

Curriculum Vitae – Concise Version

Amir Ivry

I am an incoming Postdoctoral Researcher in CMU LTI, to be advised by Prof. Shinji Watanabe.

Education

[2018–2023] : Ph.D. (direct track), Electrical and Computer Engineering, Technion
Advisors: Prof. Israel Cohen and Dr. Baruch Berdugo
Dissertation title: “Deep Learning-based Acoustic-echo Cancellation”

[2011–2016] : BSc in Electrical and Computer Engineering, Technion

Professional Experience and Appointments

[2024 – Now] : Visiting Researcher, Electrical and Computer Engineering, **Technion**, Haifa
[2024 - Now] : AI Chapter Chairman, **IEEE**, Tel-Aviv
[2023–2025] : Head of Data, Teams, **Microsoft**, Herzliya
[2022–2023] : Principal Research Scientist, Advanced Technology Labs, **Microsoft**, Herzliya
[2021–2022] : Research Intern, Advanced Technology Labs, **Microsoft**, Herzliya
[2018–2021] : Senior Researcher, **Prime Minister’s Office**, Tel-Aviv
[2015–2018] : Researcher, **Prime Minister’s Office**, Tel-Aviv

Teaching

[01/2021] : Array Signal Processing and Analysis (048828, Graduate Level), Teaching Assistant,
Electrical and Computer Engineering, Technion
[01/2020] : Array Signal Processing and Analysis (048828, Graduate Level), Teaching Assistant,
Electrical and Computer Engineering, Technion

Honors and Awards (RECENT):

[2024] Microsoft Creativity Award (group)
[2024] IEEE Senior Member (individual)
[2022] Forbes 30 under 30 (individual)
[2021] Outstanding Data Science Research Award, CHE Israel (individual)
[2021] The International Speech and Communication Association (ISCA) Grant (individual)
[2021] Accepted into Interspeech’s Conference Doctoral Consortium (individual)
[2020] Jacobs Research Award for Graduate Students (individual)
[2019] Jacobs Research Award for Graduate Students (individual)

Publications (applicant in bold):

a. Published

Peer-reviewed Journals

1. Abramovski, I., Vinnikov, A., Shaer, S., Kanda, N., Wang, X., **Ivry, A.**, and Krupka, E., "Summary of the NOTSOFAR-1 challenge: Highlights and learnings," *Computer Speech & Language*, 93, 2025.
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2. **Ivry, A.**, Cohen, I., and Berdugo, B., "A User-centric Approach for Deep Residual-Echo Suppression in Double-talk," *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, 32, pp. 1901–1914, 2024.
3. **Ivry, A.**, Fisher, E., Alimi, R., Mosseri, I., and Nahir, K., "Multiclass Permanent Magnets Superstructure for Indoor Localization Using Artificial Intelligence," *IEEE Transactions on Magnetism*, 58(2), pp. 1–6, 2021.
4. Fisher, E., **Ivry, A.**, Alimi, R., and Weiss, E., "Smartphone-based Indoor Localization Using Permanent Magnets and Artificial Intelligence for Pattern Recognition," *AIP Advances*, 11(1), 2021.
5. **Ivry, A.**, Berdugo, B., and Cohen, I., "Voice Activity Detection for Transient Noisy Environment Based on Diffusion Nets," *IEEE Journal of Selected Topics in Signal Processing*, 13(2), pp. 254–264, 2019.
6. Alimi, R., Fisher, E., **Ivry, A.**, Shavit, A., and Weiss, E., "Low Power in-Situ AI Calibration of a Three-Axial Magnetic Sensor," *IEEE Transactions on Magnetism*, 55(7), pp. 1–7, 2019.
7. Alimi, R., **Ivry, A.**, Fisher, E., and Weiss, E., "Machine-Learning Detection Algorithms for Large Barkhausen Jumps in Cluttered Environment," *IEEE Magnetism Letters*, 10, pp. 1–5, 2019.
8. Weiss, E., Alimi, R., **Ivry, A.**, and Fisher, E., "Investigation and Modeling of Large Barkhausen Jumps Dynamics in Low-power Fluxgate Magnetometers," *IEEE Sensors Journal*, 19(6), pp. 2105–2112, 2018.

