Filip Ilievski

Assistant Professor (Sr.) (UD1)
Department of Computer Science, Faculty of Sciences
Vrije Universiteit (VU) Amsterdam — f.ilievski@vu.nl
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Other Academic Experience

10/2023-present **Affiliated Scientist, USC Information Sciences Institute**
8/2022-8/2023 **Research Lead, USC Information Sciences Institute**
8/2022-8/2023 **Research Assistant Professor of Computer Science, USC Viterbi School of Engineering**
12/2019-7/2022 **Research Scientist, USC Information Sciences Institute**
08/2020-12/2020 **Part-time Lecturer, USC School of Engineering**
03/2019-11/2019 **Postdoctoral Researcher, Vrije Universiteit (VU) Amsterdam**

Education

03/2015-02/2019 **PhD in Natural Language Processing, VU Amsterdam**
- Thesis: "Identity of Long-tail Entities in Text"
- Computational Lexicology and Terminology Lab (CLTL) / Knowledge Representation and Reasoning (KRR)
- Promotors: Piek Vossen, Frank van Harmelen, Stefan Schlobach, Marieke van Erp

03/2017-08/2017 **Visiting Research Scholar, Carnegie Mellon University**
- Project: Neural profiling over knowledge graphs
- Department: Language Technologies Institute (LTI)
- Supervisor: Eduard Hovy

09/2013-02/2015 **MSc in Artificial Intelligence: Intelligent Systems Design, VU Amsterdam**
- Thesis: "NED with two-stage coherence optimization – How i am teaching my Ford automobile not to run on 20th century presidential elections in US"
- Supervisors/advisors: Marieke van Erp, Stefan Schlobach, Piek Vossen, Wouter Beek
- GPA: 8.4/10.00, Graduated Cum Laude, VU Fellowship Program (VUFP) Recipient

09/2009-09/2013 **BSc in Computer Science and Engineering, Ss. Cyril and Methodius University, Skopje**
- Thesis: "Performance Analysis of Techniques for Storage and Organization of Geospatial Data"
- Supervisor: Slobodan Kalajdziski
- GPA: 9.56/10.00, study abroad at VU Amsterdam, The Netherlands (Fall 2012 - Spring 2013, funded by the Erasmus Mundus Euroweb Scholarship

Funding

03/2024-09/2028 **Human-Centric AI with Common Sense** (PI), NWO AiNed, 909,000€ (1.8M€ including internal and external matching)

02/2024-08/2024 **Supporting Sustainable Diet Policies by Knowledge-based AI** (PI; Co-PI Heinout Reijungs, ASI Seed funding, 10,000€

08/2023-08/2024 **Decision-making by Analogical Reasoning over exoTic Situations (DARTS)** (PI), ARL DEVCOM, $100,000

06/2023-05/2028 **Theme 6A: INVITE: Inclusive and Innovative Intelligent Technologies for Education**, (USC sub PI; Prime: UIUC), National Science Foundation (NSF), $500,000

02/2023-12/2023 **Coherent and commonsensical AI for social influence** (PI; Co-PI: Gale Lucas), ISI ($100,000) and US Army ($50,000)

05/2022-04/2024 **CRII: III: Robust and Explainable AI Agents with Common Sense** (PI), National Science Foundation (NSF), $175,000

07/2022-04/2023 **iPASSAGE: improved Performance, Analytics and Summarization of Synergistic Anticipation of Geopolitical Events** (Co-PI; PI: Fred Morstatter), Open Philanthropy via the University of Maryland, $150,000

06/2022-11/2022 **KG-IA: Knowledge Graph Technology for Information Analytics** (PI; co-PI: Pedro Szekely), armasuisse Science and Technology, $112,817

12/2021 **MoSAiC: Multimodal Architectures for Holistic Situational Awareness** (PI), BOSCH Research, $50,000

Projects

06/2025-06/2028 DreamsLab WP5: Interpretation of internet memes. Sponsor: Huawei. Role: WP lead.

09/2024-02/2029 Human-Centric AI with Common Sense. Sponsor: NWO. Role: PI.

09/2024-02/2025 Supporting Sustainable Diet Policies by Knowledge-based AI. Sponsor: ASI. Role: PI.

12/2023-08/2024 Learning with LLMs: Supporting complex reasoning and argumentation and providing educational guidance. Sponsor: Humane AI (EU). Role: Subcontractor team lead.

02/2022-08/2023 Coherent and commonsensical AI for social influence. Sponsor: ISI and AFSR. Role: PI.

05/2022-08/2023 CRII: III: Robust and Explainable AI Agents with Common Sense. Sponsor: NSF. Role: PI.

12/2021-08/2023 MoSAiC: Multimodal Architectures for Holistic Situational Awareness. Sponsor: BOSCH Research. Role: PI.

09/2022-08/2023 KNIC: Knowledge Needed in Context. Sponsor: DARPA. Role: co-PI.

12/2019-08/2023 Machine Common Sense (MCS), team MOWGLI. Sponsor: DARPA. Role: key personnel.

07/2022-11/2022 Knowledge Graph Technology for Information Analytics (KG-IA). Sponsor: armasuisse. Role: PI.

