tal REMEZ, Bowen SHI, Jacob DONLEY, **Yossi Adi**. ReVISE: Self-Supervised Speech Resynthesis with Visual Input for Universal and Generalized Speech Regeneration. *The Conference on Computer Vision and Pattern Recognition (CVPR)*.
- 2023 Moshe MANDEL, Or TAL, **Yossi Adi**. AERO: Audio Super Resolution in the Spectral Domain. *The 48th IEEE International Conference in Acoustic, Speech and Signal Processing (ICASSP)*.
- 2023 Roy SHEFFER, **Yossi Adi**. I Hear Your True Colors: Image Guided Audio Generation. *The 48th IEEE International Conference in Acoustic, Speech and Signal Processing (ICASSP)*.
- 2023 Amitay SICHerman, **Yossi Adi**. Analyzing Discrete Self Supervised Speech Representation For Spoken Language Modeling. *The 48th IEEE International Conference in Acoustic, Speech and Signal Processing (ICASSP)*.
- 2023 Wen-Chin HUANG, Benjamin PELOQUIN, Justine KAO, Changhan WANG, Hongyu GONG, Elizabeth SALESKY, **Yossi Adi**, Ann LEE, Peng-Jen CHEN. A Holistic Cascade System, Benchmark, and Human Evaluation Protocol For Expressive Speech-To-Speech Translation. *The 48th IEEE International Conference in Acoustic, Speech and Signal Processing (ICASSP)*.
- 2023 Ali ELKAHKY, Wei-Ning Hsu, Paden TOMASELLO, Tu-Anh NGUYEN, Robin ALGAYRES, **Yossi Adi**, Jade COPET, Emmanuel DUPOUX, Abdelrahman MOHAMED. Do Coarser Units Benefit Cluster Prediction-Based Speech Pre-Training? *The 48th IEEE International Conference in Acoustic, Speech and Signal Processing (ICASSP)*.
- 2023 Felix KREUK, Gabriel SYNNAEVE, Adam POLYAK, Uriel SINGER, Alexandre

- DEFOSSEZ, Jade COPET, Devi PARIKH, Yaniv TAIGMAN, **Yossi Adi**. AudioGen: Textually Guided Audio Generation. *International Conference on Learning Representations (ICLR)*.
- 2022 Felix KREUK, Adam POLYAK, Jade COPET, Eugene KHARITONOV, Tu-Anh NGUYEN, Morgane RIVIÈRE, Wei-Ning HSU, Abdelrahman MOHAMED, Emmanuel DUPOUX, **Yossi Adi**. Textless Speech Emotion Conversion using Decomposed and Discrete Representations. *Conference on Empirical Methods in Natural Language Processing (EMNLP)*.
- 2022 Itai GAT, **Yossi Adi**, Alexander SCHWING, Tamir HAZAN. On the Importance of Gradient Norm in PAC-Bayesian Bounds. *The 36th Annual Conference on Neural Information Processing Systems (NeurIPS)*.
- 2022 Paden TOMASELLO, Akshat SHRIVASTAVA, Daniel LAZAR, Po-Chun HSU, Duc LE, Adithya SAGAR, Ali ELKAHKY, Jade COPET, Wei-Ning HSU, **Yossi Adi**, Robin ALGAYRES, Tu Ahn NGUYEN, Emmanuel DUPOUX, Luke ZETTLEMOYER, Abdelrahman MOHAMED. STOP: A dataset for Spoken Task Oriented Semantic Parsing. *IEEE Spoken Language Technology Workshop (SLT)*.
- 2022 Arnon TURETZKY, Tzvi MICHELSON, **Yossi Adi**, Shmuel PELEG. Deep Audio Waveform Prior. *The 23rd Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2022 Or TAL, Moshe MANDEL, Felix KREUK, **Yossi Adi**. A Systematic Comparison of Phonetic Aware Techniques for Speech Enhancement. *The 23rd Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2022 Shahaf BASSAN, **Yossi Adi**, Jeffrey S. ROSENSCHEIN. Unsupervised Symbolic Music Segmentation using Ensemble Temporal Prediction Errors. *The 23rd Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2022 Sravya POPURI, Peng-Jen CHEN, Changhan WANG, Juan PINO, **Yossi Adi**, Jiatao GU, Wei-Ning HSU, Ann LEE. Enhanced Direct Speech-to-Speech Translation Using Self-supervised Pre-training and Data Augmentation. *The 23rd Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2022 Maureen de SEYSEL, Marvin LAVECHIN, **Yossi Adi**, Emmanuel DUPOUX, Guillaume WISNIEWSKI. Probing Phoneme, Language and Speaker Information in Unsupervised Speech Representations. *The 23rd Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2022 Ann LEE, Hongyu GONG, Paul-Ambroise DUQUENNE, Holger SCHWENK, Peng-Jen CHEN, Changhan WANG, Sravya POPURI, **Yossi Adi**, Juan PINO, Jiatao GU, Wei-Ning HSU. Textless Speech-to-Speech Translation on Real Data. *Conference of the North American Chapter of the Association for Computational Linguistics (NAACL)*.
- 2022 Eugene KHARITONOV, Jade COPET, Kushal LAKHOTIA, Tu-Anh NGUYEN, Paden TOMASELLO, Ann LEE, Ali ELKAHKY, Wei-Ning HSU, Abdelrahman MOHAMED, Emmanuel DUPOUX, **Yossi Adi**. textless-lib: a Library for Textless Spoken Language Processing. *Conference of the North American Chapter of the Association for Computational Linguistics (NAACL): System Demonstrations*.
- 2022 Eugene KHARITONOV*, Ann LEE*, Adam POLYAK, **Yossi Adi**, Jade COPET, Kushal LAKHOTIA, Tu-Anh NGUYEN, Morgane RIVIÈRE, Abdelrahman MOHAMED, Emmanuel DUPOUX, Wei-Ning HSU. Text-Free Prosody-Aware Generative Spoken Language Modeling. *The 60th Annual Meeting of the Association for Computational Linguistics (ACL)*.
- 2022 Ann LEE, Peng-Jen CHEN, Changhan WANG, Jiatao GU, Xutai MA, Adam POLYAK, **Yossi Adi**, Qing HE, Yun TANG, Juan PINO, Wei-Ning HSU. Direct Speech-to-Speech Translation with Discrete Units. *The 60th Annual Meeting of the Association for Computational Linguistics (ACL)*.

