

R E S U M E

1. PERSONAL DETAILS

Full name: Roi Reichart

Identity No. 037341732

Date and place of birth: February, 20, 1980. Ramat-Gan, Israel.

Marital status: Married + 3.

Web site: ie.technion.ac.il/~roiri

2. ACADEMIC DEGREES

1. 2010. PhD, The Interdisciplinary Center for Neural Computation (ICNC). The Hebrew University of Jerusalem. Adviser: Prof. Ari Rappoport.
2. 2007. MSc, The Interdisciplinary Center for Neural Computation (ICNC). The Hebrew University of Jerusalem (part of a direct PhD program).
3. 2004. BA in Computer Science. The Open University of Israel.

3. ACADEMIC APPOINTMENTS

1. 6/2019 - . Associate Professor. Technion – Israel Institute of Technology. Faculty of Industrial Engineering and Management.
2. 2013 – 6/2019. Assistant Professor. Technion – Israel Institute of Technology. Faculty of Industrial Engineering and Management.
3. 1/2020 – Schmidt career development in artificial intelligence, Technion - – Israel Institute of Technology.
4. 2022 - : Member and Steering Committee member, Center for Human Inspired AI, The University of Cambridge, UK.
5. 2015 -. Visiting Affiliated Professor. University of Cambridge, UK, Department of Theoretical and Applied Linguistics (DTAL). The Language Technology Lab (LTL, <http://ltl.mml.cam.ac.uk/>).

6. 2012 – 2013. Post-doc Researcher. The University of Cambridge, computer laboratory. Post-doc host: Prof. Anna Korhonen.
7. 2010 – 2012. Post-doc Fellow/Associate. Massachusetts Institute of Technology (MIT). Post-doc host: Prof. Regina Barzilay.

4. PROFESSIONAL EXPERIENCE

1. 3/2020 - . Suridata.ai. Chief Scientist.
2. 1/2021 – HiAuto, Natural Language Processing (NLP) consultant.
3. 9/2021 – 8/2022: Meta (Facebook): Visiting Researcher (Core Data Science, London).
4. 2017 - 2020. Gong.io, Natural Language Processing (NLP) consultant.
5. 2014 – 2016. Yahoo! Labs, Haifa. Visiting research scientist.
6. 2012 – 2013. ExB Communication Systems GmbH, Germany. Natural Language Processing (NLP) consultant.
7. 2009 – 2012. National Institute for Testing and Evaluation, Natural Language Processing (NLP) consultant.
8. 2002 - 2003, MABAT, Israel Aerospace Industry (IAI): Software engineer and algorithm developer.

5. RESEARCH INTERESTS

Natural Language Processing (NLP), Machine Learning, Structured Prediction, computational semantics, Unsupervised and Semi-Supervised Learning, Domain adaptation, Multi-task learning, Multilingual learning, Evaluation of NLP and machine learning algorithms, Computational Models of Language Acquisition.

6. TEACHING EXPERIENCE

Technion:

1. Software Engineering (094219), Technion, Faculty of IE&M. Undergraduate Level. Winter 2014, 2015. Lecturer.

2. Machine learning and online optimization (Changed to Machine Learning 2) (097209), Technion, Faculty of IE&M. Graduate and undergraduate Level. Spring, 2014, 2015, 2016, 2017, 2018, 2019, 2020. Lecturer.
3. Natural Language Processing, (097215). Technion, Israel Institute of Technology, Winter 2016, 2017, 2018, 2019, 2020 (winter+spring), 2021. Lecturer. Graduate level course in natural language processing. **This is a new course that I developed at the Technion. This course got "tziun leshvah" (honorable mention) for being among the top 12% in students' scores in its category (2016,2019).**
4. Advanced topics in information systems (natural language processing) (096260), Technion, Faculty of IE&M. Graduate and undergraduate Level. Winter 2015. Lecturer.
5. Advanced topics in information systems (096260) and Advanced topics in data engineering (096290), (advanced natural language processing), Technion, Faculty of IE&M. Graduate Level. Spring 2016, 2017, 2018, 2019. Lecturer.
6. Advanced topics in Natural Language Processing (097216). Technion, Faculty of IE&M. Graduate Level. 2020, 2021. Lecturer.
7. Project in Machine Learning (095280). Technion, Faculty of IE&M. Graduate Level. 2021. Lecturer.

Hebrew University:

1. Introduction to Artificial Intelligence (67842). Graduate Level. Hebrew University, school of computer science. Spring 2009. Teaching Assistant.
2. Theory of Neural Networks I (76908). Hebrew University, The Interdisciplinary Center for Neural Computation (ICNC). Spring 2006-2010. Grader.

7. TECHNION ACTIVITIES

2014 – 2015: Member of the Technion Faculty Association (Vaad).

2017 - : Member of Vaadat Tikshuv.

