Assaf Ben-Kish - Curriculum Vitae

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Education

- **2024 - Present: Visiting Student Researcher, MIT CSAIL**
  Spoken Language Systems (SLS) Group, supervised by Prof. Jim Glass

- **2022 - Present: PhD (Direct Track) in Electrical Engineering, Tel-Aviv University, Israel**
  Specializing in Deep Learning and Large Language Models, supervised by Prof. Raja Giryes
  Current GPA: **99.27/100**

- **2018 - 2022: B.Sc. in Electrical Engineering and Computer Science, Technion, Israel**
  Specialized in Machine Learning and Signal Processing
  Final GPA: **91.3/100 - Magna Cum Laude,** included in the **President's honor list** and **Dean's honor list**

Publications

- **Overflow Prevention Enhances Long-Context Recurrent LLMs**
  Assaf Ben-Kish, Itamar Zimerman, M. Jehanzeb Mirza, James Glass, Leonid Karlinsky, Raja Giryes. **COLM 2025**. link

- **DeciMamba: Exploring the Length Extrapolation Potential of Mamba**
  Assaf Ben-Kish, Itamar Zimerman, Shady AH, Nadav Cohen, Amir Globerson, Lior Wolf, Raja Giryes. **ICLR 2025**. link

- **Mitigating Open-Vocabulary Caption Hallucinations**
  Assaf Ben-Kish, Moran Yanuka, Morris Alper, Raja Giryes, Hadar Averbuch-Elor. **EMNLP 2024.** link

- **Bridging the Visual Gap: Fine-Tuning Multimodal Models with Knowledge-Adapted Captions**
  Moran Yanuka, Assaf Ben-Kish, Yonatan Bitton, Idan Szpektor, Raja Giryes. **NAACL 2025 (Oral)**. link

- **Beyond Context Limits: Subconscious Threads for Long-Horizon Reasoning**
  H. Luo, N. Morgan, T. Li, D. Zhao, A. Ngo, P. Schroeder, L. Yang, A. Ben-Kish, J. O'brien, J. Glass. **Under Review**. link

- **Constant Beamwidth LCMV Beamformer**
  Ariel Frank, Assaf Ben-Kish, Israel Cohen. **EUSIPCO 2022**. link

Awards and Scholarships

- **KLA Award for PhD Excellence - 2025**
- **Direct-Track PhD Scholarship from The Center for AI & Data Science, Tel-Aviv University - 2024**
- **Travel Grant from The Center for AI & Data Science, Tel-Aviv University - 2024**
- **Award of Excellence for M.Sc Students, Engineering Department, Tel-Aviv University - 2024**

Talks

- **MIT CSAIL, ASAP Seminar** - "Overflow Prevention Enhances Long-Context Recurrent Models" - August 2025
- **MIT CSAIL, SLS Group** - "DeciMamba: Exploring the Length Extrapolation Potential of Mamba" - December 2024
- **MIT CSAIL, Scale ML Seminar** - "DeciMamba: Exploring the Length Extrapolation Potential of Mamba" - June 2024
- **Northeastern, Prof. Bau's Lab** - "DeciMamba: Exploring the Length Extrapolation Potential of Mamba" - June 2024
- **TAD Deep Learning Theory Retreat -** "Mitigating Open-Vocabulary Caption Hallucinations" - April 2024

Additional Experience

- **2021-2023 - Algorithms Engineer at Vayyar**
  Development of Methods for Antenna Array Calibration:
  Model-Based Trace Calibration and Model-Free Online Trace Calibration, Statistical Methods for Leakage Removal, Radiation Pattern Estimation, created and teached Vayyar's Array Calibration Course

- **2023-2024 - Linear Algebra and Calculus I Tutor at Xtra (Tel-Aviv University)**
- **2020 - 'Signals and Systems' Course Tutor at the Technion**
- **2017 and summer of 2018 - Software Developer at Insoundz LTD**

Programming and Software knowledge: Python, Matlab, C, C++, Linux and open-source software, such as: Pytorch, Docker, Pybullet, FFMPEG, etc.

Community Involvement

- Mentor in a "Big Brother" program for new EE students at the Technion - 2018, 2019, 2020
- Youth Movement Supervisor + Tutor of a child from a low socio-economic background - 2013
- Year of Service - The Jewish Agency, Greater New-Haven, CT, USA - 2012-2013

Languages: Hebrew, English - native tongue level