YOSSI ADI - CURRICULUM VITAE

PERSONAL INFORMATION

Email yossiadidrum@gmail.com

Website http://adiyoss.github.io

GitHub https://github.com/adiyoss

Scholar http://bit.ly/2NFFoyw

RESEARCH INTERESTS

Machine learning; Audio, Speech and Language Analysis; Music.

WORK EXPERIENCE

2019-present Research Scientist, Facebook AI Research, Tel Aviv Lab. I am working on machine learning and deep learning models for audio and speech processing.

2017 Research Intern, Facebook AI Research, New York Lab. I was 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. I was working on analysis of unsupervised sentence embeddings. [paper1], [paper2].

2013-2014 Software R&D, MEDeduce. I was 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: Dr. 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: Dr. 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 SCHOLARSHIPS

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.

PUBLICATIONS

2020 Ke Tan, Buye Xu, Anurag Kumar, Eliya Nachmani, **Yossi Adi**. SAGRNN: Self-Attentive Gated RNN for Binaural Speaker Separation with Interaural Cue Preservation. *IEEE Signal Processing Letters (accepted for publication).*

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 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).*

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).*

2019 Jacob T. Cohen, Alma Cohen, Limor Benyamini, **Yossi Adi**, Joseph Keshet. Predicting Glottal Closure Insufficiency using Fundamental Frequency Contour Analysis. *Head & neck, 41 (7), 2324-2331.*

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 Matthew Goldrick, Rhonda McClain Baum, Emily Cibelli, **Yossi Adi**, Erin Gustafson, Cornelia Moers and Joseph Keshet. The Influence of Lexical Selection Disruptions on Articulation. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 45 (6), 1107-1141.*

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).*

2017 **Yossi Adi**, Einat Kermany, Yonatan Belinkov, Ofer Lavi and Yoav Goldberg. Analysis of sentence embedding models using prediction tasks in natural language processing. *IBM Journal of Research and Development, 61 (4/5), 31-39.*

2016 **Yossi Adi**, Joseph Keshet, Emily Cibelli, Erin Gustafson, Cynthia Clopper and Matt Goldrick. Automatic Measurement of Vowel Duration via Structured Prediction. *Journal of the Acoustical Society of America, 140 (6), 4517-4527.*

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).*

2016 **Yossi Adi** and Joseph Keshet. StructED: Risk Minimization in Structured Prediction. *Journal of Machine Learning Research, 17 (1), 2282-2286.*

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).*

TEACHING

2018-2019 Lecturer, Rimon School of Jazz and Contemporary Music. Drums and Technology.

2017-2019 Teaching Assistant, Bar-Ilan University. Introduction to Machine Learning, Automatic Speech Recognition.

2015-2017 Teaching Assistant, College of Management Academic Studies. Introduction to Computer Science, Data Structures, Algorithms II and OOP.

SERVICE

2020 Reviewer for: NeurIPS, ICML, UAI, ICLR, ICASSP, InterSpeech, MLSP.

Senior Program Committee for: IJCAI.

2019 Reviewer for: NeurIPS, ICML, ICASSP, ICLR, UAI, IJCAI, MLSP.

2018 Reviewer for: NeurIPS, ICML, ICASSP, MLSP, MLSLP.

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