2018 – Representative of the Technion in activities that aim to establish collaboration with Japanese AI research and industrial institutions.

8. DEPARTMENTAL ACTIVITIES

2017 – : Organizer of the Computational Data Dcience (CDS) weekly seminar.

2022 – Advising the Dean of the IE&M faculty on the topic of establishing recruitment policy for faculty members in the data science areas.

9. PUBLIC PROFESSIONAL ACTIVITIES

1. Editorial Boards of Scientific Journals:

- **1/10/22 – 31/12/2024: Co-Editor in Chief, Transactions of the Association for Computational Linguistics (TACL).**
- 2020 – 9/2022: Associate Editor, Transactions of the Association for Computational Linguistics (TACL).
- 2016 – 2020: Transactions of the Association for Computational Linguistics (TACL). Member of the constant reviewing pool (reviewing one paper on a monthly basis).
- 2018 – 8/2022: PLOS One (Associate Editor).
- 2018 – 8/2021: AI Communications (Associate Editor).

2. Journal Reviewer:

- 2018: Journal of Machine Learning Research (JMLR).
- 2017 - : Computational Linguistics.
- 2020: British Journal of Psychiatry.

3. Conference Area Chair (and senior area chair):

- ACL Rolling Review (**2022 -**).
- Conference on Natural Language Learning (**CoNLL, 2018, 2019, 2020,2021, 2022**).
- Association for Computational Linguistics (**ACL, 2019, 2021**).
- Empirical Methods in Natural Language Processing (**EMNLP, 2019, 2021**).

- The Eighth Joint Conference on Lexical and Computational Semantics (***SEM 2019**)
- North American Association for Computational Linguistics (**NAACL, 2018, 2019, 2021**).
- European chapter of the Association for Computational Linguistics (**EACL, 2021, Senior Area chair**).
- Association for the Advancement of Artificial Intelligence (**AAAI, 2021, 2022**).

4. Conference Senior Program Committee Member (equivalent to an area chair):

- International Conference on Artificial Intelligence. **IJCAI 2011, 2019, 2020, 2021**.

5. Conference Best Paper Award Committee:

- Conference on Computational Natural Language Learning (**CoNLL, 2018**)
- European Association for Computational Linguistics (**EACL, 2021**)

6. Conference Reviewer/Program Committee Member (NLP = Natural Language Processing. ML = Machine Learning. AI = Artificial Intelligence):

1. **Association for Computational Linguistics** (ACL, NLP, yearly):
2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019 (area chair), 2020, 2021 (area chair).
2. **North American Association for Computational Linguistics** (NAACL, NLP, two of every three years. Was recently held at 2010,2012,2013,2015,2016):
2010, 2013, 2015, 2016, 2018 (area chair), 2019 (area chair) , 2021 (area chair).
3. **Empirical Methods in Natural Language Processing** (EMNLP, NLP, yearly):
2009, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018 (best reviewer award), 2019 (area chair), 2020, 2021 (area chair), 2022.
4. **Conference on Computational Natural Language Learning** (CoNLL, NLP, yearly):
2010, 2011, 2013, 2016, 2017, 2018 (area chair), 2019, 2020 (area chair), 2021 (area chair), 2022 (area chair).
5. **Neural Information Processing Systems** (NIPS, ML, yearly): *2013, 2014, 2015, 2017, 2018, 2019, 2020.*

6. **International Conference on Machine Learning** (ICML, ML, yearly): *2016, 2017, 2018, 2020.*
7. **European Association for Computational Linguistics** (EACL, NLP, approximately once every three years. Recently: 2012, 2014, 2017): *2012, 2014, 2017, 2021 (senior area chair).*
8. **International Conference on Computational Linguistics** (COLING, NLP, biannual): *2008, 2014, 2016.*
9. **Association for the Advancement of Artificial Intelligence** (AAAI, AI, yearly): *2013, 2017, 2018, 2019, 2021 (senior PC member), 2022 (area chair).*
10. **International Conference on Learning Representations** (ICLR, ML, yearly): *2019, 2020, 2021,2022.*
11. **International Conference on Artificial Intelligence** (IJCAI, AI, most years, recently: 2013, 2015, 2016): *2011 (senior PC member), 2013, 2015, 2016, 2019 (senior PC member), 2020 (senior PC member), 2021 (senior PC member).*
12. **International AAAI Conference on Web and Social Media** (ICWSM AI, yearly): *2016,*
13. **International Joint Conference on Natural Language Processing** (IJCNLP, NLP, biannual): *2011.*

7. Workshop Program Committee Member for various ACL/NAACL/EMNLP workshops on a regular (annual) basis.

8. Member of grant decision committees:

- **ISF computer science grant committee** (2020, 2021).
- **Israel Ministry of Science and Technology Mega Data program** (Maya, 2018; digital humanities, 2021).