12/2019-12/2022 Knowledge Graph Toolkit (KGTK). Sponsor: DARPA. Role: key personnel, PI.

Publications

Over ninety peer-reviewed publications, many of which in top-tier conferences and journals (AAAI, IJCAI, COLING, EMNLP, NAACL, ACL, ICLR, NeurIPS, AKBC, ISWC, SWJ, JWS, KBS). An additional five papers are currently in preparation or under review.

1. (in preparation) Mustafa Kaan Aslan, Filip Ilievski, Reinout Heijungs. The Carbon Footprint Wizard: A Knowledge-Augmented AI Interface for Streamlining Food Carbon Footprint Analysis.

2. (in preparation) Jiarui Zhang, Jinyi Hu, Mahyar Khayatkhoei, Filip Ilievski, Maosong Sun. Exploring Perceptual Limitations of Multimodal LLMs on Small Visual Objects.
3. (under review) Abhishek Kolari, Mohammad Hossein Khojasteh, Yifan Jiang, Floris den Hengst, Filip Ilievski. ORBIT: An Object Property Reasoning Benchmark for Visual Inference Tasks. **AAAI**.
4. (under review) Zizheng Wang, Li Huang, Qiang Gao, Goce Trajcevski, Filip Ilievski, Guisong Liu. Forgetting-Free Knowledge Transfer via Meta Subnet for Task-Incremental Learning. **NeurIPS**.
5. (under review) Filip Ilievski, Barbara Hammer, Frank van Harmelen, Benjamin Paassen, Sascha Saralajew, Ute Schmid, Michael Biehl, Marianna Bolognesi, Xin Luna Dong, Kiril Gashteovski, Pascal Hitzler, Giuseppe Marra, Pasquale Minervini, Martin Mundt, Axel-Cyrille Ngonga Ngomo, Alessandro Oltramari, Gabriella Pasi, Zeynep G. Saribatur, Luciano Serafini, John Shawe-Taylor, Vered Shwartz, Gabriella Skitalinskaya, Clemens Stachl, Gido M. van de Ven, Thomas Villmann. Aligning Generalisation Between Humans and Machines. **Nature Machine Intelligence**.
6. (to appear) Bradley P. Allen, Prateek Chhikara, Thomas Macaulay Ferguson, Filip Ilievski, Paul Groth. Sound and Complete Neuro-symbolic Reasoning with LLM-Grounded Interpretations (2025). NeSy.
7. (to appear) Fabian Hoppe, Filip Ilievski, Jan-Christoph Kalo (2025). Investigating the Robustness of Deductive Reasoning with Large Language Models. **ECAI**.
8. (to appear) Leilani Gilpin, Filip Ilievski (2025). Neuro-Symbolic Reasoning in the Traffic Domain. **Neurosymbolic Artificial Intelligence Journal**.
9. Tygo Bloem, Filip Ilievski (2025). Clustering Internet Memes Through Template Matching and Multi-Dimensional Similarity. ICWSM.
10. Filip Ilievski, Riccardo Tommasini (2025). Capturing the Semantics of Internet Memes. The Handbook on Neurosymbolic AI and Knowledge Graphs.
11. Mohammad Jaleed Khan, Filip Ilievski, Edward Curry (2025). Neurosymbolic Visual Reasoning with Scene Graphs and Multimodal LLMs. The Handbook on Neurosymbolic AI and Knowledge Graphs.
12. Huabin Liu, Filip Ilievski, Cees Snoek (2025). Commonsense Video Question Answering through Video-Grounded Entailment Tree Reasoning. **CVPR**.
13. Jiarui Zhang, Mahyar Khayatkhoei, Prateek Chhikara, Filip Ilievski (2025). MLLMs Know Where to Look: Training-free Perception of Small Visual Details with Multimodal LLMs. **ICLR**.
14. Koen Kraaijveld, Yifan Jiang, Kaixin Ma, Filip Ilievski (2025). COLUMBUS: Evaluating COgnitive Lateral Understanding through Multiple-choice reBUSes. **AAAI**.
15. Filip Ilievski (2024). Human-centered AI with Common Sense. **Springer Nature Synthesis Book**.
16. Zhivar Sourati, Filip Ilievski, Pia Sommerauer (2024). ARN: Analogical Reasoning on Narratives. BNAIC extended encore abstracts.
17. Yifan Jiang, Jiarui Zhang, Kexuan Sun, Zhivar Sourati, Kian Ahrabian, Kaixin Ma, Filip Ilievski, Jay Pujara (2024). MARVEL: Multiple Abstraction and Reasoning benchmark for Visual Evaluation and Learning. **NeurIPS Benchmarks** Track.
18. Zhivar Sourati, Darshan Deshpande, Filip Ilievski, Kiril Gashteovski, Sascha Saralajew (2024). Robust Text Classification: Analyzing Prototype-Based Networks. **EMNLP**

