

FILIP ILIEVSKI

Research Lead

University of Southern California, Information Sciences Institute
Marina del Rey, California, USA

Research Assistant Professor of Computer Science

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Los Angeles, California, USA

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Prior Work Experience

- 12/2019-7/2022 Research Scientist, USC Information Sciences Institute
- Tasks: Teaching, supervision, and research
 - Projects: Machine Common Sense (MCS) and Knowledge Graph Toolkit (KGTK)
- 08/2020-12/2020 Part-time Lecturer, USC School of Engineering
- Taught the course *Building Knowledge Graphs (DSCI-558)* to Data Science Graduate students.
- 03/2019-11/2019 Postdoctoral Researcher, Vrije Universiteit Amsterdam
- Tasks: Teaching, supervision, and research
 - Projects: Dutch FrameNet and Clariah

Education

- 03/2015-02/2019 PhD in Natural Language Processing, Vrije Universiteit (VU) Amsterdam
- Title: “Identity of Long-tail Entities in Text”
 - Defense date: September 6th, 2019
 - Computational Lexicology and Terminology Lab (CLTL) / Knowledge Representation and Reasoning (KRR)
 - Promotors: Prof. Piek Vossen (CLTL, VU), Prof. Frank van Harmelen (KRR, VU); co-promotors: Dr. Stefan Schlobach (KRR, VU), Dr. Marieke van Erp (KNAW)

- My dissertation focused on multiple aspects of the under-addressed challenge of interpreting identity of long-tail entities in text, namely: description, analysis, evaluation, access to knowledge, and solution systems. It was part of the project [Understanding Language By Machines](#).

03/2017-08/2017 Visiting Research Scholar, Carnegie Mellon University

- Department: Language Technologies Institute (LTI)
- Project: Neural profiling over knowledge graphs
- Supervisor: Prof. Eduard Hovy

09/2013-02/2015 MSc in Artificial Intelligence, Vrije Universiteit Amsterdam

- Specialization: Intelligent Systems Design
- VU Fellowship Program (VUFP) Recipient
- GPA: 8.4/10.00, Graduated Cum Laude
- Thesis title: "NED with two-stage coherence optimization – How i am teaching my Ford automobile not to run on 20th century presidential elections in US"
- Thesis supervisors/advisors: Dr. Marieke van Erp, Dr. Stefan Schlobach, Prof. Piek Vossen, Dr. Wouter Beek

09/2009-09/2013 BSc in Computer Science and Engineering, Ss. Cyril and Methodius University, Skopje

- GPA: 9.56/10.00
- Study Abroad - Vrije Universiteit Amsterdam, The Netherlands (Fall 2012 - Spring 2013, funded by the Erasmus Mundus Euroweb Scholarship)

Publications

1. (under review) Filip Ilievski, Jay Pujara, Kartik Shenoy. Does Wikidata Support Analogical Reasoning? KGSWC-2022.
2. (under review) Ehsan Qasemi, Filip Ilievski, Muhao Chen, Pedro Szekely. PaCo: Pre-conditions Attributed to Commonsense Knowledge. EMNLP 2022.
3. (under review) Filip Ilievski, Kartik Shenoy, Nicholas Klein, Hans Chalupsky, Pedro Szekely. Capturing Concept Similarity with Knowledge Graphs. Semantic Web Journal.
4. (under review) Bohui Zhang, Filip Ilievski, Pedro Szekely. Enriching Wikidata with Linked Open Data. Wikidata workshop, co-located with the International Semantic Web Conference (ISWC) 2022.
5. (under review) Nicholas Klein, Filip Ilievski, Hayden Freedman, Pedro Szekely. Identifying Surprising Facts in Wikidata. Wikidata workshop, co-located with the International Semantic Web Conference (ISWC) 2022.

