

# YOSSI ADI - CURRICULUM VITAE

## PERSONAL INFORMATION

*Email* [yossiadi@rum@gmail.com](mailto: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. 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, MEDUCE. 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

*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 **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, [\[code\]](#).
- 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, [\[website\]](#), [\[code\]](#).

## 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.

## SERVICE

2018	Reviewer for: NeurIPS, ICML, ICASSP. Program Committee for: MLSP, MLSLP.
2019	Reviewer for: NeurIPS, ICML, ICASSP, ICLR. Program Committee for: UAI, IJCAI.
2020	Reviewer for: NeurIPS, ICML, ICASSP, ICLR. Senior Program Committee for: IJCAI.

## OTHER INFORMATION

<i>Music</i>	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: <a href="#">YouTube</a> , <a href="#">iTunes</a> , <a href="#">WebSite</a>
<i>Interests</i>	Drums · Music · Sound · Audio