Findings.
19. M. Jaleed Khan, Filip Ilievski, John G. Breslin, Edward Curry (2024). A Survey of Neurosymbolic Visual Reasoning with Scene Graphs and Common Sense Knowledge. **Neurosymbolic Artificial Intelligence journal**.
20. Darshan Deshpande, Zhivar Sourati, Filip Ilievski, Fred Morstatter (2024). Contextualizing Argument Quality Assessment with Relevant Knowledge. **NAACL**.
21. Yifan Jiang, Kaixin Ma, Filip Ilievski (2024). SemEval-2024 Task 9: BRAINTEASER, A Novel Task Defying Common Sense. SemEval workshop, co-located with NAACL.
22. Zhivar Sourati, Filip Ilievski, Pia Sommerauer (2024). ARN: Analogical Reasoning on Narratives. **TACL**.
23. Bradley P. Allen, Filip Ilievski (2024). Standardizing Knowledge Engineering Practices with a Reference Architecture. Transactions on Graph and Data Knowledge (TGDK).
24. Saurav Joshi, Filip Ilievski, Luca Luceri (2024). Contextualizing internet memes across social media platforms. Workshop on Multimodal Content Analysis for Social Good: MM4SG 2024. **Best Paper and Best Presentation Awards**.
25. Filip Ilievski, Kartik Shenoy, Hans Chalupsky, Nicholas Klein, Pedro Szekely (2024). A Study of Concept Similarity in Wikidata. **Semantic Web Journal**.
26. Saurav Joshi, Filip Ilievski, Jay Pujara (2024). Knowledge-powered recommendation for an improved diet water footprint. Proceedings of the AAAI Conference on Artificial Intelligence, Demonstration Track. 38(21), 23805-23807.
27. Prateek Chhikara, Dhiraj Chaurasia, Yifan Jiang, Omkar Masur, Filip Ilievski (2024). FIRE: Food Image to REcipe generation. **WACV**.
28. Jiarui Zhang, Mahyar Khayatkhoei, Prateek Chhikara, Filip Ilievski (2023). Visual Cropping Improves Zero-Shot Question Answering of Multimodal Large Language Models. **Ro-FoMo, co-located with NeurIPS**.
29. Prateek Chhikara, Jiarui Zhang, Filip Ilievski, Jonathan Francis, Kaixin Ma (2023). Knowledge-enhanced Agents for Interactive Text Games. **K-CAP** 2023. **Best Student Paper Award**.
30. Yifan Jiang, Filip Ilievski, Kaixin Ma, Zhivar Sourati (2023). BRAINTEASER: Lateral Thinking Puzzles for Large Language Models. **EMNLP**.
31. Yifan Jiang, Filip Ilievski, Kaixin Ma (2023). Transferring Procedural Knowledge across Commonsense Tasks. **European Conference on Artificial Intelligence (ECAI)**.
32. Ana Iglesias-Molina, Kian Ahrabian, Filip Ilievski, Jay Pujara, Oscar Corcho (2023). Comparison of Knowledge Graph Representations for User Consumption Scenarios. **International Semantic Web Conference (ISWC)** Research Track.
33. Jiarui Zhang, Filip Ilievski, Aravinda Kolla, Jonathan Francis, Kaixin Ma, Alessandro Oltramari (2023). A study of situational reasoning in traffic. **KDD**.
34. Alessandro Oltramari, Jonathan Francis, Filip Ilievski, Kaixin Ma, Roshanak Mirzaee (2023). Generalizable Neuro-Symbolic Systems for Commonsense Question Answering. Workshop on Neuro-Symbolic Learning and Reasoning (NeSy2023).
35. Abhinav Kumar Thakur, Filip Ilievski, Hông-Ân Sandlin, Zhivar Sourati, Luca Luceri, Riccardo Tommasini, Alain Mermoud (2023). Explainable Classification of Internet Memes. Workshop on Neuro-Symbolic Learning and Reasoning (NeSy2023).
36. Zhivar Sourati, Filip Ilievski, Hông-Ân Sandlin, Alain Mermoud (2023). Case-based Reasoning with Language Models for Classification of Logical Fallacies. **International**