6. (under review) Jiarui Zhang, Filip Ilievski, Kaixin Ma, Jonathan Francis, Alessandro Oltramari. An Empirical Investigation of Commonsense Self-Supervision with Knowledge Graphs. AKBC 2022.
7. Kaixin Ma, Filip Ilievski, Jonathan Francis, Eric Nyberg, Alessandro Oltramari (2022). Coalescing Global and Local Information for Procedural Text Understanding. COLING.
8. Thiloshon Nagarajah, Filip Ilievski, Jay Pujara. [Understanding Narratives through Dimensions of Analogy](#). Qualitative Reasoning workshop, co-located with IJCAI 2022.
9. Jiang Wang, Filip Ilievski, Pedro Szekely, Ke-Thia Yao (2022). [Augmenting Knowledge Graphs for Better Link Prediction](#). International Joint Conference on Artificial Intelligence (IJCAI).
10. Sara Melotte, Filip Ilievski, Linglan Zhang, Aditya Malte, Namita Mutha, Fred Morstatter, Ninareh Mehrabi (2022). [Where Does Bias in Common Sense Knowledge Models Come From?](#) IEEE Journal on Internet Computing, Special issue on Knowledge-infused Learning.
11. Peifeng Wang, Jonathan Zamora, Junfeng Liu, Filip Ilievski, Muhao Chen, Xiang Ren (2022). [Contextualized Scene Imagination for Generative Commonsense Reasoning](#). International Conference on Learning Representations (ICLR) 2022.
12. Alessandro Oltramari, Jon Francis, Filip Ilievski, Kaixin Ma, Roshanak Mirzaee (2022). [Generalizable Neuro-symbolic Systems for Commonsense Question Answering](#). In Neuro-Symbolic Artificial Intelligence: The State of the Art.
13. Nicholas Klein, Filip Ilievski, Pedro Szekely (2021). [Generating Explainable Abstractions for Wikidata Entities](#). Eleventh International Conference on Knowledge Capture (K-CAP).
14. Kartik Shenoy, Filip Ilievski, Daniel Garijo, Daniel Schwabe, Pedro Szekely (2021). [A Study of the Quality of Wikidata](#). Journal of Seb Semantics, Special Issue on Community-Based Knowledge Bases.
15. Filip Ilievski, Alessandro Oltramari, Kaixin Ma, Bin Zhang, Deborah L. McGuinness, Pedro Szekely (2021). [Dimensions of Commonsense Knowledge](#). Knowledge-Based Systems (KBS). Volume 229. ISSN 0950-7051. [10.1016/j.knosys.2021.107347](#).
16. Kaixin Ma, Filip Ilievski, Jonathan Francis, Satoru Ozaki, Eric Nyberg, Alessandro Oltramari (2021). [Exploring Strategies for Generalizable Commonsense Reasoning with Pre-trained Models](#). In Proceedings of the 2021 Conference on Empirical Methods in Natural Language Processing (EMNLP).
17. Avijit Thawani, Jay Pujara, Filip Ilievski (2021). [Numeracy Enhances the Literacy of Language Models](#). In Proceedings of the 2021 Conference on Empirical Methods in Natural Language Processing (EMNLP).

18. Peifeng Wang, Filip Ilievski, Muhao Chen, Xiang Ren (2021). [Do Language Models Perform Generalizable Commonsense Inference?](#) In Findings of the Association for Computational Linguistics: ACL-IJCNLP 2021. 3681–3688. DOI.
19. Avijit Thawani, Jay Pujara, Pedro Szekely, Filip Ilievski (2021). [Representing Numbers in NLP: a Survey and a Vision](#). In Proceedings of the 2021 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies. 644–656. DOI.
20. Filip Ilievski, Pedro Szekely, Bin Zhang (2021). [CSKG: The CommonSense Knowledge Graph](#). In Proceedings of Extended Semantic Web Conference (ESWC), Resource Track. 680–696. ISBN 978-3-030-77385-4.
21. Kaixin Ma, Filip Ilievski, Jonathan Francis, Yonatan Bisk, Eric Nyberg, Alessandro Oltramari (2021). [Knowledge-driven Data Construction for Zero-shot Evaluation in Commonsense Question Answering](#). In Proceedings of the AAAI Conference on Artificial Intelligence. 13507–13515.
22. Filip Ilievski, Pedro Szekely, Gleb Satyukov, Amandeep Singh. [User-friendly Comparison of Similarity Algorithms on Wikidata](#). Wikidata-21 workshop, co-located with the International Semantic Web Conference (ISWC).
23. Hans Chalupsky, Pedro Szekely, Filip Ilievski, Daniel Garijo, Kartik Shenoy. [Creating and Querying Personalized Versions of Wikidata on a Laptop](#). Wikidata-21 workshop, co-located with the International Semantic Web Conference (ISWC).
24. Filip Ilievski, Jay Pujara, Hanzhi Zhang (2021). [Story Generation with Commonsense Knowledge Graphs and Axioms](#). Common Sense Knowledge Bases (CSKB) workshop, co-located with the Automated Knowledge Base Construction (AKBC) Conference.
25. Zaina Shaik, Filip Ilievski, Fred Morstatter (2021). [Analyzing Race and Citizenship Bias in Wikidata](#). Workshop for REU Research in Networking and Systems (REUNS 2021), co-located with 2021 IEEE 18th International Conference on Mobile Ad Hoc and Smart Systems (MASS).
26. Mark Mann, Filip Ilievski, Mohammad Rostami, Aastha Aastha, Basel Shbita (2021). [Open Drug Knowledge Graph](#). Knowledge Graph Construction (KGC) workshop, co-located with the Extended Semantic Web Conference (ESWC).
27. Ziping Hu, Zepei Zhao, Mohammad Rostami, Filip Ilievski, Basel Shbita (2021). [Knowledge Graph-Based Housing Market Analysis](#). Knowledge Graph Construction (KGC) workshop, co-located with the Extended Semantic Web Conference (ESWC).
28. Peifeng Wang, Nanyun Peng, Filip Ilievski, Pedro Szekely, Xiang Ren (2020). [Connecting the Dots: A Knowledgeable Path Generator for Commonsense Question Answering](#). In Findings of the Association for Computational Linguistics: EMNLP 2020. Association for Computational Linguistics. 4129–4140. DOI.

