

YOSSI ADI - CURRICULUM VITAE

PERSONAL INFORMATION

Email yossiadi@rum@gmail.com
Website <http://adiyoss.github.io>
GitHub <https://github.com/adiyoss>
Scholar <https://bit.ly/2GluXpw>

RESEARCH INTERESTS

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

WORK EXPERIENCE

2019-present Research Scientist FACEBOOK AI RESEARCH, TEL AVIV LAB. Working on machine learning and deep learning models for speech-to-text and text-to-speech.

2017 Research Scientist (internship), 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 analysis of unsupervised sentence embeddings.

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

EDUCATION

2014-2019 Graduate Student in Computer Science (Integrated Ph.D. Track), Department of Computer Science, Bar-Ilan University, Ramat-Gan, Israel.
Thesis: *Automatic Analysis of Speech and Language Data using Deep Structured Learning*
Advisor: Dr. Joseph Keshet

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

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.

SELECTED PUBLICATIONS

2019 Jacob T. COHEN, Alma COHEN, Limor BENYAMINI, **Yossi Adi**, Joseph KESHET, Predicting Glottal Closure Insufficiency using Fundamental Frequency

Contour Analysis, *Head & Neck, Journal of the Sciences and Specialities of the Head and Neck*, 2019.

- 2019 **Yossi Adi**, Neil ZEGHIDOUR, Ronan COLLOBERT, Nicolas USUNIER, Vitaliy LIPTCHINSKY and 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)*, Brighton, UK, 2019.
- 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 (NIPS)*, Montréal, Canada, 2018.
- 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*, 2018.
- 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*, Baltimore, USA, 2018, [\[Blog\]](#).
- 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)*, Alberta, Calgary, Canada, 2018.
- 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 (NIPS)*, Long Beach, CA, USA, 2017.
- 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)*, Stockholm, Sweden, 2017.
- 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)*, Stockholm, Sweden, 2017.
- 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)*, Toulon, France, 2017.
- 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)*, New Orleans, LA, USA, 2017, [\[code\]](#).
- 2017 **Yossi Adi**, Einat KERMANY, Yonatan BELINKOV, Ofer LAVI and Yoav GOLDBERG, Advanced Analysis of Sentence Embedding Models Using Auxiliary Prediction Tasks, *IBM Journal of Research and Development* 61.4, 3-1, 2017.
- 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*, Volume 140, Issue 6, 2016, [\[code\]](#).
- 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)*, San Francisco, CA, USA, 2016, [\[code\]](#).

- 2016 **Yossi Adi** and Joseph KESHET, StructED: Risk Minimization in Structured Prediction, *Journal of Machine Learning Research* 17, 1-5, 2016, [[website](#)], [[code](#)].
- 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)*, Boston, MA, USA, 2015.

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.
- 2014-2017 Teaching Assistant, COLLEGE OF MANAGEMENT ACADEMIC STUDIES. Introduction to Computer Science, Data Structures, Algorithms II and OOP.

SERVICE

- 2018 Reviewer for: NeurIPS, ICML, ICASSP, MLSP, MLSLP.
- 2019 Reviewer for: NeurIPS, ICML, ICASSP, ICLR, UAI, IJCAI.

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