Joint Conference on Artificial Intelligence (IJCAI).
37. Filip Ilievski, Kaixin Ma, Alessandro Oltramari, Peifeng Wang, Jay Pujara (2023). Building Robust and Explainable AI with Commonsense Knowledge Graphs and Neural Models. **Compendium of Neuro-Symbolic Artificial Intelligence (book chapter)**.
38. Riccardo Tommasini, Filip Ilievski, Thilini Wijesiriwardene (2023). The Internet Meme Knowledge Graph. **Extended Semantic Web Conference (ESWC)** Resource Track.
39. Zhivar Sourati, Vishnu Priya Prasanna Venkatesh, Darshan Deshpande, Himanshu Rawlani, Filip Ilievski, Hông-Ân Sandlin, Alain Mermoud (2023). Robust and Explainable Identification of Logical Fallacies in Natural Language Arguments. **Knowledge-Based Systems (KBS)**.
40. Peifeng Wang, Aaron Chan, Filip Ilievski, Muhao Chen, Xiang Ren (2023). PINTO: Faithful Language Reasoning Using Prompted-Generated Rationales. **International Conference on Learning Representations (ICLR)**. 2023.
41. Abhinav Kumar Thakur, Filip Ilievski, Hông-Ân Sandlin, Alain Mermoud, Zhivar Sourati, Luca Luceri, Riccardo Tommasini (2023). Multimodal and Explainable Internet Meme Classification. AAAI AI4SG workshop.
42. Aravinda Kolla, Filip Ilievski, Hông-Ân Sandlin, Alain Mermoud. A Study of Slang Representation Methods. Preprint.
43. Peifeng Wang, Aaron Chan, Filip Ilievski, Muhao Chen, Xiang Ren (2022). PINTO: Faithful Language Reasoning Using Prompted-Generated Rationales. NeurIPS workshops TL4NLP and TSRML.
44. Jiarui Zhang, Filip Ilievski, Aravinda Kolla, Jonathan Francis, Kaixin Ma, Alessandro Oltramari (2022). Utilizing Background Knowledge for Robust Reasoning over Traffic Situations. AAAI Workshop on Knowledge Augmented Methods for NLP.
45. Ehsan Qasemi, Filip Ilievski, Muhao Chen, Pedro Szekely (2022). PaCo: Preconditions Attributed to Commonsense Knowledge. **Conference on Empirical Methods in Natural Language Processing (EMNLP)** Findings.
46. Filip Ilievski, Jay Pujara, Kartik Shenoy (2022). Does Wikidata Support Analogical Reasoning? KGSWC.
47. Bohui Zhang, Filip Ilievski, Pedro Szekely (2022). Enriching Wikidata with Linked Open Data. ISWC Wikidata workshop.
48. Nicholas Klein, Filip Ilievski, Hayden Freedman, Pedro Szekely (2022). Identifying Surprising Facts in Wikidata. ISWC Wikidata workshop.
49. Jiarui Zhang, Filip Ilievski, Kaixin Ma, Jonathan Francis, Alessandro Oltramari (2022). A Study of Zero-shot Adaptation with Commonsense Knowledge. **Automated Knowledge Base Construction (AKBC)**.
50. Kaixin Ma, Filip Ilievski, Jonathan Francis, Eric Nyberg, Alessandro Oltramari (2022). Coalescing Global and Local Information for Procedural Text Understanding. **Conference on Computational Linguistics (COLING)**.
51. Thiloshon Nagarajah, Filip Ilievski, Jay Pujara (2022). Understanding Narratives through Dimensions of Analogy. IJCAI Qualitative Reasoning workshop.
52. Jiang Wang, Filip Ilievski, Pedro Szekely, Ke-Thia Yao (2022). Augmenting Knowledge Graphs for Better Link Prediction. **International Joint Conference on Artificial Intelligence (IJCAI)**.
53. Sara Melotte, Filip Ilievski, Linglan Zhang, Aditya Malte, Namita Mutha, Fred Morstat-

ter, Ninareh Mehrabi (2022). Where Does Bias in Common Sense Knowledge Models Come From? **IEEE Journal on Internet Computing**, Special issue on Knowledge-infused Learning.
54. 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).**
55. Alessandro Oltramari, Jon Francis, Filip Ilievski, Kaixin Ma, Roshanak Mirzaee (2022). Generalizable Neuro-symbolic Systems for Commonsense Question Answering. **Neuro-Symbolic Artificial Intelligence: The State of the Art (book chapter)**.
56. Nicholas Klein, Filip Ilievski, Pedro Szekely (2021). Generating Explainable Abstractions for Wikidata Entities. Eleventh International **Conference on Knowledge Capture (K-CAP)**.
57. Kartik Shenoy, Filip Ilievski, Daniel Garijo, Daniel Schwabe, Pedro Szekely (2021). A Study of the Quality of Wikidata. **Journal of Seb Semantics (JWS)**, Special Issue on Community-Based Knowledge Bases.
58. 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.
59. 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)**.
60. 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)**.
61. 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**. 3681–3688. DOI.
62. 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 (NAACL)**: Human Language Technologies. 644–656. DOI.
63. 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.
64. 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.
65. Filip Ilievski, Pedro Szekely, Gleb Satyukov, Amandeep Singh. User-friendly Comparison of Similarity Algorithms on Wikidata. ISWC Wikidata workshop.
66. Hans Chalupsky, Pedro Szekely, Filip Ilievski, Daniel Garijo, Kartik Shenoy. Creating and Querying Personalized Versions of Wikidata on a Laptop. ISWC Wikidata workshop.
67. Filip Ilievski, Jay Pujara, Hanzhi Zhang (2021). Story Generation with Commonsense Knowledge Graphs and Axioms. AKBC Common Sense Knowledge Bases (CSKB) work-