- 2022 Alon BERLINER, Guy ROTMAN, **Yossi Adi**, Roi REICHART, Tamir HAZAN. Learning Discrete Structured Variational Auto-Encoder Using Natural Evolution Strategies. *International Conference on Learning Representations (ICLR)*.
- 2022 Efthymios TZINIS, **Yossi Adi**, Vamsi K. ITHAPU, Buye XU, Anurag KUMAR. Continual Self-Training with Bootstrapped Remixing For Speech Enhancement. *The 47th IEEE International Conference in Acoustic, Speech and Signal Processing (ICASSP)*.
- 2021 Changhan WANG*, Wei-Ning Hsu*, **Yossi Adi**, Adam POLYAK, Ann LEE, Peng-Jen CHEN, Jiatao GU, Juan PINO . FAIRSEQ S²: A Scalable and Integrable Speech Synthesis Toolkit. *Conference on Empirical Methods in Natural Language Processing (EMNLP): System Demonstrations*.
- 2021 *Ori KABELI, ***Yossi Adi**, Zhenyu TANG, Buye XU, Anurag KUMAR. Online Self-Attentive Gated RNNs for Real-Time Speaker Separation. *Proceedings of Machine Learning in Speech and Language Processing Workshop*.
- 2021 Adam POLYAK, **Yossi Adi**, Jade COPET, Ori KABELI, Eugene KHARITONOV, Kushal LAKHOTIA, Wei-Ning Hsu, Adelrahman MOHAMED, Emmanuel DUPOUX. Speech Resynthesis from Discrete Disentangled Self-Supervised Representations. *The 22nd Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2021 Shahar SEGAL, **Yossi Adi**, Benny PINKAS, Carsten BAUM, Chaya GANESH, Joseph KESHET. Fairness in the Eyes of the Data: Certifying Machine-Learning Models. *The Forth AAAI/ACM Conference on Artificial Intelligence, Ethics, and Society (AIES)*.
- 2021 Adam POLYAK, Lior WOLF, **Yossi Adi**, Ori KABELI, Yaniv TAIGMAN. High Fidelity Speech Regeneration with Application to Speech Enhancement. *The 46th IEEE International Conference in Acoustic, Speech and Signal Processing (ICASSP)*.
- 2021 Shlomo E. CHAZAN, Lior WOLF, Eliya NACHMANI, **Yossi Adi**. Single Channel Voice Separation for Unknown Number of Speakers Under Reverberant and Noisy Settings. *The 46th IEEE International Conference in Acoustic, Speech and Signal Processing (ICASSP)*.
- 2020 Felix KREUK, Joseph KESHET, **Yossi Adi**. Self-Supervised Contrastive Learning for Unsupervised Phoneme Segmentation. *The 21st Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2020 Adam POLYAK, Lior WOLF, **Yossi Adi**, Yaniv TAIGMAN. Unsupervised Cross-Domain Singing Voice Conversion. *The 21st Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2020 Alexandre DÉFOSSEZ, Gabriel SYNNAEVE, **Yossi Adi**. Real Time Speech Enhancement in the Waveform Domain. *The 21st Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2020 Felix KREUK, **Yossi Adi**, Bhiksha RAJ, Rita SINGH, Joseph KESHET. Hide and Speak: Towards Deep Neural Networks for Speech Steganography. *The 21st Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2020 Eliya NACHMANI, **Yossi Adi**, Lior WOLF. Voice Separation with an Unknown Number of Multiple Speakers. *The 37th International Conference on Machine Learning (ICML)*.
- 2020 Ben GOLDBERGER, **Yossi Adi**, Joseph KESHET, Guy KATZ. Minimal Modifications of Deep Neural Networks using Verification. *The 23rd International Conference on Logic for Programming, Artificial Intelligence and Reasoning (LPAR)*.
- 2020 Felix KREUK, Yaniv SHEENA, Joseph KESHET, **Yossi Adi**. Phoneme Boundary