29. Filip Ilievski, Daniel Garijo, Hans Chalupsky, Naren Teja, Yixiang Yao, Craig Rogers, Rongpeng Li, Jun Liu, Amandeep Singh, Daniel Schwabe, Pedro Szekely (2020). [KGTK: A Toolkit for High-Volume Knowledge Graph Manipulation](#). In: J. Z. Pan et al. (Eds.): The Semantic Web – ISWC 2020, LNCS 12507, DOI.
30. Piek Vossen, Filip Ilievski, Marten Postma, Antske Fokkens, Gosse Minnema, Levi Remijnse (2020). [Large-scale Cross-lingual Language Resources for Referencing and Framing](#). In Proceedings of the 12th Language Resources and Evaluation Conference. 3162–3171.
31. Filip Ilievski, Pedro Szekely, Daniel Schwabe (2020). [Commonsense Knowledge in Wikidata](#). Wikidata-20 workshop, co-located with the International Semantic Web Conference (ISWC).
32. Marten Postma, Levi Remijnse, Filip Ilievski, Antske Fokkens, Sam Titarsolej, Piek Vossen (2020). [Combining Conceptual and Referential Annotation to Study Variation in Framing](#). In Proceedings of the International FrameNet Workshop 2020: Towards a Global, Multilingual FrameNet. 31–40.
33. Avijit Thawani, Jay Pujara, Filip Ilievski, Pedro Szekely (2020). [Representing Numbers in Language Models](#). West Coast NLP (WeCNLP) Summit.
34. Filip Ilievski (2019). [Identity of Long-Tail Entities in Text](#). Studies on the Semantic Web. Volume 43. IOS Press. ISBN 978-1-64368-042-2 (print) | 978-1-64368-043-9 (online).
35. Filip Ilievski (2019). [Identity of Long-Tail Entities in Text](#). PhD dissertation. Vrije Universiteit Amsterdam. 227p.
36. Filip Ilievski, Eduard Hovy, Piek Vossen, Stefan Schlobach, Qizhe Xie (2019). [The Role of Knowledge in Establishing Identity of Long-Tail Entities](#). Journal of Web Semantics (JWS), Special Issue on Language Technology and Knowledge Graphs. Volumes 61-62. ISSN 1570-8268. [10.2139/ssrn.3697491](#).
37. Filip Ilievski, Piek Vossen, Stefan Schlobach (2018). [Systematic Study of Long Tail Phenomena in Entity Linking](#). In Proceedings of the 27th International Conference on Computational Linguistics (COLING). Association for Computational Linguistics. 664–674.
38. Piek Vossen, Filip Ilievski, Marten Postma, Roxane Segers (2018). [Don't Annotate, but Validate: a Data-to-Text Method for Capturing Event Data](#). In Proceedings of the Eleventh International Conference on Language Resources and Evaluation (LREC 2018). European Language Resources Association (ELRA).
39. Piek Vossen, Marten Postma, Filip Ilievski (2018). [ReferenceNet: a semantic-pragmatic network for capturing reference relations](#). In Proceedings of the 9th Global Wordnet Conference. Global Wordnet Association. 219–228.
40. Marten Postma, Filip Ilievski, Piek Vossen (2018). [SemEval-2018 Task 5: Counting Events and Participants in the Long Tail](#). In Proceedings of The 12th International Workshop on Semantic Evaluation. Association for Computational Linguistics. 70–80. DOI.