shop.
68. Zaina Shaik, Filip Ilievski, Fred Morstatter (2021). Analyzing Race and Citizenship Bias in Wikidata. IEEE MASS Workshop for REU Research in Networking and Systems (REUNS 2021).
69. Mark Mann, Filip Ilievski, Mohammad Rostami, Aastha Aastha, Basel Shbita (2021). Open Drug Knowledge Graph. ESWC Knowledge Graph Construction (KGC) workshop.
70. Ziping Hu, Zepei Zhao, Mohammad Rostami, Filip Ilievski, Basel Shbita (2021). Knowledge Graph-Based Housing Market Analysis. ESWC Knowledge Graph Construction (KGC) workshop.
71. Peifeng Wang, Nanyun Peng, Filip Ilievski, Pedro Szekely, Xiang Ren (2020). Connecting the Dots: A Knowledgeable Path Generator for Commonsense Question Answering. **Conference on Empirical Methods in Natural Language Processing (EMNLP)** Findings. Association for Computational Linguistics. 4129–4140. DOI.
72. 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 – **International Semantic Web Conference (ISWC)** 2020, LNCS 12507, DOI.
73. 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 (LREC)**. 3162–3171.
74. Filip Ilievski, Pedro Szekely, Daniel Schwabe (2020). Commonsense Knowledge in Wikidata. ISWC Wikidata workshop.
75. Marten Postma, Levi Remijnse, Filip Ilievski, Antske Fokkens, Sam Titarsolej, Piek Vossen (2020). Combining Conceptual and Referential Annotation to Study Variation in Framing. International FrameNet Workshop 2020: Towards a Global, Multilingual FrameNet. 31–40.
76. Avijit Thawani, Jay Pujara, Filip Ilievski, Pedro Szekely (2020). Representing Numbers in Language Models. West Coast NLP (WeCNLP) Summit.
77. Filip Ilievski (2019). Identity of Long-Tail Entities in Text. **Studies on the Semantic Web (book series).** Volume 43. IOS Press. ISBN 978-1-64368-042-2 (print) | 978-1-64368-043-9 (online).
78. Filip Ilievski (2019). Identity of Long-Tail Entities in Text. PhD dissertation. Vrije Universiteit Amsterdam. 227p.
79. 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.
80. 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.
81. 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)**. European

Language Resources Association (ELRA).
82. Piek Vossen, Marten Postma, Filip Ilievski (2018). ReferenceNet: a semantic-pragmatic network for capturing reference relations. In Proceedings of the 9th **Global Wordnet Conference (GWC)**. Global Wordnet Association. 219–228.
83. 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 (SemEval). Association for Computational Linguistics. 70-80. DOI.
84. 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.
85. 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 (book chapter)**. Springer International Publishing. 124–155. ISBN 978-3-319-49493-7. DOI.
86. 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.
87. Filip Ilievski, Marten Postma, Piek Vossen (2016). Semantic overfitting: what 'world' do we consider when evaluating disambiguation of text?. In Proceedings of the 26th **Conference on Computational Linguistics (COLING)**: Technical Papers. The COLING 2016 Organizing Committee. 1180–1191.
88. Filip Ilievski, Wouter Beek, Marieke van Erp, Laurens Rietveld, Stefan Schlobach (2016). LOTUS: Adaptive Text Search for Big Linked Data. In Proceedings of the **Extended Semantic Web Conference (ESWC)**, the 13th International Conference on The Semantic Web. Latest Advances and New Domains - Volume 9678. ISBN 978-3-319-34128-6. 470-485. DOI.
89. 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)**. European Language Resources Association (ELRA). 541-548.
90. 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)**. European Language Resources Association (ELRA). 4373–4379.
91. 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.
92. 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.
93. 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.
94. 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.
95. 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).
96. 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.
97. 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.
98. 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.

Talks and Presentations

03/2025 Human-centric AI with common sense. Invited keynote, Hybrid Intelligence consortium meeting, Delft. March 27th, 2025.
03/2025 What it really takes to interpret a meme. Talk, DreamsLab workshop, VU Amsterdam. March 19th, 2025.
03/2025 Commonsense Video Question Answering through Video-Grounded Entailment Tree Reasoning. Talk, DreamsLab workshop, VU Amsterdam. March 19th, 2025.
03/2025 Panelist. The First Workshop on Structure & Generalization in Multimodal Language Understanding (SAGE-MLU). VU Amsterdam, March 10th, 2025.
02/2025 What does it really take to understand a meme? Invited talk, LIRMM Montpellier, France. February 4th, 2025.
01/2025 Abstraction and Reasoning Beyond Foundation Models. Neurosymbolic AI journal webinar, online. January 28th, 2025.
12/2024 AI-powered Food Sustainability Analytics. Sigma-VU meeting, VU Amsterdam. December 5th, 2024.
11/2024 ARN: Analogical Reasoning on Narratives. BNAIC 2024, Utrecht. November 19th, 2024.
10/2024 ARN: Analogical Reasoning on Narratives. Institute of Data Science, Maastricht University, online. October 3rd, 2024.
08/2024 ARN: Analogical Reasoning on Narratives. Analogy-ANGLE workshop, Jeju, Korea. August 4th, 2024.
04/2004 Commonsense AI: Beyond LLMs. Artificial Intelligence Research Center (AIRC), Tokyo, Japan. April 25th, 2024.
04/2024 AI for Good. Japanese Science and Technology Agency, Tokyo, Japan. April 23rd, 2024.
03/2024 Commonsense Reasoning in Narratives: Beyond LLMs. The DReAMS Lab, online. March 26th, 2024.