Detection Using Learnable Segmental Features. *The 45th IEEE International Conference in Acoustic, Speech and Signal Processing (ICASSP)*.

- 2019 **Yossi Adi**, Neil ZEGHIDOUR, Ronan COLLOBERT, Nicolas USUNIER, Vitaliy LIPTCHINSKY, Gabriel SYNNAEVE. To Reverse The Gradient or Not: An Empirical Comparison of Adversarial and Multi-Task Learning in Speech Recognition. *The 44th IEEE International Conference in Acoustic, Speech and Signal Processing (ICASSP)*.
- 2018 Gabi SHALEV, **Yossi Adi** and Joseph KESHET. Out-of-Distribution Detection using Multiple Semantic Label Representations. *The 32nd Annual Conference on Neural Information Processing Systems (NeurIPS)*.
- 2018 **Yossi Adi**, Carsten BAUM, Moustapha CISSE, Benny PINKAS and Joseph KESHET. Turning Your Weakness Into a Strength: Watermarking Deep Neural Networks by Backdooring. *USENIX Security Symposium*.
- 2018 Felix KREUK, **Yossi Adi**, Moustapha CISSE, and Joseph KESHET. Fooling End-to-End Speaker Verification With Adversarial Examples. *The 43rd IEEE International Conference in Acoustic, Speech and Signal Processing (ICASSP)*.
- 2017 Moustapha CISSE, **Yossi Adi**, Natalia NEVEROVA, and Joseph KESHET. Houdini: Fooling Deep Structured Visual and Speech Recognition Models with Adversarial Examples. *The 31st Annual Conference on Neural Information Processing Systems (NeurIPS)*.
- 2017 Einat NAAMAN, **Yossi Adi**, and Joseph KESHET. Learning Similarity Function for Pronunciation Variations. *The 18th Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2017 Yaniv SHEENA, Misha HEJNA, **Yossi Adi**, and Joseph KESHET. Automatic Measurement of Pre-aspiration. *The 18th Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2017 **Yossi Adi**, Einat KERMANY, Yonatan BELINKOV, Ofer LAVI and Yoav GOLDBERG. Fine-grained Analysis of Sentence Embeddings Using Auxiliary Prediction Tasks. *International Conference on Learning Representations (ICLR)*.
- 2017 **Yossi Adi**, Joseph KESHET, Emily CIBELLI, and Matt GOLDRICK. Sequence Segmentation Using Joint RNN and Structured Prediction Models. *The 42st IEEE International Conference in Acoustic, Speech and Signal Processing (ICASSP)*.
- 2016 **Yossi Adi**, Joseph KESHET, Olga DMITRIEVA and Matt GOLDRICK. Automatic Measurement of Voice Onset Time and Prevoicing using Recurrent Neural Networks. *The 17th Annual Conference of the International Speech Communication Association (Interspeech)*.
- 2015 **Yossi Adi**, Joseph KESHET and Matt GOLDRICK. Vowel Duration Measurement Using Deep Neural Networks. *The 25th IEEE International Workshop on Machine Learning for Signal Processing (MLSP)*.

