# HILA GONEN

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## PROFESSIONAL EXPERIENCE

**Meta AI and University of Washington** – Postdoctoral Researcher · *2021 - now*

**Amazon** – Research Scientist, Alexa shopping – Postdoc position · *2020 - 2021*

**Google NY** – summer internship · *2019*
**Google Israel** – research student
Automatically Identifying Gender Issues in Machine Translation using Perturbations.

**"Beyond Minds"** – providing expert knowledge to AI companies: Consultant. · *2019*

**Intel** – WiFi core and features team: developing WiFi driver in C Language. · *2012 - 2013*

## EDUCATION

**Bar-Ilan University** · *2015 - 2021*
PhD student in computer science.
Research field: **Natural Language Processing and deep learning**, under the supervision
of Prof. Yoav Goldberg.
Thesis: **Multilinguality and Bias in Language Modeling**.
Grades: average – **97.3**

**The Hebrew University of Jerusalem** · *2012 - 2014*
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**.

**The Hebrew University of Jerusalem** · *2009 - 2012*
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**.

## AWARDS

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 Computing
Sciences. · *2019*

Best paper award at CoNLL (Conference on Computational Natural Language Learning). · *2019*

Excellence scholarship for PhD students from Bar-Ilan University (the President's Scholarship). · *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*

Dean's list, second year of B.Sc. · *2011*

## PUBLICATIONS

H. Gonen, 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**.

Davide Cirillo, Hila Gonen, Enrico Santus, Alfonso Valencia, Marta R. Costa-juss, and Marta 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, H. Gonen, G Kutiel, R. Levy and E. Agichtein. Identifying Helpful Sentences in Product Reviews. In proceedings of NAACL, 2021.

E. Rabinovich, H. Gonen and S. Stevenson. Pick a Fight or Bite your Tongue: Investigation of Gender Differences in Figurative Language Usage. In proceedings of COLING, 2020.

H. Gonen, 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.

H. Gonen and K. Webster. Automatically Identifying Gender Issues in Machine Translation using Perturbations, In *findings* of EMNLP, 2020.

S. Ravfogel, Y. Elazar, H. Gonen, M. Twiton and Y. Goldberg. Null it out: Guarding protected attributes by iterative nullspace projection, In proceedings of ACL, 2020.

H. Gonen, 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.

H. Gonen, 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, H. Gonen, 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.

H. Gonen 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.

H. Gonen and Y. Goldberg. Language Modeling for Code-Switching: Evaluation, Integration of Monolingual Data, and Discriminative Training, In proceedings of EMNLP, 2019.

H. Gonen and Y. Goldberg. Semi Supervised Preposition-Sense Disambiguation using Multilingual Data. In proceedings of COLING, 2016.

H. Gonen 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.

## ACADEMIC ACTIVITY

## REVIEWING

Reviewer for Northern European Journal of Language Technology (NEJLT). *2022*

Reviewer for EACL 2021, NAACL 2021, TrustNLP 2021,
Multilingual Representation Learning Workshop 2021 and TACL. *2021*

Reviewer for ACL 2020. *2020*

Reviewer for ACL 2019, *Sem 2019, repEval 2019, EurNLP 2019 and TACL. *2019*

Reviewer for NAACL 2018, COLING 2018, SRW 2018. *2018*

# ORGANIZATION

Co-organizer of the 2nd Multilingual Representations Learning Workshop (MRL), EMNLP 2022. *2022*

Co-organizer of the 4th Workshop on Research in Computational Typology and Multilingual NLP (SIGTYP), NAACL 2022. *2022*

Co-organizer of the 4th Gender Bias in NLP Workshop (GeBNLP), NAACL 2022. *2022*

Co-organizer of the 3rd Gender Bias in NLP Workshop (GeBNLP), ACL 2021. *2021*

# INVITED TALKS

**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 *2021*
Technion *2021*
Hebrew University of Jerusalem *2021*
University of Washington, Prof. Noah A. Smith's group *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 Logic, Language and Information summer school (NASSLLI) in 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*

## COURSES AND SERVICE TO HOME INSTITUTION

The Hebrew University: TA in the course "Data Structures"
for first-year students (frontal teaching). *2014*

The Hebrew University: TA in the course "Computational Models, Computability and Complexity"
for second-year students. *2013*

The Hebrew University: TA in the course "Data Bases"
for second-year students. *2012*

## 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.