HILA GONEN

 $(+1)6505869403 \Leftrightarrow hilagnn@gmail.com\\ https://gonenhila.github.io \Leftrightarrow https://github.com/gonenhila$

2021 - now

2011

University of Washington – Postdoctoral Researcher

Dean's list, second year of B.Sc.

EDUCATION

Bar-Ilan University PhD student in computer science.	2015 - 2021
Research field: Natural Language Processing and deep learning , under the super of Prof. Yoav Goldberg. Thesis: Multilinguality and Bias in Language Modeling . Grades: average – 97.3	ervision
The Hebrew University of Jerusalem M.Sc. in computer science (with honor). Research field: formal verification, under the supervision of Prof. Orna Kupferman. Thesis: Inherent Vacuity in Lattice Automata. Grades: average – 95.37, final exam – 96, thesis – 95.	2012 - 2014
The Hebrew University of Jerusalem B.Sc. in computer science (major) and Physics (minor). Studied during autumn 2011 in the University of Helsinki as an exchange student. Grades: average – 91.19, CS average – 92.31.	2009 - 2012
AWARDS	
Women's Postdoctoral Career Development Award in Science (Weitzmann Institute of	Science). 2023
Best Doctoral Dissertation Award Runner Up, Israeli Association for Artificial Intelligence (IAAI).	2022
EECS Rising Stars Award.	2022
Best paper award at the RepL4NLP workshop at ACL.	2022
Fulbright Postdoctoral Fellowship – declined.	2021
Rothschild Postdoctoral Fellowship, Yad Hanadiv.	2021
The Eric and Wendy Schmidt Postdoctoral Award for Women in Mathematical and Consciences.	omputing 2019
Best paper award at CoNLL (Conference on Computational Natural Language Learnin	ng). 2019
Excellence scholarship for PhD students from Bar-Ilan University (the President's Scho	olarship). 2016
M.Sc. in computer science with honor from the Hebrew University of Jerusalem.	2014
Excellence scholarship for M.Sc. students from the school of Computer Science and Engineering at the Hebrew University of Jerusalem.	2012

- S. Verma, K. Hines, J. Bilmes, C. Siska, L. Zettlemoyer, <u>H. Gonen</u>, C. Singh. OMNIGUARD: An Efficient Approach for AI Safety Moderation Across Modalities. 2025. arXiv preprint, arXiv:2505.23856.
- L. Peled-Cohen, M. Zadok, N. Calderon, <u>H. Gonen</u>, R. Reichart. Dementia Through Different Eyes: Explainable Modeling of Human and LLM Perceptions for Early Awareness. 2025. arXiv preprint, arXiv:2505.13418.
- O. Ahia, M. Bartelds, K. Ahuja, <u>H. Gonen</u>, V. Hofmann, S. Arora, S. Li, V. Puttagunta, M. Adeyemi, C. Buchireddy, B. Walls, N. Bennett, S. Watanabe, N. A. Smith, Y. Tsvetkov, S. Kumar. BLAB: Brutally Long Audio Bench. 2025. arXiv preprint, arXiv:2505.03054.
- <u>H. Gonen</u>, T. Blevins, A. Liu, L. Zettlemoyer, N. A. Smith. Does Liking Yellow Imply Driving a School Bus? Semantic Leakage in Language Models. In Proceedings of NAACL, 2025.
- O. Ahia, S. Kumar, <u>H. Gonen</u>, V. Hoffman, T. Limisiewicz, Y. Tsvetkov, N. A. Smith. MAGNET: Improving the Multilingual Fairness of Language Models with Adaptive Gradient-Based Tokenization. In proceedings of NeurIPS, 2024.
- O. Ahia, A. Aremu, D. Abagyan, <u>H. Gonen</u>, D. Ifeoluwa Adelani, D. Abolade, N. A. Smith, Y. Tsvetkov. Voices Unheard: NLP Resources and Models for Yorùbá Regional Dialects. In proceedings of EMNLP, 2024.
- T. Blevins, T. Limisiewicz, S. Gururangan, M. Li, <u>H. Gonen</u>, N. A. Smith, L. Zettlemoyer. Breaking the Curse of Multilinguality with Cross-lingual Expert Language Models. In proceedings of EMNLP, 2024.
- T. Limisiewicz, T. Blevins, <u>H. Gonen</u>, O. Ahia, L. Zettlemoyer. MYTE: Morphology-Driven Byte Encoding for Better and Fairer Multilingual Language Modeling. In proceedings of ACL, 2024.
- S. Mayhew, T. Blevins, S. Liu, M. uppa, <u>H. Gonen</u>, J. Marvin Imperial, B. F. Karlsson, P. Lin, N. Ljubei, LJ Miranda, B. Plank, A. Riabi, Y. Pinter. Universal NER: A Gold-Standard Multilingual Named Entity Recognition Benchmark. In proceedings of NAACL, 2024.
- A. Asai, S. Kudugunta, X. Yu, T. Blevins, <u>H. Gonen</u>, M. Reid, Y. Tsvetkov, S. Ruder, H. Hajishirzi. BUFFET: Benchmarking Large Language Models for Few-shot Cross-lingual Transfer. In proceedings of NAACL, 2024.
- J. Lee, A. Liu, O. Ahia, <u>H. Gonen</u>, N. A. Smith. That was the last straw, we need more: Are Translation Systems Sensitive to Disambiguating Context? In *findings* of EMNLP, 2023.
- <u>H. Gonen</u>, S. Iyer, T. Blevins, N. A. Smith, L. Zettlemoyer. Demystifying prompts in language models via perplexity estimation. In *findings* of EMNLP, 2023.
- W. Shi, X. Han, <u>H. Gonen</u>, A. Holtzman, Y. Tsvetkov, L. Zettlemoyer. Toward Human Readable Prompt Tuning: Kubrick's The Shining is a good movie, and a good prompt too? In *findings* of EMNLP, 2023.
- M. Ghazvininejad, <u>H. Gonen</u>, L. Zettlemoyer. Dictionary-based Phrase-level Prompting of Large Language Models for Machine Translation. 2023. arXiv preprint, arXiv:2302.07856.
- D, Liang, <u>H. Gonen</u>, Y. Mao, R. Hou, N. Goyal, M. Ghazvininejad, L. Zettlemoyer, M. Khabsa. XLM-V: Overcoming the Vocabulary Bottleneck in Multilingual Masked Language Models. In proceedings of EMNLP, 2023.
- O. Ahia, S. Kumar, <u>H. Gonen</u>, J. Kasai, D. R. Mortensen, N. A. Smith, Y. Tsvetkov. Do All Languages Cost the Same? Tokenization in the Era of Commercial Language Models. In proceedings of EMNLP, 2023.

