

Morris Alper, M.Sc.

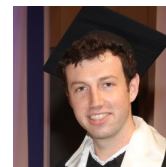
✉ morrisalper@mail.tau.ac.il

🌐 morrisalp.github.io

📄 Google Scholar

🐙 GitHub

🌐 LinkedIn



I am interested in multimodal learning, particularly using linguistic knowledge combined with vision and other structured modalities for complex tasks that require high-level semantic understanding.

Education

- 2023 – ongoing **Ph.D., Tel Aviv University** Electrical Engineering (Machine Learning)
Advisor: *Dr. Hadar Averbuch-Elor*
- 2019 – 2023 **M.Sc. (cum laude), Tel Aviv University** Computer Science
Advisor: *Dr. Hadar Averbuch-Elor*
Thesis: *Learning Human-Human Interactions in Images with Weak Textual Supervision*
GPA: 98 / 100
- 2012 – 2016 **B.Sc., Massachusetts Institute of Technology (MIT)** Linguistics and Mathematics (dual major).
GPA: 4.9 / 5

Employment History

- 2019 – 2023 **Data Science Lead and Lecturer**, Israel Tech Challenge.
Designed syllabus, wrote, and delivered lectures on data science to industry professionals.
- 2019 – 2021 **NLP Data Scientist**, Pipl, Inc.
Designed information extraction algorithms for unstructured textual web data.
- 2018 – 2019 **NLP Data Scientist**, Reverso-Softissimo.
Designed NLP algorithms to automatically correct and enrich linguistic data.
- 2017 – 2018 **Software Developer**, K Dictionaries.
Managed API for lexicographic data, and developed algorithms for data enrichment
- 2015 – 2016 **Software and Algorithm Developer**, Voiceitt.
Prototyped speech recognition algorithms and integrated them into the company's API.
- 2016 **Algorithm Development Intern**, SECOM.
Developed algorithms for improved facial recognition.
- 2012-2015 **Undergraduate Research in Cognitive Linguistics**, TedLab, MIT.
Analyzed psycholinguistic survey data to study cognition and language.

Research Publications

* indicates equal contribution.



Peer-Reviewed Conference Papers

- Chen Dudai*, **Morris Alper***, Hana Bezalel, Rana Hanocka, Itai Lang, and Hadar Averbuch-Elor. HaLo-NeRF: Learning Geometry-Guided Semantics for Exploring Unconstrained Photo Collections. *Proceedings of the Eurographics Conference (EG)*, 2024.
- Morris Alper** and Hadar Averbuch-Elor. Kiki or Bouba? Sound Symbolism in Vision-and-Language Models. *Advances in Neural Information Processing Systems (NeurIPS)*, 2023. (spotlight paper)
- Morris Alper** and Hadar Averbuch-Elor. Learning Human-Human Interactions in Images from Weak Textual Supervision. *Proceedings of the IEEE/CVF International Conference on Computer Vision (ICCV)*, 2023.

4. **Morris Alper***, Michael Fiman*, and Hadar Averbuch-Elor. Is BERT Blind? Exploring the Effect of Vision-and-Language Pretraining on Visual Language Understanding. *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2023.

Miscellaneous Experience

Presentations and Interviews

- 2024  IMVC 2024 presentation on “Kiki or Bouba?” NeurIPS 2023 paper
-  Radio interview for Kan Tarbut program on VLM sound symbolism research (46:30-60:00, Hebrew language)

Awards and Achievements

- 2011 **International Linguistics Olympiad**, first place internationally (both individual and team rounds), best solution (problem 2), Zhurinsky Memorial Prize.
- 2009 **International Linguistics Olympiad**, honorable mention (individual round), first place in team round.
- 2008 **International Linguistics Olympiad**, tied for 6th place individual round (silver medal).

Academic Teaching Experience

- Spring 2024 (upcoming) **Deep Learning**, teaching assistant, Tel Aviv University.
- Fall 2023 (ongoing) **Digital Signal Processing**, teaching assistant, Tel Aviv University.

Languages

English (native), **Hebrew** (professional), **French** (intermediate)

References

Available upon request