01/2024 Commonsense Reasoning in Narratives. Bosch Neuro-Symbolic AI Focus Group, online. January 18th, 2024.

12/2023 Building Storytelling AI with Common Sense. Social AI group, VU Amsterdam. December 14th, 2023.

07/2023 Building Synergistic AI with Common Sense. USC/ISI Seminar. Marina del Rey, CA, USA. July 28th, 2023.

07/2023 Explainable Classification of Internet Memes. Workshop on Neuro-Symbolic Learning and Reasoning (NeSy2023). Siena, Italy. July 5th, 2023.

05/2023 Building (Teams of Humans &) Trustworthy AI with Common Sense. VU Amsterdam, Amsterdam, The Netherlands. May 15th, 2023.

04/2023 Interpretable Generalization between Stories. UCLA Reasoning Lab and UCLA Computational Vision and Learning Lab. Los Angeles, CA, USA. April 19th, 2023.

02/2023 Generalizable Commonsense Reasoning. AAAI 2023 Tutorial. Washington DC, USA. February 8th, 2023.

02/2023 KGTK: User-friendly Toolkit for Manipulation of Large Knowledge Graphs. AAAI 2023 Lab. Washington DC, USA. February 7th, 2023.

01/2023 Building Robust and Explainable AI Agents with Common Sense. NLP group at UCSF. Online. January 25th, 2023.

09/2022 Knowledge-based commonsense reasoning and explainability. U.S. Semantic Technologies Symposium Series (US2TS) Symposium. Symposium presentation/tutorial. Michigan State University, East Lansing, MI.

09/2022 Tools and User Experience for KG Engineering. Knowledge Graphs and their Role in the Knowledge Engineering of the 21st Century. Dagstuhl Seminar. Deep dive presentation. Dagstuhl, Germany. September 13th, 2022.

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 Babelfy: 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.

Valorization

03/2024 Knowledge-enriched AI Bootcamp (second iteration), in collaboration between Deloitte and the Learning and Reasoning group (VU Amsterdam). Presenter of sessions: Intro to Large Language Models and Combining LLMs with KGs. **Service (education for third parties)**.

09/2024 When robots can't riddle: What puzzles reveal about the depths of our own minds. **Outreach (interview for a BBC article).**

pending Alessandro Oltramari, Jonathan Francis, Kaixin Ma, Filip llievski. Knowledge-Driven and Self-Supervised System for Question-Answering (US20220147861A1). **Product (patent)**.

06/2024 Knowledge-enriched AI Bootcamp, in collaboration between Deloitte and the Learning and Reasoning group (VU Amsterdam). Presenter of sessions: Intro to Large Language Models and Combining LLMs with KGs. **Service (education for third parties)**.

08/2023 Neuro-Symbolic Technology. Sciencious Soundwaves. **Outreach (podcast appearance)**.

06/2023 The Internet Has a Dark Side – Can We Teach Machines How to Identify it? USC/ISI News. **Outreach (website article)**.

06/2022 Machines can learn from fables. USC/ISI News. **Outreach (website article)**.

04/2022 Talented early career researchers recognized again by NSF. USC/ISI News. **Outreach (website article)**.

05/2019-07/2019 Text Mining, Central Bureau for Statistics (CBS) Netherlands, Lab session coordinator. **Service (education for third parties)**.

Teaching

11/2024-12/2024 Conversational AI, Bachelor course, Vrije University Amsterdam, Coordinator.

11/2024-12/2024 The Social Web. Master course, Vrije University Amsterdam, Teacher.

01/2024-02/2024 Project Intelligent Systems, Bachelor course, Vrije University Amsterdam, Teacher.

04/2023 PhD Seminar (CSCI-697), Graduate course, University of Southern California, Guest Lecturer, session "Trustworthy AI with Common Sense".

08/2022-12/2022

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".

08/2020-12/2020 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, VU Amsterdam, Guest lecturer, session "KR and NLP: The curious case of entities".

01/2019-03/2019 Text Mining, Bachelor course, VU Amsterdam, Lecturer.

10/2017-01/2018 Python for Text Analysis, Master course, VU Amsterdam, Lecturer.

10/2017-01/2018 Programming for Humanities and Social Sciences, Bachelor course, VU Amsterdam, Lecturer.

10/2017-01/2018 Digital and Environmental Humanities, Master course, VU Amsterdam, Lecturer.

10/2017 Databases, Master course, Rijksuniversiteit Groningen, Guest lecturer, session "NoSQL Databases".

01/2016-03/2016 Information processing (Informatieverwerking), Bachelor course, VU Amsterdam, Lecturer.

Mentoring and Advice

Current team

2025- Ting-Chih Chen. PhD student. Co-supervisor. VU Amsterdam.

2025- Shaurya Gaur. PhD student. Co-supervisor. VU Amsterdam.

2025- Stefano De Giorgis. Postdoc. Supervisor. VU Amsterdam.

2025- Emile van Krieken. Postdoc. Supervisor. VU Amsterdam.

2024- Gabriella Bollici. PhD student. Supervisor. VU Amsterdam.

2024- Bradley P. Allen. PhD student. Co-promotor. UvA Amsterdam.