PREPRINTS

- 2024 Guy YARIV, Idan SCHWARTZ, **Yossi Adi***, Sagie BENAİM*. Improving Visual Commonsense in Language Models via Multiple Image Generation. *preprint*.
- 2024 Michael HASSID*, Tal REMEZ*, Jonas GEHRING, Roy SCHWARTZ, **Yossi Adi**. The Larger the Better? Improved LLM Code-Generation via Budget Reallocation. *preprint*.
- 2024 Matanel OREN*, Michael HASSID*, **Yossi Adi**, Roy SCHWARTZ. Transformers are Multi-State RNNs. *preprint*.
- 2023 Baptiste ROZIERE, Jonas GEHRING, Fabian GLOECKLE, Sten SOOTLA, Itai GAT, Xiaoqing ELLEN TAN, **Yossi Adi**, Jingyu LIU, Tal REMEZ, Jeremy RAPIN, Artyom KOZHEVNIKOV, Ivan EVTIMOV, Joanna BITTON, Manish BHATT, Cristian CANTON

FERRER, Aaron GRATTAFIORI, Wenhan XIONG, Alexandre DEFOSSEZ, Jade COPET, Faisal AZHAR, Hugo TOUVRON, Louis MARTIN, Nicolas USUNIER, Thomas SCIALOM, Gabriel SYNNAEVE. Code Llama: Open Foundation Models for Code. *preprint*.

2022 Felix KREUK, Yaniv TAIGMAN, Adam POLYAK, Jade COPET, Gabriel SYNNAEVE, Alexandre DEFOSSEZ, **Yossi Adi**. Audio Language Modeling using Perceptually-Guided Discrete Representations. *preprint*.

2020 **Yossi Adi**, Yaniv NEMCOVSKY, Alex SCHWING, Tamir HAZAN. On the Generalization of Bayesian Deep Nets for Multiclass Classification. *preprint*.

TEACHING

2022-2024 Instructor (Faculty), THE HEBREW UNIVERSITY OF JERUSALEM:
 - *Introduction Speech and Audio Processing & Recognition*.
 - *Seminar in Speech and Audio Processing*.
 - *Machine Learning Lab for Speech and Audio Processing*.

2019 Instructor (during PhD), BAR-ILAN UNIVERSITY:
 - *Introduction to Automatic Speech Recognition*.

2017-2019 Teaching Assistant, BAR-ILAN UNIVERSITY:
 - *Introduction to Machine Learning*.

2015-2017 Teaching Assistant, COLLEGE OF MANAGEMENT ACADEMIC STUDIES:
 - *Introduction to Computer Science*.
 - *Data Structures and Algorithms*.
 - OOP.

SERVICE

2024 Co-organizing a tutorial on *Recent Advances in Speech Language Models* at Interspeech24: [Link](#).

2024 Co-organizing a special session on *Spoken Language Models for Universal Speech Processing* at Interspeech24: [Link](#).

2024 Co-organizing a special session on *Discrete Speech Representation for Speech Processing* at Interspeech24: [Link](#).

2024 Member of the organizing committee for Interspeech24 at Kos, Greece: [Link](#).

2023-2024 Area Chair at NeurIPS.

2023 Co-organizer of **iSpeech**, the first Israeli seminar on Speech & Audio processing using neural networks.

2023 Senior Program Committee for ICASSP.

2022-2023 Area Chair & Session Chair at InterSpeech.

2021 Senior Program Committee for the International Joint Conferences on Artificial Intelligence (IJCAI).

2018-present Program Committee for: NeurIPS, ICML, ICLR, ICASSP, InterSpeech, ARR, MLSP.

ADVISING AND MENTORING

2022 - present Gallil Maimon, Ph.D.
 Alon Ziv, Ph.D.
 Michael Hassid, Ph.D.
 Arnon Turetzky, Ph.D.
 Or Tal, Ph.D.

2022 - present Ella Erez, M.Sc.

Dor Tennenbiom, M.Sc.

Shuval Messica, M.Sc.

Amit Roth, M.Sc.

Guy Yariv, M.Sc.

alumni

Roy Sheffer, M.Sc. (2023)

Amitay Sicherman, M.Sc. (2023)

Avi Rozen, M.Sc. (2023)

Moshe Mandel, M.Sc. (2022)

Arnon Turetzky, M.Sc. (2022)

Shahaf Bassan, M.Sc. (2022)

OTHER INFORMATION

Music

I'm a professional drummer and very passionate about rhythm, drums and groove. Drumming has always been my passion and very big part of my life. Here are few links to my music: [YouTube](#), [iTunes](#), [WebSite](#).

Interests

Drums · Music · Sound · Audio