9. Grant Reviewer: BSF (2015,2017 regular program), GIF (2016, 2017, 2021 regular program), NWO (the Dutch Research Council) – personal research grant (2018).

9. Member of VATAT and MALAG committee for approval of teaching programs (BSc and MSc) in data science (2021 -).

10. Panel participation in the Malag/vatat committee on the future of humanities studies (2021).

11. Book Chapter Reviewer: Language, Cognition and Computational Models (tentative name, to be published by Cambridge University Press in 2016).

12. Conference Organizer and Program Committee Co-Chair:

The 2016 Israeli Seminar on Computational Linguistics (ISCOL 2016), The Technion, May 31, 2016. <http://ie.technion.ac.il/~roiri/ISCOL2016> .

The 2018 Israeli Seminar on Computational Linguistics (ISCOL 2018), IBM HRL, October 10, 2018. <http://sysrun.haifa.il.ibm.com/hrl/ISCOL18/index.shtml> .

13. Workshop Organizer:

- a. Second Workshop on Domain Adaptation for NLP. **EACL 2021.** (together with Eyal Ben David, Shay Cohen, Ryan McDonald, Barbara Plank, Guy Rotman and Yftah Ziser).
- b. First Workshop on Causal Inference & NLP. **EMNLP 2021.** (with Amir Feder, Katherine Keith, Emaad Manzoor, Reid Pryzant, Dhanya Sridhar, Zach Wood-Doughty, Jacob Eisenstein, Justin Grimmer, Molly Roberts, Uri Shalit, Brandon Stewart, Victor Veitch and Diyi Yang).
- c. Second Workshop on Typology for Polyglot NLP. **EMNLP 2020.** Steering committee (together with Yevgeni Berzak, Ryan Cotterell, Eitan Grossman and Anna Korhonen).
- d. First Workshop on Typology for Polyglot NLP. **ACL 2019.** Steering committee (together with Yevgeni Berzak, Ryan Cotterell, Manaal Farukui and Anna Korhonen).
- e. Second Workshop on Evaluating Vector Space Representations for NLP. **EMNLP 2017.** (together with Sam Bowman, Omer Levy, Felix Hill, Angeliki Lazaridou, Yoav Goldbert and Anders Søgaard).
- f. First Workshop on Evaluating Vector Space Representations for NLP. **ACL 2016.** (together with Omer Levy, Felix Hill, Anna Korhonen, Kyunghyun Cho, Yoav Goldbert and Antoine Bordes).
- g. Joint Workshop on Unsupervised and Semi-Supervised Learning in NLP. **EACL 2012.** (together with Omri Abend, Anna Korhonen and Ari Rappoport).
- h. First Workshop on Unsupervised Learning in NLP. **EMNLP 2011** (together with Omri Abend, Anna Korhonen and Ari Rappoport).

10. MEMBERSHIP IN PROFESSIONAL SOCIETIES

- Association for Computational Linguistics, ACL (2007-).
- ACL Special Interest Group on Natural Language Learning, SIGNLL (2007-).
- ACL Special Interest Group for Linguistic Data and Corpus-based Approaches to NLP, SIGDAT (2007-).
- International Machine Learning Society (2016 -).

- Association for Psychological Science (2019).
- Association for Computing Machinery (ACM, 2020 -).

11. FELLOWSHIPS, AWARDS AND HONORS

1. **Wolf prize for BSc students (2000).**
2. **PhD scholarship of the Interdisciplinary Center for Neural Computation (ICNC), The Hebrew University of Jerusalem (2005 – 2009).**
3. **The Rector scholarship** for outstanding PhD students. The Hebrew University of Jerusalem (2007 – 2009).
4. **The Golda Meir foundation scholarship for PhD students (2008).**
5. **Best paper award** for the paper: Sample Selection for Statistical Parsers: Cognitively Driven Algorithms and Evaluation Measures. (Together with Ari Rappoport). The Thirteenth Conference on Computational Natural Language Learning (CoNLL 2009).
6. **The Dimitris N. Chorafas award for PhD dissertation (2010).**
7. **The ELSC post-doctoral fellowship (2011).**
8. **Tziun Leshvah (honorable mention) – for Natural Language Processing course (097215, Winter 2016, 2019).** The course was scored by the students among the top 12% in its category.
9. **My PhD student Rotem Dror won the Google PhD fellowship (2018).**
10. **My PhD student Rotem Dror won the Schmidt post-doctoral fellowship (2019).**
11. **My PhD student Eyal Ben-David won the IBM PhD fellowship (2020).**
12. **The Yanai Honorable Mention (Tziun Leshvah) for Teaching Excellence, awarded by the Technion. 2019.**
13. **The Schmidt Career Development Chair in Artificial Intelligence (2020-2023).** A 100K USD career development award (75% for a research grant, 25% personal).
14. **The paper** CausaLM: Causal Model Explanation Through Counterfactual Language Models. Amir Feder, Nadav Oved, Uri Shalit and Roi Reichart. (Computational Linguistics, 2021) received the Technion MLIS best student paper award in machine learning.