- O. Ahia, <u>H. Gonen</u>, V. Balachandran, N. A. Smith, Y. Tsvetkov. LEXPLAIN: Improving Model Explanations via Lexicon Supervision. *SEM conference 2023.
- T. Blevins, <u>H. Gonen</u>, L. Zettlemoyer. Prompting Language Models for Linguistic Structure. In proceedings of ACL, 2023.
- O. Goldman, F. Tinner, <u>H. Gonen</u>, B. Muller, V. Basmov, S. Kirimi, L. Nishimwe, B. Sagot, D. Seddah, R. Tsarfaty, D. Ataman. The MRL 2022 shared task on multilingual clause-level morphology. In proceedings of the EMNLP 2nd Workshop on Multi-lingual Representation Learning (MRL), 2022.
- T. Blevins, <u>H. Gonen</u>, L. Zettlemoyer. Analyzing the Mono-and Cross-Lingual Pretraining Dynamics of Multilingual Language Models. In proceedings of EMNLP, 2022.
- A. Cohen, <u>H. Gonen</u>, O. Shapira, R. Levy, Y. Goldberg. McPhraSy: Multi context phrase similarity and clustering. In *findings* of EMNLP, 2022.
- <u>H. Gonen</u>, S. Ravfogel and Y. Goldberg. Analyzing Gender Representation in Multilingual Models. In Proceedings of the ACL Workshop RepL4NLP: Representation Learning for NLP, 2022, **Best Paper**.
- D. Cirillo, <u>H. Gonen</u>, E. Santus, A. Valencia, M. R. Costa-juss, and M. Villegas. "Sex and Gender Bias in Natural Language Processing". Sex and Gender Bias in Technology and Artificial Intelligence, edited by Davide Cirillo, Silvina Catuara Solarz and Emre Guney, Elsevier, May 2022, pages 113–132.
- I. Gamzu, <u>H. Gonen</u>, G Kutiel, R. Levy and E. Agichtein. Identifying Helpful Sentences in Product Reviews. In proceedings of NAACL, 2021.
- E. Rabinovich, <u>H. Gonen</u> and S. Stevenson. Pick a Fight or Bite your Tongue: Investigation of Gender Differences in Figurative Language Usage. In proceedings of COLING, 2020.
- <u>H. Gonen</u>, S. Ravfogel, Y. Elazar, and Y. Goldberg. It's not Greek to mBERT: Inducing Word-Level Translations from Multilingual BERT. In Proceedings of the EMNLP Workshop BlackboxNLP: Analyzing and Interpreting Neural Networks for NLP, 2020.
- <u>H. Gonen</u> and K. Webster. Automatically Identifying Gender Issues in Machine Translation using Perturbations. In *findings* of EMNLP, 2020.
- S. Ravfogel, Y. Elazar, <u>H. Gonen</u>, M. Twiton and Y. Goldberg. Null it out: Guarding protected attributes by iterative nullspace projection. In proceedings of ACL, 2020.
- <u>H. Gonen</u>, G. Jawahar, Y. Goldberg and D. Seddah. Simple, Interpretable and Stable Method for Detecting Words with Usage Change across Corpora. In proceedings of ACL, 2020.
- <u>H. Gonen</u>, Y. Kementchedjhieva and Y. Goldberg. How does Grammatical Gender Affect Noun Representations in Gender-Marking Languages? In proceedings of CoNLL 2019, **Best Paper**.
- R. H. Maudslay, <u>H. Gonen</u>, R. Cotterell and S. Teufel. It's All in the Name: Mitigating Gender Bias with Name-Based Counterfactual Data Substitution. In proceedings of EMNLP, 2019.
- <u>H. Gonen</u> and Y. Goldberg. Lipstick on a Pig: Debiasing Methods Cover up Systematic Gender Biases in Word Embeddings But do not Remove Them. In proceedings of NAACL, 2019.
- <u>H. Gonen</u> and Y. Goldberg. Language Modeling for Code-Switching: Evaluation, Integration of Monolingual Data, and Discriminative Training. In proceedings of EMNLP, 2019.
- <u>H. Gonen</u> and Y. Goldberg. Semi Supervised Preposition-Sense Disambiguation using Multilingual Data. In proceedings of COLING, 2016.
- <u>H. Gonen</u> and O. Kupferman. Inherent vacuity in lattice automata. In Fields of Logic and Computation II, volume 9300 of Lecture Notes in Computer Science, pages 174-192. Springer, 2015.