2024- Mohammadhossein Khojasteh. PhD student. Supervisor. VU Amsterdam.

2023- Fabian Hoppe. PhD student. Co-supervisor. VU Amsterdam.

Past

2025 Main supervisor of 5 MSc theses (Yixing Wang, Ege Dinc, Abhishek Kolari, Mustafa Kaan Aslan, Yigit Ozkaya) and 5 BSc theses (Mihaita Melnic, Vlad Morar, Sofronia Nikolaou, Erbol Esengulov, Tess Buijs).

2024 Kaan Aslan. Research assistant. Supervisor. VU Amsterdam.

2024 Mohammad Hossein Khojasteh. Research assistant. Supervisor. VU Amsterdam.

2024 Ruthu H. Rooparaghunath. Research assistant. Supervisor. VU Amsterdam.

2024 Mehdi Jafari. Research assistant. Supervisor. VU Amsterdam.

2024 Koen Kraiijveld. Research assistant. Supervisor. VU Amsterdam.

2024 Main supervisor of 5 MSc theses (Tygo Bloem, Koen Kraaijveld, Tanya Kaintura, Aimee Donsu, Taylor Doughty), 6 BSc theses (Ilona Masiuk, Diana Cernetchi, Jan Szumski, Juliusz

Janicki, Daniil Paplauski, Adem Kaya), and one mini-master project (Antonis Georgakopoulos). Second assessor of six Master theses.

2022-2024 Jiarui Zhang. PhD student. Supervisor. USC/ISI.
2022-2024 Zhivar Sourati. PhD student. Supervisor. USC/ISI.
2022-2024 Darshan Girish Deshpande. MsC student worker. Supervisor. USC/ISI.
2022-2024 Prateek Chhikara. MsC student worker. Supervisor. USC/ISI.
2020-2023 Peifeng Wang, PhD student. Advisor. USC/ISI.
2023 Saurav Joshi. MSc student worker. Supervisor.
2023 Varun Venkatesh. MSc student worker. Supervisor.
2022-2023 Yifan Jiang. MSc student worker. Supervisor.
2022-2023 Vishnu Priya Prasanna Venkatesh. MSc student worker. Supervisor.
2022-2023 Thiloshon Nagarajah. MSc student worker. Supervisor.
2022 Abhinav Thakur. MSc student worker. Supervisor.
2022 Saurav Joshi, Yuhua Wu, Shreya Padmanabhan. CKIDS students. Supervisor.
2022 Ana Iglesias. Intern. Supervisor.
2022 Aravinda Kolla. MSc student worker. Supervisor.
2022 Himanshu Rawlani. MsC student worker. Supervisor.
2022 Lucas Zhuang. Intern. Supervisor.
2022 Shubham Akhilesh Singh. MSc student worker. Supervisor.
2022 Jiasheng Gu. MSc student. Directed research Supervisor.
2022 Dweepa Honnavali. MSc student worker. Supervisor.
2021-2022 Jiang Wang. MSc student worker. Supervisor.
2022 Harshit Manektalia. MSc student worker. Supervisor.
2022 Vaibhav Vats. MSc student volunteer. Supervisor.
2022 Sukavanan Nanjundan. MSc student worker. Supervisor.
2021-2022 Aditya Malte. MSc student worker. Supervisor.
2021 Sara Melotte, Aditya Malte, Linglan Zhang, Namita Mutha. CKIDS students. Supervisor.
2021 Zaina Shaik, Undergraduate summer intern (NSF REU program). UC Berkeley. Supervisor.
2021 Jiarui Zhang, Undergraduate summer intern. Tsinghua University. Supervisor.
2021 Bohui Zhang. MSc student worker. Supervisor.
2021 Pushkaraj Jitendra Sarnobat. MSc volunteer. Supervisor.
2021-2022 Kartik Shenoy. MSc student worker. Supervisor.
2020-2021 Ehsan Qasemi, PhD student. University of Southern California. Advisor.
2020-2021 Avijit Thawani, PhD student. University of Southern California. Advisor.
2020-2021 Bin Zhang. MSc student worker. Supervisor.
2020-2021 Hanzhi Zhang. MSc student worker. Supervisor.
2020-2022 Nicholas Klein. MSc student worker/USC Rising star intern. Supervisor.
2016-2019 Supervisor of 1 MSc thesis (Jiri Brummer), second reader of 3 MSc theses (Guido Jansen, Arash Parnia, Sai Sreewathsa Kovullari).

Professional Service and Activities

Coordinator. Situated AI Minor (01/2024-); Digital Sustainability Center (DiSC) (01/2024-); Conversational AI course (01/2024-).