41. Wouter Beek, Filip Ilievski, Jeremy Debattista, Stefan Schlobach, Jan Wielemaker (2017). [Literally Better: Analyzing and Improving the Quality of Literals](#). Semantic Web Journal (SWJ). Semantic Web, volume 9. DOI.
42. Wouter Beek, Laurens Rietveld, Filip Ilievski, Stefan Schlobach (2017). [LOD Lab: Scalable Linked Data Processing](#). In Reasoning Web: Logical Foundation of Knowledge Graph Construction and Query Answering. Springer International Publishing. 124–155. ISBN 978-3-319-49493-7. DOI.
43. Filip Ilievski, Piek Vossen, Marieke van Erp (2017). [Hunger for Contextual Knowledge and a Road Map to Intelligent Entity Linking](#). In proceedings of Language, Data and Knowledge (LDK). Springer International Publishing. 143–149. ISBN 978-3-319-59888-8.
44. Filip Ilievski, Marten Postma, Piek Vossen (2016). [Semantic overfitting: what ‘world’ do we consider when evaluating disambiguation of text?](#). In Proceedings of COLING 2016, the 26th International Conference on Computational Linguistics: Technical Papers. The COLING 2016 Organizing Committee. 1180–1191.
45. Filip Ilievski, Wouter Beek, Marieke van Erp, Laurens Rietveld, Stefan Schlobach (2016). [LOTUS: Adaptive Text Search for Big Linked Data](#). In Proceedings of the 13th International Conference on The Semantic Web. Latest Advances and New Domains - Volume 9678. ISBN 978-3-319-34128-6. 470–485. DOI.
46. Filip Ilievski, Giuseppe Rizzo, Marieke van Erp, Julien Plu, Raphael Troncy (2016). [Context-enhanced Adaptive Entity Linking](#). In Proceedings of the Tenth International Conference on Language Resources and Evaluation (LREC’16). European Language Resources Association (ELRA). 541–548.
47. Marieke van Erp, Pablo Mendes, Heiko Paulheim, Filip Ilievski, Julien Plu, Giuseppe Rizzo, Joerg Waitelonis (2016). [Evaluating Entity Linking: An Analysis of Current Benchmark Datasets and a Roadmap for Doing a Better Job](#). In Proceedings of the Tenth International Conference on Language Resources and Evaluation (LREC’16). European Language Resources Association (ELRA). 4373–4379.
48. Roxane Segers, Egoitz Laparra, Marco Rospocher, Piek Vossen, German Rigau, Filip Ilievski (2016). [The Predicate Matrix and the Event and Implied Situation Ontology: Making More of Events](#). In Proceedings of the 8th Global WordNet Conference (GWC). Global Wordnet Association. 364–372.
49. Marten Postma, Filip Ilievski, Piek Vossen, Marieke van Erp (2016). [Moving away from semantic overfitting in disambiguation datasets](#). In Proceedings of the Workshop on Uphill Battles in Language Processing: Scaling Early Achievements to Robust Methods. Association for Computational Linguistics. 17–21. DOI.
50. Marieke van Erp, Roxane Segers, Filip Ilievski, Antske Fokkens, Rodrigo Agerri, Marco Rospocher, Itziar Aldabe, Egoitz Laparra, German Rigau, Sanne Vrijenhoek (2016). [D5. 2.2 Domain model for financial and economic events, version 3 Deliverable D5. 2.2](#).

51. Piek Vossen, Tommaso Caselli, Agata Cybulska, Antske Fokkens, Filip Ilievski, Anne-Lyse Minard, Paramita Mirza, Itziar Aldabe, Egoitz Laparra, German Rigau (2016). [Event Narrative Module, version 3 Deliverable D5.1.3](#).
52. Filip Ilievski, Wouter Beek, Marieke van Erp, Laurens Rietveld, Stefan Schlobach (2015). [LOTUS: Linked Open Text UnleaShed](#). In Proceedings of the 6th International Workshop on Consuming Linked Data (COLD).
53. Marieke van Erp, Filip Ilievski, Marco Rospocher, Piek Vossen (2015). [Missing Mr. Brown and buying an Abraham Lincoln – Dark Entities and DBpedia](#). In Proceedings of the NLP and DBpedia workshop.
54. Tommaso Caselli, Piek Vossen, Marieke van Erp, Antske Fokkens, Filip Ilievski, Ruben Izquierdo Bevia, Minh Lê, Roser Morante, and Marten Postma (2015). [When it's all piling up: investigating error propagation in an NLP pipeline](#). In: NLP Applications: completing the puzzle.
55. Piek Vossen, Tommaso Caselli, Filip Ilievski, Ruben Izquierdo, Alessandro Lopopolo, Emiel Van Miltenburg, Roser Morante, Ngoc Minh, Marten Postma (2015). [Words in context: a reference perspective on the lexicon](#). In Proceedings of the MAPLEX workshop.