12. GRADUATE STUDENTS

Completed Theses

PhD:

1. Yufan Guo (PhD and post-doc, The University of Cambridge). Primary Supervisor: Dr. Anna Korhonen. Co-Supervisor: Prof. Roi Reichart. PhD Thesis Title: Semi-supervised Argumentation Zoning. Graduated PhD: 9/2013. Finish post-doc: March 2015. Now at IBM research, New-York.
2. Felix Hill (PhD, The University of Cambridge). Primary Supervisor: Dr. Anna Korhonen. Co-Supervisor: Prof. Roi Reichart. Graduation date: September 2016. Now at Google Brain, London.
3. Roy Schwartz (PhD, The Hebrew University). Primary Supervisor: Prof. Ari Rappoport. Co-Supervisor: Prof. Roi Reichart. Thesis title: Pattern-based methods for Improved Lexical Semantics and Word Embeddings. Graduated: September 2016. Now a faculty member at the School of Computer Science, Hebrew University of Jerusalem.
4. Daniela Gerz (University of Cambridge, UK). Primary Supervisor: Prof. Anna Korhonen. Second Supervisor: Prof. Roi Reichart. Thesis title: Representation Learning beyond Semantic Similarity: Character-aware and Function-specific approaches. Graduated: June 2019. Now an NLP researcher at Poly-ai, London, UK.
5. Yftah Ziser (PhD, Technion). Primary adviser: Prof. Roi Reichart. Thesis title: Domain adaptation for natural language processing, a neural network based approach. Graduated: September 2019. Now a researcher at Amazon.
6. Ira Leviant. (PhD, Technion). Primary adviser: Prof. Roi Reichart. Thesis title: Multilingual Word Embeddings: Evaluation and Template-based Algorithms. Graduated: July 2020.
7. Rotem Dror. Thesis title: Structured Solutions in Natural Language Processing: Algorithms and Statistically Sound Evaluation. Graduated: August 2020.
8. Amir Feder. (PhD, Technion). Primary adviser: Prof. Roi Reichart. Thesis title: Causal Inference for Natural Language Processing.

MSc:

1. Simon Baker. (MSC, The University of Cambridge). Primary Supervisor: Prof. Anna Korhonen. Co-Supervisor: Prof. Roi Reichart. Thesis title: Unsupervised Instance-level Subcategorization Frame Acquisition. Graduation date: September 2013.
2. Ilan Tchernovitz. MSc start date: August 2014. Primary Supervisor: Prof. Roi Reichart. Second advisor: Prof. Liron Yedidsion. Thesis title: Approximations for the inference

problem in statistical dependency parsing with high order features. Graduation date: May 2016.

3. Hagar Leoub. MSc start date: December 2015. Thesis title: Multi-modal models for semantic representation. Graduation date: August 2016.
4. Iftah Peretz. MSc start date: March 2015. Primary Supervisor: Prof. Roi Reichart. Second advisor: Prof. Mark Silberstein (EE faculty, Technion). Thesis title: GPU based parallelization of the Chu-Liu-Edmonds algorithm, for the dependency parsing Problem. Graduation date: October 2016.
5. Lotem Peled. MSc start date: October 2015. Thesis title: Sarcasm Translation Models. Graduation date: September 2017.
6. Meiran Rubinstein. MSc start date: June 2014. Thesis title: Automatic summarization as a social network analysis problem. Graduation date: March 2018.
7. Guy Rotman. MSc start date: October 2015. Thesis title: Every image tells a story in more than one language - A multimodal multilingual deep CCA. Graduation date: March 2018.
8. Riki (Rivka) Malka (CS faculty, Technion). MSc start date: March 2017. Thesis title: Transition based dependency parsing for Web queries with question intent. Graduation date: August 2018.
9. Ofer Givoli (CS faculty, Technion). MSc start date: June 2015. Thesis title: Learning to control computer applications with natural language instructions. Graduation: September 2018.
10. Amichay Doitch (Applied Math faculty, Technion). MSc start date: December 2014. Thesis title: Perturbation based methods for structured prediction in NLP. Graduation date: October 2018.
11. Dor Zohar (Computer Science faculty). MSc start date: March 2017. Thesis title: Semi-supervised learning with sequential neural models in NLP. Graduation date: December 2018.
12. Lilach Edelstein (Hebrew University, ELSC – the Edmond and Lily Safra Center for Brain Research). MSc Start date: April 2016. Thesis title: Unsupervised Linguistic Structure Learning with Sparse Lexical Hints and Automatically Acquired Knowledge. Graduation date: May 2020.
13. Ram Yazdi. MSc start date: October 2018. Thesis title: Perturbation Based Learning for Structured NLP tasks with Application to Dependency Parsing. Graduation date: December 2020.
14. Maya Terno. MSc start date: October 2019. Thesis Title: Designing an Automatic Agent for Repeated Language based Persuasion Games. Graduation date: May 2021.
15. Entony Lekthman. MSc start date: March 2019. Thesis Title: Domain Adaptation for Structured Output Tasks. Graduation date: July 2021.