Committee Member. Electrical Faculty Council (EFC) (USC, 2023); Qualifying Exam of Elan Markowitz (USC, 2023); Thesis Proposal of Peifeng Wang (USC, 2023) and Elan Markowitz (USC, 2024).
Panel Reviewer. National Science Foundation, IIS: Information Integration and Informatics (III) (2022, 2023); Amsterdam AI Thesis Awards (2024).
Guest Editor. Semantic Web Journal (Special Issue on Commonsense Knowledge and Reasoning), Neurosymbolic Artificial Intelligence journal (Special Issue on Commonsense Reasoning).
Editorial Board Member. Neurosymbolic Artificial Intelligence journal.
Journal Reviewer IEEE Transactions on Pattern Analysis and Machine Intelligence, IEEE Transactions on Emerging Topics in Computing, Wiley Journal of Software: Evolution and Process, Knowledge-Based Systems, ACM Computing Surveys, Machine Learning (MACH), Artificial Intelligence Journal, Institution of Engineering and Technology (IET), Semantic Web Journal (SWJ), Machine Learning Journal (Special Track on Learning and Reasoning), Journal of Web Semantics (JWS) (Special Issue on Language Technology and Knowledge Graphs), Journal of Natural Language Engineering, Journal on Data Science: Methods, Infrastructure, and Applications, Information Processing and Management journal.
Conference Chair. Workshop chair, IEEE Big Data (2024); Proceedings chair, The ACM Web Conference (2023).
Organizer. DreamsLab workshop (VU Amsterdam, 2025), Analogy-ANGLE workshop (IJCAI 2024, ACL 2025), Dagstuhl seminar: Generalization by People and Machines (2024), ESWC Workshop on Generative Neuro-Symbolic AI (GeNeSy) (2024), USC Futures Symposium on AI with Common Sense, (2021), AAAI Workshop on Commonsense Knowledge Graphs (CSKGs) (2021), SemEval-2018 competition on Counting Events and Participants within Highly Ambiguous Data covering a very long tail (2018), Spinoza Workshop: Looking at the Long Tail (2016).
Senior Area Chair. Workshop on Semantic Reasoning and Goal Understanding in Robotics (2024).
Area Chair. Workshop on Semantic Reasoning and Goal Understanding in Robotics (RSS SemRob) (2025), ARR (02/2025), COLING (2024), ACL (2023), EMNLP (2022).
Conference Reviewer. KDD PhD Consortium (2025), NeSy (2025), The Web Conference (2025), Conference on Advances in Cognitive Systems (ACS) (2024), Conference on Knowledge Engineering and Knowledge Management (EKAW) (2024), Hybrid Human-Artificial Intelligence (HHAI) Conference (2024), International Conference on Learning Representations (ICLR) (2024), European Conference on Artificial Intelligence (ECAI) (2023), NeurIPS (2023), ACM Symposium on Applied Computing (SAC) (2021, 2022, 2023, 2024), International Joint Conference on Artificial Intelligence (IJCAI) (2021, 2022, 2023, 2024), ACL Rolling Review (2021, 2022, 2023), ACM International Conference on Information and Knowledge Management (CIKM) (2020, 2021, 2022), COLING (2016, 2018, 2020, 2022, 2025), ACM Conference on Hypertext and Social Media (2021, 2022), Language Resources and Evaluation Conference (LREC) (2020, 2022), Extended Semantic Web Conference (ESWC) (2017, 2020, 2021, 2022, 2024), Conference on Empirical Methods in Natural Language Processing (EMNLP) (2021), ACL (2021), AAAI (2021, 2024, 2025, 2026), Global Wordnet Conference (GWC) (2019, 2021), AACL-IJCNLP (2020), Biographical Data in a Digital World

(2017, 2019), Conference on Lexical and Computational Semantics (*SEM) (2018), Language, Data and Knowledge (LDK) (2017), Computational Linguistics in the Netherlands (CLiN) (2015).
Workshop Reviewer. KG4S (2025), NAACL Workshop on Cognitive Modeling and Computational Linguistics (CMCL) (2025), ISWC workshop on Retrieval-Augmented Generation Enabled by Knowledge Graphs (RAGE-KG) (2024), ACL workshop on knowledge graphs and large language models (KaLLM) (2024), NeurIPS Ro-FoMo: Robustness of Few-shot and Zero-shot Learning in Large Foundation Models (2023), Workshop on Neuro-Symbolic Learning and Reasoning (NeSy) (2023), EACL Student Research Workshop (SRW) (2021, 2023, 2024), ACL Workshop on Commonsense Representation and Reasoning (2022), Wordnets in the Deep Learning Era (WDLE) (2022), Wikidata workshop (2021, 2022, 2023), International Workshop on Semantic Evaluation (SemEval) (2018, 2020, 2021), SEMANTiCS (2016, 2018), European Summer School in Logic, Language and Information (ESSLLI) (2017), Workshop on Open Knowledge Base Question Answering (OKBQA) (2016), Making Sense of Microposts NEEL challenge (2016), NLP Applications: completing the puzzle (2015).
Participant and Session Organizer. Dagstuhl Seminar Knowledge Graphs and their Role in the Knowledge Engineering of the 21st Century (2022).

Training and certificates

10/2024 PhD supervision (Begeleiden van promovendi). Hertz.

Technical skills

- **Areas:** Commonsense Reasoning, Knowledge Graphs, Information Extraction, Semantic Web, Machine Learning, Language Modeling, Knowledge Integration, Transfer Learning, Explainability
- **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** B2
- **Spanish** A2
- **German** A1