Presentations

upcoming	Knowledge-based commonsense reasoning and explainability. U.S. Semantic Technologies Symposium Series (US2TS) Symposium. Symposium presentation/tutorial. Michigan State University, East Lansing, MI.
08/2022	Building Robust and Explainable AI Agents for the Real World. USC/ISI. Seminar. Online. August 5th, 2022
07/2022	Augmenting Knowledge Graphs for Better Link Prediction. IJCAI 2022. Conference presentation. Vienna, Austria. July 28th, 2022.
07/2022	Understanding Narratives through Dimensions of Analogy. Qualitative reasoning workshop, IJCAI 2022. Workshop presentation. Vienna, Austria. July 23th, 2022.
05/2022	CSKG: The CommonSense Knowledge Graph. Knowledge Graph Conference (KGC). Conference presentation. Cornell Tech, New York City. May 5th, 2022.
05/2022	Commonsense Knowledge and Reasoning. Workshop on Reasoning with Imperfect Knowledge, Knowledge Graph Conference (KGC). Invited keynote. Online. May 3rd, 2022.
05/2022	KGTK: Tools for Creating and Exploiting Large Knowledge Graphs. Knowledge Graph Conference (KGC). Tutorial. Online. May 2nd, 2022.
04/2022	KGTK: Tools for Creating and Exploiting Large Knowledge Graphs. The ACM Web Conference. Tutorial. Online. April 25th, 2022.
12/2021	Open-World Agents. USC Futures Symposium: AI with Common Sense. Symposium presentation. Online. December 7th, 2021.
10/2021	KGTK: Tools for Creating and Exploiting Large Knowledge Graphs. International Semantic Web Conference (ISWC). Tutorial. Online. October 24th, 2021.
10/2021	

- User-friendly Comparison of Similarity Algorithms on Wikidata. Wikidata-21 workshop, International Semantic Web Conference (ISWC). Workshop paper presentation. Online. October 24th, 2021.
- 10/2021 Story Generation with Commonsense Knowledge Graphs and Axioms. Common Sense Knowledge Bases (CSKB) workshop, Automated Knowledge Base Construction (AKBC) Conference. Workshop paper presentation. Online. October 8th, 2021.
- 06/2021 CSKG: The CommonSense Knowledge Graph. Extended Semantic Web Conference (ESWC) 2021. Conference paper presentation. Online. June 10th, 2021. [Slides](#).
- 06/2021 Knowledge Graph-Based Housing Market Analysis. Knowledge Graph Construction workshop, Extended Semantic Web Conference (ESWC) 2021. Workshop paper presentation. Online. June 6th, 2021.
- 06/2021 Open Drug Knowledge Graph. Knowledge Graph Construction workshop, Extended Semantic Web Conference (ESWC) 2021. Workshop paper presentation. Online. June 6th, 2021.
- 05/2021 Building Agents with Common Sense. Knowledge-infused Learning workshop, Knowledge Graph Conference. Invited keynote. Online. May 3rd, 2021. [Slides](#).
- 04/2021 KGTK: A Knowledge Graph Toolkit for Exploiting Large Knowledge Graphs. The Web Conference 2021, Developers Track. Conference paper presentation. Online. April 22nd, 2021. [Slides](#).
- 04/2021 Building Agents with Common Sense. Distributed Artificial Intelligence group, King's College London, United Kingdom. Invited talk. Online. April 6th, 2021. [Slides](#).
- 02/2021 Commonsense Knowledge Acquisition and Representation. AAAI Conference on Artificial Intelligence. Tutorial. Online. February 3rd, 2021.
- 12/2020 Reasoning with Commonsense Knowledge Graphs. Turing NLP Research group, London, United Kingdom. Invited talk. Online. December 3rd, 2020. [Slides](#).
- 11/2020 Commonsense Knowledge Graphs (CSKGs). International Semantic Web Conference (ISWC). Tutorial. Online. November 2nd, 2020.
- 11/2020 KGTK: A Toolkit for High-Volume Knowledge Graph Manipulation. International Semantic Web Conference (ISWC), Research Track. Conference paper presentation. Online. November 3rd, 2021. [Slides](#).
- 11/2020 Commonsense Knowledge in Wikidata. Wikidata-20 workshop, co-located with the International Semantic Web Conference (ISWC). Workshop paper presentation. Online. November 2nd, 2021.
- 04/2020 Machine Common Sense and Other Quests at USC-ISI. NEC Labs, Germany. Invited talk. Online. April 20th, 2020.
- 08/2018 Systematic Study of Long Tail Phenomena in Entity Linking. COLING. Conference paper presentation. Santa Fe, NM, USA. August 21st, 2021. [Slides](#).
- 06/2018 SemEval-2018 Task 5: Counting Events and Participants in the Long Tail. International Workshop on Semantic Evaluation (SemEval-2018), co-located with NAACL 2018. Workshop task presentation. New Orleans, LA, USA. June 6th, 2018. [Slides](#).
- 06/2017 Hunger for Contextual Knowledge and a Road Map to Intelligent Entity Linking. Language, Data and Knowledge (LDK) conference. Conference paper presentation. Galway, Ireland. June 19th, 2017. [Poster](#).
- 11/2016 LOTUS: Adaptive Text Search for Big Linked Data. BNAIC conference. Conference abstract presentation. Amsterdam, The Netherlands. November 10th, 2016. [Poster](#).