16. Chen Badler. MSc start date: October 2019. Thesis Title: Pruning Methods for Neural Networks in Low Natural Language Processing Setups. Graduation date: October 2021.
17. Daniel Rosenberg. MSc start date: March 2020. Thesis Title: On the Robustness of Visual Question Answering Systems. Graduation date: October 2021.
18. Boaz Ben-Dov. MSc start date: October 2019. Thesis Title: Predicting the Success of Domain Adaptation, a causal Mode Interpretation Approach. Graduation date: February 2022.

Theses in Progress:

PhD:

1. Guy Rotman: Start date: October 2019. Thesis title: Structured Learning for Low-resource Natural Language Processing.
2. Eyal Ben David. MSc start date: March 2019. **Moved to direct PhD track:** January 2020. Thesis title: Domain Adaptation in NLP – A fully Automated Approach.
3. Nadav Oved. MSc start date: October 2018. **Moved to direct PhD track:** January 2020. Thesis title: Neural Language Processing for Human Conversations – Challenges, Models and Algorithms.
4. Rafael Tikochinsky: Start date: January 2020. Thesis title: Modeling Human Language Processing with Large Pre-trained Language Models (Co-advised with Prof. Uri Hasson, Princeton).
5. Reut Apel. MSc start date: October 2018. **Moved to direct PhD track:** July 2020. Thesis title: Natural Language Processing for Non-cooperative Games (co-advised with Prof. Moshe Tennenholtz, Technion).
6. Shir Lissak. Start date: October 2020. **Moved to direct PhD track:** July 2021. Thesis title: TBD.
7. Nitay Calderon. Start date: March 2022. **Moved to direct PhD track:** May 2021. Thesis title: TBD.

MSc:

1. Zorik Gekhtman. MSc start date: October 2020.
2. Yael Badian. MSc start date: March 2021.
3. Almog Gueta. MSc start date: March 2021.
4. Eldar Abraham. MSc start date: March 2021.

5. Tomer Volk. MSc start date: March 2021.
6. Naveh Porat. MSc start date: March 2021.

13. SPONSORED LONG-TERM VISITORS AND POST-DOCTORAL ASSOCIATES

Yaakov Ophir. 9/2017 – 8/2022. Post-doctoral associate.

14. RESEARCH GRANTS

Competitive

1. GIF, Young Scientist Grant. (1/1/2016 - 31/12/2016). 20K Euro. Syntactic Parsing in Context.
2. ISF (1/10/18- 30/9/2022), Individual Research Grant. 1 Million shekels. Domain Adaptation in Natural Language Processing: A Structure Aware and Linguistically Informed Neural Approach. 1M NIS.

Industrial and other sources

1. The ISF Bikura fellowship for outstanding Israeli post-docs (2011-2012). A two-years fellowship (34K dollars a year) and a research grant (24K\$) for first years in an academic position. Given by the Israel Science Foundation to six outstanding post-docs from all academic areas.
2. Google Research Award (6/2014-6/2015). 33K\$. Automatic Domain Adaptation for Information Extraction through Lexical Acquisition.
3. Microsoft/Technion research center for electronic commerce. (1/2014-1/2016). 35K\$. Context sensitive sentence understanding for natural language processing.
4. Jacobs Technion-Cornell Innovation Institute. (6/2014-6/2015). 25K\$. Social media analysis for NYC Parks Operational Purposes. Co-PI: Prof. Mor Naaman, Cornell-Tech.
5. Intel ICRI-CI Research Grant. (7/2015-6/2017). 90K USD. Hybrid NLP models for Conversation Processing.
6. AOL Research Grant. (9/2015-12/2020). 220K USD. An unrestricted personal research grant awarded by AOL to a group of researchers from the Technion and the Jacobs Technion-Cornell Innovation Institute who works on topics around machine learning, natural language processing and computer vision. Technion Co-PIs (each co-PI gets its own share in the gift, the 75K USD is my personal share): Prof. Nir Ailon (CS faculty), Prof. Lihi Zelnik-Manor (EE faculty) and Prof. Anat Refaeli (IE&M faculty).
7. Magnet – Infimedia consortium. (1/6/2016 – 31/5/2018). 440K shekels. Multilingual vector space modeling for computational semantics.