INDUSTRY EXPERIENCE

Meta AI – Postdoctoral Researcher	2021 - 202
Amazon – Research Scientist, Alexa shopping – Postdoc position	2020 - 202
Google NY – summer internship Google Israel – research student Automatically Identifying Gender Issues in Machine Translation using Perturbations.	201
"Beyond Minds" – providing expert knowledge to AI companies: Consultant.	201
Intel – WiFi core and features team: developing WiFi driver in C Language.	2012 - 201
ΓEACHING	
University of Washington: organizer and leader of a reading group on Jailbreaking LLMs for graduate students.	202
University of Washington: organizer and leader of a reading group on Multilinguality in NLP for graduate students.	202
The Hebrew University: TA in the course "Data Structures" for first-year students (frontal teaching).	20.
The Hebrew University: TA in the course "Computational Models, Computability and Coffor second-year students.	omplexity" 20
The Hebrew University: TA in the course "Data Bases" for second-year students.	20.
SERVICE	
REVIEWING	
Best Paper Committee, ACL 2025.	20
Reviewer for the GEM2 Workshop: Generation, Evaluation & Metrics, ACL 2025.	20.
Action Editor, NEJLT: the Northern European Journal for Language Technology.	20.
Retion Editor, Webel: the Northern European Journal for Eanguage Technology.	
Area Chair (AC), ARR 2024, Ethics Reviewer, ARR 2024, Area Chair (AC), *SEM 2024.	20
Area Chair (AC), ARR 2024, Ethics Reviewer, ARR 2024, Area Chair (AC), *SEM 2024.	20
Area Chair (AC), ARR 2024, Ethics Reviewer, ARR 2024, Area Chair (AC), *SEM 2024. Area Chair (AC), track of language modeling, LREC-COLING 2024.	20 20
Area Chair (AC), ARR 2024, Ethics Reviewer, ARR 2024, Area Chair (AC), *SEM 2024. Area Chair (AC), track of language modeling, LREC-COLING 2024. Area Chair (AC), track of large language models, ACL 2023.	20 20 2022. 20
Area Chair (AC), ARR 2024, Ethics Reviewer, ARR 2024, Area Chair (AC), *SEM 2024. Area Chair (AC), track of language modeling, LREC-COLING 2024. Area Chair (AC), track of large language models, ACL 2023. Reviewer for the 2nd Multilingual Representations Learning Workshop (MRL), EMNLP 2	20. 20.
Area Chair (AC), ARR 2024, Ethics Reviewer, ARR 2024, Area Chair (AC), *SEM 2024. Area Chair (AC), track of language modeling, LREC-COLING 2024. Area Chair (AC), track of large language models, ACL 2023. Reviewer for the 2nd Multilingual Representations Learning Workshop (MRL), EMNLP 2 Reviewer for Northern European Journal of Language Technology (NEJLT). Reviewer for EACL 2021, NAACL 2021, TrustNLP 2021,	20 20 2022. 20 20
Area Chair (AC), ARR 2024, Ethics Reviewer, ARR 2024, Area Chair (AC), *SEM 2024. Area Chair (AC), track of language modeling, LREC-COLING 2024. Area Chair (AC), track of large language models, ACL 2023. Reviewer for the 2nd Multilingual Representations Learning Workshop (MRL), EMNLP 2 Reviewer for Northern European Journal of Language Technology (NEJLT). Reviewer for EACL 2021, NAACL 2021, TrustNLP 2021, Multilingual Representation Learning Workshop 2021 and TACL.	200 200 2022. 200 200

