

# Assaf Ben-Kish - Curriculum Vitae

<https://assafbk.github.io/website> | [assafbk@gmail.com](mailto:assafbk@gmail.com) | +972(0)-549982536

## Education

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### 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

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- **Overflow Prevention Enhances Long-Context Recurrent LLMs**  
*Assaf Ben-Kish, Itamar Zimmerman, M. Jehanzeb Mirza, James Glass, Leonid Karlinsky, Raja Giryes. Under Review. [link](#)*
- **DeciMamba: Exploring the Length Extrapolation Potential of Mamba**  
*Assaf Ben-Kish, Itamar Zimmerman, 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](#)*
- **Constant Beamwidth LCMV Beamformer**  
*Ariel Frank, Assaf Ben-Kish, Israel Cohen. EUSIPCO 2022. [link](#)*

## Awards and Scholarships

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- 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

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- 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

## Research Projects

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- **Implementing and Improving the DDPG-MP algorithm** - Final projects in Deep RL, [CRML](#) laboratory, Technion  
(i) Evaluating a robotic manipulation algorithm (ii) Improving the algorithm using Model-Based methods.

## Additional Experience

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- **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 Taught 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](#)**
- **2014-2017 - Member of a leading R&D team at Unit 81 - The Technological Unit of the Intelligence Branch, IDF**
  - Specialized in R&D in the field of digital communication and reverse engineering
  - Awarded outstanding employee of the Electrical Engineering Department (out of 1000 employees)

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

## *Community Involvement*

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- 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