8. Kamin. (1/9/2017 – 1/9/2019). 660K shekels. Developing NLP tools for the detection of emotional distress on the Web. Co-PIs: Prof. Baruh Schwartz and Dr. Christa Astarhan (Hebrew University. 660K shekels is my part of the grant).
9. Bank Hapoalim (1/9/2017 – 1/9/2018). 15K USD. Sentiment analysis of bank customer data. Co-PIs: Dr. Tamir Hazan and Prof. Anat Refaeli (Faculty of industrial engineering, Technion. 15K USD is my part of the grant).
10. Google (1/1/2018). 12K USD. Personal, Open-ended research grant for the development of NLP techniques for the Web.
11. Intel (1/11/2018 – 31/12/2021). 150K USD. Domain adaptation for structured NLP tasks.
12. Google (1/12/2018). 30K USD. Personal, Open-ended research grant for the development of NLP techniques for dialog processing.
13. Bank Hapoalim (1/9/2018 – 1/9/2019). 30K USD. NLP for action prediction in bank data.
14. Google Research Award (4/2019-3/2020). 60K\$. Automatic Induction and Adaptation of Syntactic Structures for Improved Cross-Lingual NLP. Together with Professor Anna Korhonen (Cambridge University, UK).
15. Google (1/12/2019). 10K USD. Personal, Open-ended research grant for the development of NLP techniques for dialog processing.
16. Magnet – "Big Data for Food Consortium". (1/6/2019 – 30/11/2020). 350K shekels. Automatic ontology induction form multiple domains.
17. Israel Ministry of Science (1/10/2019 – 31/9/2022). 2M NIS (jointly with Dr. Erez Karpas and Dr. Tamir Hazan, Technion). Natural Interaction with Cognitive Robots.
18. Zukerman Foundation for Artificial Intelligence. (1/8/2020 – 31/7/2021). 25K USD. A Causal Inference Methodology for Deep Learning Model Explanation in Natural Language Processing.
19. Google (1/11/2020). 27K USD. Personal, Open-ended research grant for the development of NLP techniques for human conversation processing.
20. The Schmidt Career Development Chair in Artificial Intelligence (2021-2023). A 100K USD career development award (75% for a research grant, 25% personal).
21. Israel Higher Education Council (VATAT). 1/1/2022 – 31/12/2024. 1.636 M NIS. From Language to Behavior: Natural Language Processing Models and their Interpretation.
22. Google (1/11/2020). 30K USD. Personal, Open-ended research grant for the development of Domain Adaptation technology for NLP.

- **Highly rated proposal that were not funded due to budget constraints.**
 - Domain Independent Textual Information Extraction with Hybrid Models, ISF individual grant proposal, 2014 ("Tov Meod" grade).

15. PUBLICATIONS

Theses Semi-Supervised Learning of Natural Language, PhD Thesis, The Hebrew University of Jerusalem (Approved: 4/11).

Books

1. Proceedings of the EMNLP Workshop on Unsupervised Learning in NLP. Roi Reichart, Omri Abend, Anna Korhonen and Ari Rappoport. Association for Computational Linguistics 2011.
2. Proceedings of the EACL Joint Workshop on Unsupervised and Semi-Supervised Learning in NLP. Roi Reichart, Omri Abend, Anna Korhonen and Ari Rappoport. Association for Computational Linguistics 2012.
3. Proceedings of the ACL First Workshop on Evaluating Vector Space Representations for NLP. Roi Reichart, Omer Levy, Felix Hill, Anna Korhonen, Kyunghyun Cho, Yoav Goldberg and Antoine Bordes. Association for Computational Linguistics 2016.
4. Proceedings of the second (EMNLP) Workshop on Evaluating Vector Space Representations for NLP. Sam Bowman, Yoav Goldberg, Felix Hill, Angeliki Lazaridou, Omer Levy, Roi Reichart and Anders Søgaard. Association for Computational Linguistics 2017.
5. Proceedings of the first ACL Workshop on Typology for Polyglot NLP. Haim Dubossarsky, Arya D. McCarthy, Edoardo Maria Ponti, Ivan Vulic, Ekaterina Vylomova, Yevgeni Berzak, Ryan Cotterell, Manaal Faruqui, Anna Korhonen and Roi Reichart. Association for Computational Linguistics 2019.
6. Proceedings of the Second EMNLP Workshop on Typology for Polyglot NLP. Steering committee (together with Yevgeni Berzak, Ryan Cotterell, Eitan Grossman and Anna Korhonen). Association for Computational Linguistics 2020.
7. Proceedings of the Second EACL Workshop on Domain Adaptation for NLP. Eyal Ben David, Shay Cohen, Ryan McDonald, Barbara Plank, Roi Reichart, Guy Rotman and Yftah Ziser. Association for Computational Linguistics 2021.