11/2016	Moving away from semantic overfitting in disambiguation datasets. Workshop on Uphill Battles in Language Processing, co-located with EMNLP 2016. Workshop paper presentation. Austin, TX, USA. November 5th, 2016. Poster .
05/2016	LOTUS: Adaptive Text Search for Big Linked Data. Extended Semantic Web Conference (ESWC). Conference paper presentation. Heraklion, Crete, Greece. May 31st, 2016. Slides .
05/2016	Join the LOD Lab! Scale your Linked Data evaluations to the Web. Extended Semantic Web Conference (ESWC). Tutorial. Online. May 30th, 2016.
10/2015	LOTUS: Linked Open Text UnleaShed. 6th International Workshop on Consuming Linked Data (COLD), co-located with the International Semantic Web Conference (ISWC). Workshop paper presentation. Bethlehem, PA, USA. October 12th, 2015.
12/2015	A Look inside Babelify: Examining the Bubble. Computational Linguistics in the Netherlands (CLiN). Conference abstract presentation. Amsterdam, The Netherlands. December 18th, 2015. Slides .
02/2015	Named Entity Disambiguation with two-stage coherence optimization. Computational Linguistics in the Netherlands (CLiN). Conference abstract presentation. Antwerp, Belgium. February 6th, 2015. Slides .

Teaching

upcoming	Building Knowledge Graphs (DSCI-558), Graduate course, University of Southern California, Lecturer.
11/2021	Building Knowledge Graphs (DSCI-558), Graduate course, University of Southern California, Guest lecturer, session "Commonsense Knowledge Graphs".
04/2021	Building Knowledge Graphs (DSCI-558), Graduate course, University of Southern California, Guest lecturer, session "Commonsense Knowledge Graphs".
10/2020	Text Analytics (ISE-540), Graduate course, University of Southern California, Guest lecturer, session "Knowledge Graphs".
08/2020-12/2021	Building Knowledge Graphs (DSCI-558), Graduate course, University of Southern California, Lecturer.
05/2019-07/2019	Text Mining, Central Bureau for Statistics (CBS) Netherlands, Lab session coordinator.
05/2019	Knowledge Representation on the Web, Master course, Vrije Universiteit Amsterdam, Guest lecturer, session "KR and NLP: The curious case of entities".
01/2019-03/2019	Text Mining, Bachelor course, Vrije Universiteit Amsterdam, Lecturer.
10/2017-01/2018	Python for Text Analysis, Master course, Vrije Universiteit Amsterdam, Lecturer.
10/2017-01/2018	Programming for Humanities and Social Sciences, Bachelor course, Vrije Universiteit Amsterdam, Lecturer.
10/2017-01/2018	Digital and Environmental Humanities, Master course, Vrije Universiteit Amsterdam, Lecturer.
10/2017	Databases, Master course, Rijksuniversiteit Groningen, Guest lecturer, session "NoSQL Databases".
01/2016-03/2016	Information processing (Informatieverwerking), Bachelor course, Vrije Universiteit Amsterdam, Lecturer.