Peer-reviewed Conferences

1. **Ivry, A.**, and Cohen, I., "E-URES 2.0: Efficient User-centric Residual-Echo Suppression Framework with a Lightweight Neural Network," *Proc. ICASSP*, 2025.
 2. **Ivry, A.**, and Cohen, I., "E-URES: Efficient User-centric Residual-Echo Suppression Framework with a Data-Driven Approach to Reducing Computational Costs," *Proc. IWAENC*, 2024.
 3. Vinnikov, A., **Ivry, A.**, Hurvitz, A., Abramovski, I., Koubi, S., Gurvich, I., et al., "NOTSOFAR-1 Challenge: New Datasets, Baseline, and Tasks for Distant Meeting Transcription," *Proc. Interspeech*, 2024.
 4. **Ivry, A.**, Cohen, I., and Berdugo, B., "Deep Adaptation Control for Stereophonic Acoustic Echo Cancellation," *Proc. WASPAA*, 2023.
 5. **Ivry, A.**, Cohen, I., and Berdugo, B., "Objective Metrics to Evaluate Residual-Echo Suppression During Double-Talk in the Stereophonic Case," *Proc. Interspeech*, 2022.
 6. **Ivry, A.**, Cohen, I., and Berdugo, B., "Deep Adaptation Control for Acoustic Echo Cancellation," *Proc. ICASSP*, 2022.
 7. **Ivry, A.**, Cohen, I., and Berdugo, B., "Off-the-shelf Deep Integration for Residual-Echo Suppression," *Proc. ICASSP*, 2022.
 8. **Ivry, A.**, Cohen, I., and Berdugo, B., "Objective Metrics to Evaluate Residual-Echo Suppression during Double-Talk," *Proc. WASPAA*, 2021.
 9. **Ivry, A.**, Cohen, I., and Berdugo, B., "Nonlinear Acoustic Echo Cancellation with Deep Learning," *Proc. Interspeech*, 2021.
 10. **Ivry, A.**, Cohen, I., and Berdugo, B., "Deep Residual Echo Suppression with Tunable Tradeoff between Signal Distortion and Echo Suppression," *Proc. ICASSP*, 2021.
 11. **Ivry, A.**, Cohen, I., and Berdugo, B., "Evaluation of Deep-Learning-Based Voice Activity Detectors and Room Impulse Response Models in Reverberant Environments," *Proc. ICASSP*, 2020.
 12. Benisty, H., Furman, D., Abramovich, T., **Ivry, A.**, and Pratt, H., "Enhancement of BCI Classifiers through Domain Adaptation," *Proc. IEEE International Conference on the Science of Electrical Engineering (ICSEE)*, pp. 1–5, 2016.
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Books

1. Kashani, S., and **Ivry, A.** Deep Learning Interviews: Hundreds of Fully Solved Job Interview Questions from a Wide Range of Key Topics in AI. Amazon Publishing, 2021.

b. Submitted

1. **Ivry, A.**, Cornell, S., Watanabe, S. "MAPSS: Manifold-based Assessment of Perceptual Source Separation", submitted to ICLR, 2025.
2. Amar, Y., **Ivry, A.**, Cohen, I. "Probing and Analysis of Transformer-based Architectures for Speech Enhancement", submitted to ICASSP, 2025.
3. Mark, N., Shyovitz, N., **Ivry, A.**, Adam, D., "A Reproducible Annotation Protocol for New Measures of Quality and Consistency in Lung Ultrasound: Enhancing Reliable, Bias-Resilient, and Explainable Clinical Care", submitted to ICASSP, 2025.

Team:

a. PhD Students:

[2025-now] Gil Weissman

b. MSc Students:

[2024-now] Yair Amar

[2024-now] Tomer Melnik

[2025-now] Rotem Green

[2025-now] Omer Holtzman

Academic Service:

a. Journals Reviewed

IEEE Signal Processing Letters, IEEE Transactions on Signal Processing, EURASIP

b. Conferences Reviewed

ICASSP, Interspeech