8. Proceedings of the First EMNLP Workshop on Causal Inference & NLP. Amir Feder, Katherine Keith, Emaad Manzoor, Reid Pryzant, Dhanya Sridhar, Zach Wood-Doughty, Jacob Eisenstein, Justin Grimmer, Roi Reichart, Molly Roberts, Uri Shalit, Brandon Stewart, Victor Veitch and Diyi Yang.
9. Statistical Significance Testing for Natural Language Processing. Rotem Dror, Lotem Peled, Segev Shlomov and **Roi Reichart**. Morgan&Claypool (Published: May 2020).

Refereed papers in professional journals

1. Multi-Modal Models for Concrete and Abstract Concept Meaning. Felix Hill, **Roi Reichart** and Anna Korhonen. Transactions of the Association for Computational Linguistics. TACL. 2:285-296 (2014). Publisher: Association for Computational Linguistics.
2. Unsupervised Declarative Knowledge Induction for Constraint-Based Learning of Information Structure in Scientific Documents. Yufan Guo, **Roi Reichart** and Anna Korhonen. Transactions of the Association for Computational Linguistics. TACL 3:131-143 (2015). Publisher: Association for Computational Linguistics.
3. SimLex-999: Evaluating Semantic Models with (Genuine) Similarity Estimation. Felix Hill, **Roi Reichart** and Anna Korhonen. Computational Linguistics 41(4):665-695. (2015). Publisher: MIT Press. **This paper has 437 citations and is the most cited paper in the journal in the last five years (i.e. since 2013). CL and TACL are the flagship journals of the NLP community.**
4. Semantic Specialization of Distributional Word Vector Spaces using Monolingual and Cross-lingual Constraints. Nikola Mrksic, Ivan Vulic, Diarmuid O Seaghdha, Ira Leviant, **Roi Reichart**, Milica Gasic, Anna Korhonen and Steve Young. Transactions of the Association for Computational Linguistics TACL 5:309-324 (2017).
5. Replicability Analysis for Natural Language Processing: Testing Significance with Multiple Datasets. Rotem Dror, Gili Baumer, Marina Bogomolov and **Roi Reichart**. Transactions of the Association for Computational Linguistics TACL 5:471-486 (2017).
6. Language Modeling for Morphologically Rich Languages: Character-Aware Modeling for Word-Level Prediction. Daniela Gerz, Edoardo Maria Ponti, Jason Naradowski, Ivan Vulic, **Roi Reichart** and Anna Korhonen. Transactions of the Association for Computational Linguistics TACL(6):451-465 (2018).
10. The Turker Blues: Hidden Factors behind Increased Depression Rates in Amazon's Mechanical Turk. Yaakov Ophir, Itay Sisso, Christa Asterhan, Refael Tikochinski and **Roi Reichart**. *Clinical Psychological Science*. <https://doi.org/10.1177/2167702619865973>. Published online: October 2, 2019. 19 pages.
11. Perturbation Based Learning for Structured NLP tasks with Application to Dependency Parsing. Amichay Doitch (*), Ram Yasdi (*), Tamir Hazan, **Roi Reichart**. *Transactions of the Association for Computational Linguistics*, TACL (7): 643-659.

12. Deep Contextualized Self-training for Low Resource Dependency Parsing. Guy Rotman and **Roi Reichart**. *Transactions of the Association for Computational Linguistics, TACL* (7): 695-713.
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Submitted Papers

1. Example-based Hypernetworks for Out-of-Distribution Generalization. Tomer Volk (*), Eyal Ben-David (*), Ohad Amosi, Gal Chechik and **Roi Reichart**. (*) - Both authors equally contributed to the paper.
2. Fine-tuning of deep language models as a computational framework of modeling listeners' perspective during language comprehension. Refael Tikochinski, Ariel Goldstein, Yaara Yshurun, Uri Hasson and **Roi Reichart**.
3. In the Eye of the Beholder: Robust Prediction with Causal User Modeling. Amir Feder, Guy Horowitz, Yoav Wald, **Roi Reichart** and Nir Rosenfeld.
4. CEBaB: Estimating the Causal Effects of Real-World Concepts on NLP Model Behavior. Eldar David Abraham (*), Karel D'Oosterlinck (*), Amir Feder (*), Yair Ori Gat (*), Atticus Geiger (*), Christopher Potts (*), **Roi Reichart** (*) and Zhengxuan Wu (*). (*) - All authors contributed equally; Names are in alphabetic order.

Research reports and other publications

1. Judgment Language Matters: Towards Judgment Language Informed Vector Space Modeling. Ira Leivant and **Roi Reichart**. Arxiv preprint (arxiv:1508.00106. This paper has not been accepted for publication but it already has 98 citations).