Mentoring and advice

2022-	Jiarui Zhang. PhD student. Mentor.
2022-	Zhivar Sourati. PhD student. Mentor.
2022-	Himanshu Rawlani. MsC student worker. Mentor.
2022-	Prateek Chhikara. MsC student worker. Mentor.
2022	Ana Iglesias. MSc student worker. Mentor.
2022-	Vishnu Priya Prasanna Venkatesh. MSc student worker. Mentor.
2022-	Yifan Jiang. MSc student worker. Mentor.
2022-	Aravinda Kolla. MSc student worker. Mentor.
2022-	Lucas Zhuang. MSc student worker. Mentor.
2022-	Thiloshon Nagarajah. MSc student worker. Mentor.
2022	Shubham Akhilesh Singh. MSc student worker. Mentor.
2022	Jiasheng Gu. MSc student. Directed research mentor.
2022	Dweepa Honnavali. MSc student worker. Mentor.
2021-2022	Jiang Wang. MSc student worker. Mentor.
2022	Harshit Manektalia. MSc student worker. Mentor.
2022	Vaibhav Vats. MSc student volunteer. Mentor.
2022	Sukavanan Nanjundan. MSc student worker. Mentor.
2021-2022	Aditya Malte. MSc student worker. Mentor.
2021	Sara Melotte, Aditya Malte, Linglan Zhang, Namita Mutha. CKIDS students. Mentor.
2021	Zaina Shaik, Undergraduate summer intern (NSF REU program). UC Berkeley. Mentor.
2021	Jiarui Zhang, Undergraduate summer intern. Tsinghua University. Mentor.
2021	Bohui Zhang. MSc student worker. Mentor.
2021	Pushkaraj Jitendra Sarnobat. MSc volunteer. Mentor.
2021-2022	Kartik Shenoy. MSc student worker. Mentor.
2020-2021	Ehsan Qasemi, PhD student. University of Southern California. Advisor.
2020-2021	Avijit Thawani, PhD student. University of Southern California. Advisor.
2020-	Peifeng Wang, PhD student. University of Southern California. Advisor.
2020-2021	Bin Zhang. MSc student worker. Mentor.
2020-2021	Hanzhi Zhang. MSc student worker. Mentor.
2020-2022	Nicholas Klein. MSc student worker/USC Rising star intern. Mentor.
2019	Jiri Brummer: Comparing various Machine Learning Methods for Element Extraction in Dutch Contracts. MSc thesis, Business Analytics, KPMG and VU Amsterdam. Mentor.
2019	Guido Jansen: Low Resource Domain Specific Named Entity Recognition. MSc thesis, Information studies, Data science, University of Amsterdam. Second reader.
2018	Arash Parnia: Mathematical Entity Recognition System MERCS. MSc thesis, Artificial Intelligence, VU Amsterdam. Second reader.
2016	Sai Sreewathsa Kovullari: Entity Typing with Page Ranking. MSc thesis, Computer Science, VU Amsterdam. Second reader.

Professional Service

Tutorial chair. IEEE Big Data. 2025.

Proceedings chair. [The Web Conference](#). 2023.

Reviewer. [Artificial Intelligence Journal](#). 2022.

Area chair. [EMNLP](#). 2022.

Reviewer. [31st ACM International Conference on Information and Knowledge Management \(CIKM\)](#). 2022.

Reviewer. [COLING](#). 2022.

Reviewer. [ACL 2022 Workshop on Commonsense Representation and Reasoning](#). 2022.

Reviewer. [Wordnets in the Deep Learning Era \(WDLE\)](#). 2022.

Reviewer. [Wikidata-22 workshop](#). 2022.

Reviewer. [ACM Conference on Hypertext and Social Media](#). 2022.

Reviewer. [Language Resources and Evaluation Conference \(LREC\)](#). 2022.

Reviewer. [ACM Symposium On Applied Computing \(SAC\)](#). 2022.

Reviewer. [International Joint Conference on Artificial Intelligence \(IJCAI\)](#). 2022.

Reviewer. [Extended Semantic Web Conference \(ESWC\)](#). 2022.

Reviewer. [Institution of Engineering and Technology \(IET\)](#). 2021.

Co-chair. [USC Futures Symposium on AI with Common Sense](#). 2021.

Reviewer. [ACL Rolling Review](#). 2021.

Co-chair. [Workshop on Commonsense Knowledge Graphs \(CSKGs\)](#), co-located with the AAAI conference. 2021.

Guest editor. [Special Issue on Commonsense Knowledge and Reasoning](#). [Semantic Web Journal \(SWJ\)](#). 2021.

Reviewer. [Semantic Web Journal \(SWJ\)](#). 2021.

Reviewer. [Conference on Information and Knowledge Management \(CIKM\)](#). 2021.

Reviewer. [Conference on Empirical Methods in Natural Language Processing \(EMNLP\)](#). 2021.

Reviewer. [The Joint Conference of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing \(ACL-IJCNLP 2021\)](#). 2021.

Reviewer. [ACM Conference on Hypertext and Social Media](#). 2021.

Reviewer. [Extended Semantic Web Conference \(ESWC\)](#). 2021.

Reviewer. [ACM Symposium On Applied Computing \(SAC\)](#). 2021.

Reviewer. [AAAI Conference on Artificial Intelligence](#). 2021.

Reviewer. [International Joint Conference on Artificial Intelligence \(IJCAI\)](#). 2021.