ORGANIZATION

Co-organizer of the 3rd Multilingual Representations Learning Workshop (MRL), EMNLP.	2023
Co-organizer of the shared task on Clause-level Morphology, the 2nd Multilingual Representations Learning Workshop (MRL), EMNLP.	2022
Co-organizer of the 2nd Multilingual Representations Learning Workshop (MRL), EMNLP.	2022
Co-organizer of the 4th Workshop on Research in Computational Typology and Multilingual NLP (SIGTYP), NAACL.	2022
Co-organizer of the 4th Gender Bias in NLP Workshop (GeBNLP), NAACL.	2022
Co-organizer of the 3rd Gender Bias in NLP Workshop (GeBNLP), ACL.	2021
INVITED TALKS	
Societal impact of NLP Guest lecture at the NLP course at UW (Prof. Noah A. Smith)	2025
Balanced and Efficient tokenization across languages University of Cambridge, LTL Seminar Allen Institute for AI (AI2) Invited Keynote at The 4th Multilingual Representation Learning workshop, EMNLP Technion NLP group	2025 2025 2024 2024
Panelist at The Future of NLP workshop at UBC	2024
Moderator of the panel about Safety in AI at The Paul G. Allen School's 2024 Annual Research Showcase and Open House event	2024
Demystifying Prompts in Language Models via Perplexity Estimation: Sheffield University, Prof. Aline Villavicencio's group Technion, Prof. Roi Richart's group	2024 2024
How negative results fuel our research: Insights from multilinguality and gender bias Invited Keynote, Workshop on Insights from Negative Results in NLP	2023
Demystifying Prompts in Language Models via Perplexity Estimation: The University of British Columbia, NLP group Stanford University, Prof. Dan Jurafsky's group Hebrew University of Jerusalem, NLP group New-York University, NLP group UT Austin, NLP group	2023 2023 2022 2022 2022
Gender Bias in Word Embeddings: Guest lecture at the NLP course at UW (Prof. Noah A. Smith)	2022
Subspaces in multilingual models: University of Washington, Prof. Emily Bender's group	2021
What's in a Representation: Weizmann Institute Technion Hebrew University of Jerusalem University of Washington, Prof. Noah A. Smith's group	2021 2021 2021 2021
Panelist at a Gender Equality workshop at the WSIS forum (UN/UNESCO)	2021
Panelist at Widening NLP Workshop at AACL-IJCNLP	2020

Representation and Bias in NLP: Seminar, Ben Gurion University	2019
Gender Bias in Word Embeddings:	
FastAI Women course, Tel-Aviv	2020
AI Week, Tel-Aviv	2019
WiDS, Tel-Aviv – selected to appear at Best of WiDS Global 2021	2019
Inria lab, Paris	2019
Basis, Israel	2019
Language Modeling for Code-switching:	
AI Data Science Summit, Israel	2019
Microsoft Research, Israel	2018
ONLP lab, Israel	2018
Tutorial on word embeddings: WiDS, Tel-Aviv	2018
Semi Supervised Preposition-Sense Disambiguation using Multilingual Data: The Data Science Summit Europe, Jerusalem, Israel	2017
EVENTS	
Participated in the EECS Rising Stars Workshop at UT Austin	2022
Participated in the Logic, Language and Information summer school (NASSLLI) at CMU	2018
Participated in Lisbon Machine Learning School (LXMLS)	2016
Participated in Marktoberdorf Summer School (Dependable Software Systems Engineering)	2014
Participated in Women in Theory workshop (New York)	2014
SKILLS	
Programming languages: Python, Matlab, C, C++, Java	

Tools and Technologies: Deep Learning (DyNet, PyTorch), NLP (spaCy, NLTK), git

LANGUAGES

Hebrew: native tongue.

English: high level.

Arabic: high level. Rich experience in translating Arabic texts.

French: basic level.