16. CONFERENCES

Participation in organizing conferences

Workshop Organizer:

1. Second Workshop on Domain Adaptation for NLP. **EACL 2021**. (together with Eyal Ben David, Shay Cohen, Ryan McDonald, Barbara Plank, Guy Rotman and Yftah Ziser).
2. First Workshop on Causal Inference & NLP. **EMNLP 2021**. (with Amir Feder, Katherine Keith, Emaad Manzoor, Reid Pryzant, Dhanya Sridhar, Zach Wood-Doughty, Jacob Eisenstein, Justin Grimmer, Molly Roberts, Uri Shalit, Brandon Stewart, Victor Veitch and Diyi Yang).
3. Second Workshop on Typology for Polyglot NLP. **EMNLP 2020**. Steering committee (together with Yevgeni Berzak, Ryan Cotterell, Eitan Grossman and Anna Korhonen).
4. First Workshop on Typology for Polyglot NLP. **ACL 2019**. Steering committee (together with Yevgeni Berzak, Ryan Cotterell, Manaal Farukui and Anna Korhonen).
5. First Workshop on Unsupervised Learning in NLP. **EMNLP 2011** (together with Omri Abend, Anna Korhonen and Ari Rappoport).
6. Joint Workshop on Unsupervised and Semi-Supervised Learning in NLP. **EACL 2012**. (together with Omri Abend, Anna Korhonen and Ari Rappoport).
7. First Workshop on Evaluating Vector Space Representations for NLP. **ACL 2016**. (together with Omer Levy, Felix Hill, Anna Korhonen, Kyunghyun Cho, Yoav Goldberg and Antoine Bordes).
8. Second Workshop on Evaluating Vector Space Representations for NLP. **EMNLP 2017**. (together with Sam Bowman, Yoav Goldberg, Felix Hill, Angeliki Lazaridou, Omer Levy and Anders Søgaard).

Conference Organizer and Co Program Committee Chair:

The 2016 Israeli Seminar on Computational Linguistics (ISCOL 2016), The Technion, May 31, 2016. <http://ie.technion.ac.il/~roiri/ISCOL2016> .

The 2018 Israeli Seminar on Computational Linguistics (ISCOL 2018), IBM HRL, October 10, 2018. <http://sysrun.haifa.il.ibm.com/hrl/ISCOL18/index.shtml> .

Plenary, keynote and invited talks

1. IBM Machine Learning Day (IBM labs, Haifa). November 2014. Multi-Modal Models for In-Depth Computational Semantics.
2. Intel-ICRI (Intel, IDC Haifa), May 2015. Hybrid Models for Minimally Supervised Natural Language Learning With Applications to Conversation Processing
3. AOL-Technion, Cx Fall 2015 Workshop (New-York City, USA), September 2015. Multi-Modal Processing of Text and Images.
4. AOL-Technion Cx workshop (Technion). February 2016. Judgment Language Matters: Towards Judgment Language Informed Vector Space Modeling.
5. IBM research, Machine Learning Seminar (IBM, Tel-Aviv). June 2016. The Structured Weighted Violations Perceptron Algorithm.
6. University of Munich, Center for Information and Language Processing. November 2016. Recent Advances in Multilingual and Multimodal Computational Semantics.
7. Intel-ICRI (Intel, IDC Haifa), May 2017. Semantic Specialization of Distributional Word Vector Spaces using Monolingual and Cross-lingual Constraints.
8. AIST Tokyo – AI seminar. May 2018. Combining Data and World Knowledge in Natural Language Learning with Deep Neural Networks.
9. Google Research Seminar. November 2018. Neural Structural Correspondence Learning for Domain Adaptation.
10. AIST Tokyo – Real world AI, co-evolution of Intelligence and AI enrichment of Life, international symposium. February 2019.
11. Intel-Technion Machine learning symposium - Pivot based methods for domain adaptation. June 2019.
12. Samsung Israel – Pivot based methods for domain adaptation. August 2019.

13. Intel-Technion Machine learning symposium - Domain adaptation in Natural Language Processing with Deep Neural Networks. January 2020.
14. 8200 research seminar: Domain adaptation in NLP.
15. Intel Data Science Seminar: Predicting Human Behavior from Text. November 2020.
16. Bar-Ilan Machine learning club. CausaLM: Causal Model Explanation Through Counterfactual Language Models. June 2021.
17. NVIDIA Research Israel seminar: An overview of the IE@Technion NLP group research: Out-of-distribution generalization, causal inference and scientific applications. March 2022.
18. NVIDIA applied NLP and deep learning seminar: Domain adaptation in NLP through prompt-generation and hyper-networks. March 2022.
19. Facebook, Core Data Science group seminar: An overview of the IE@Technion NLP group research: Out-of-distribution generalization, causal inference and scientific applications. August 2022.
20. The International Future Lab on Artificial Intelligence and Personalized Medicine (Hannover, Germany). Workshop on artificial intelligence, causality and personalized medicine. Talk Title: Causal Inference in Natural Language Processing – Interpretability, Generalization and Evaluation. September 2022.
21. IBM Science, Tech and Sustainability Summit. Session facilitator for “Will Computers Converse Like Humans?”. September, 2022.