Reviewer. [Global Wordnet Conference \(GWC\)](#). 2021.

Reviewer. [Wikidata-21 workshop](#), co-located with the International Semantic Web Conference (ISWC). 2021.

Reviewer. [Student Research Workshop \(SRW\)](#), co-located with the Conference of the European Chapter of the Association for Computational Linguistics (EACL). 2021.

Reviewer. [International Workshop on Semantic Evaluation \(SemEval\)](#), co-located with ACL-IJCNLP. 2021.

Reviewer. [Machine Learning Journal, Special Track on Learning and Reasoning](#). 2020.

Reviewer. [Journal of Web Semantics \(JWS\)](#), Special Issue on Language Technology and Knowledge Graphs, 2020.

Reviewer. [The 1st Conference of the Asia-Pacific Chapter of the Association for Computational Linguistics and the 10th International Joint Conference on Natural Language Processing \(AACL-IJCNLP\)](#). 2020.

Reviewer. [International Conference on Computational Linguistics \(COLING\)](#). 2020.
Reviewer. [Conference on Information and Knowledge Management \(CIKM\)](#). 2020.
Reviewer. [Extended Semantic Web Conference \(ESWC\)](#) 2020.
Reviewer. [Language Resources and Evaluation Conference \(LREC\)](#). 2020.
Reviewer. [International Workshop on Semantic Evaluation \(SemEval\)](#), co-located with COLING. 2020.
Reviewer. [Journal of Natural Language Engineering](#). 2019-2020.
Reviewer. [Biographical Data in a Digital World 2019 \(BD2019\)](#). 2019.
Reviewer. [Global Wordnet Conference \(GWC\)](#). 2019.
Organizer. [Counting Events and Participants within Highly Ambiguous Data covering a very long tail](#), SemEval-2018 competition, co-located with NAACL. 2018.
Reviewer. [International Conference on Computational Linguistics \(COLING\)](#) (listed as 'outstanding reviewer'). 2018.
Reviewer. [SEMANTiCS conference](#). 2018.
Reviewer. [International Workshop on Semantic Evaluation \(SemEval\)](#), co-located with NAACL. 2018.
Reviewer. [Joint Conference on Lexical and Computational Semantics \(*SEM\)](#), co-located with NAACL. 2018.
Reviewer. [Journal on Data Science: Methods, Infrastructure, and Applications](#). 2017.
Reviewer. [Biographical Data in a Digital World \(BD\)](#) conference. 2017.
Reviewer. [Language, Data and Knowledge \(LDK\)](#) conference. 2017.
Sub-reviewer. [Extended Semantic Web Conference \(ESWC\)](#). 2017.
Reviewer. [European Summer School in Logic, Language and Information \(ESSLLI\)](#). 2017.
Co-chair. [2nd Spinoza Workshop: Looking at the Long Tail](#). 2016.
Reviewer. [Information Processing and Management journal](#). 2016.
Sub-reviewer. [International Conference on Computational Linguistics \(COLING\)](#). 2016.
Reviewer. [SEMANTiCS conference](#). 2016.
Reviewer. [Workshop on Open Knowledge Base Question Answering \(OKBQA\)](#), co-located with COLING. 2016.
Reviewer. [#Microposts2016: Making Sense of Microposts, NEEL 2016 challenge](#). 2016.
Reviewer. [Computational Linguistics in the Netherlands \(CLiN\)](#) conference. 2015.
Reviewer. [NLP Applications: completing the puzzle Workshop](#). 2015.

Technical skills

- **Specialties:** Commonsense Reasoning, Knowledge Graphs, Information Extraction, Semantic Web, Machine Learning, Language Modeling, Knowledge Integration
- **Languages:** Python, Java, Node.js, HTML/Javascript/CSS, C#, Matlab, R, C, C++
- **Systems, Tools, and Packages:** SciKit Learn, t-SNE, Sentence-transformer, graph-tool, NetworkX, TensorFlow, SpaCy, NLTK, Jupyter Notebooks, Pandas, Matplotlib
- **Databases:** SQL, Neo4j, Elasticsearch, Redis, Couchbase, MongoDB, Semantic Web technologies (RDF, SPARQL, ontologies)

Other Experience

- Volunteer at [HackYourFuture](#), teaching refugees to code
- Participation in various civil and student NGOs in Europe: EESTEC, IAESTE, Youth Cultural Center (MKC) Bitola

Languages (CEFR levels)

- **Macedonian** Native speaker
- **English** C2
- **Serbocroatian** C1
- **Dutch** B1
- **Spanish** A2
- **German** A1