CURRICULUM VITAE
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SHORT BIO

I am a Senior Associate Professor at the Department of Computer and Information Science of Linköping University. Additionally, I am an Amazon Scholar working with the Neptune graph database team at Amazon Web Services. I hold a Ph.D. in Computer Science from the Humboldt-Universität zu Berlin and have been awarded the academic qualification Docent in Computer Science from Linköping University. I am interested in problems related to the management of data and databases. My focus in this broad context is on data *on* the Web and on graph data, as well as on problems in which the data is distributed over multiple, autonomous and/or heterogeneous sources. Regarding these topics, my interests range from systems-building related research (e.g., efficient storage of data, query processing, and query optimization) all the way to theoretical foundations (e.g., complexity and expressive power of query languages). I was honored with the SWSA Distinguished Dissertation Award in 2015 for my Ph.D. dissertation "Querying a Web of Linked Data: Foundations and Query Execution," and with the 2019 SWSA Ten-Year Award for my paper "Executing SPARQL Queries over the Web of Linked Data" which pioneered the idea of traversal-based query execution as well as querying Linked Data *on* the Web in general. Additionally, I have received nine best paper awards (ESWC 2009 & 2015, ISWC 2017, SEMANTiCS 2018 & 2019, iiWAS 2020, SEMANTiCS 2021, CoopIS 2023, ESWC 2025), and I was selected for the prestigious Wallenberg Academy Fellows program. I regularly co-organize international scientific workshops and conferences; most notably, I was research track co-chair of ISWC 2019 and of CoopIS 2025, in-use track co-chair of ESWC 2024, an resources track co-chair of ESWC 2026. Additionally, I served on numerous program committees and participated as an invited expert in standardization efforts in two W3C working groups. According to Google Scholar, my publications have received more than 5300 citations, and my h-index is 31.

ACADEMIC POSITIONS HELD

since 2022	**Biträdande professor (Senior Associate Professor)**,
	Department of Computer and Information Science (IDA), Linköping University, Sweden.
2018 – 2022	**Universitetslektor, docent (Associate Professor)**,
	Department of Computer and Information Science (IDA), Linköping University, Sweden.
2016 – 2018	**Universitetslektor (Assistant Professor)**,
	Department of Computer and Information Science (IDA), Linköping University, Sweden.
2015 – 2016	**Postdoctoral research fellow**,
	Hasso Plattner Institute for IT Systems Engineering, University of Potsdam, Germany.
2012 – 2014	**Postdoctoral research fellow**,
	Cheriton School of Computer Science, University of Waterloo, Canada.

| 2007 – 2012 | **Research and teaching assistant**, Institut für Informatik, Humboldt-Universität zu Berlin, Germany. |
| 2006 – 2007 | **Research assistant**, Institut für Informatik, Humboldt-Universität zu Berlin, Germany. |

EDUCATION AND ACADEMIC DEGREES

2018	**Docent** in Computer Science, Institute of Technology at Linköping University, Sweden.
2014	**Dr. rer. nat.**, Institut für Informatik, Humboldt-Universität zu Berlin, Germany. Thesis title: "Querying a Web of Linked Data: Foundations and Query Execution"
2006	**Dipl.-Inf.**, Institut für Informatik, Humboldt-Universität zu Berlin, Germany. Thesis title: "Rule-Based Query Optimization for SPARQL" (in German)
1999	**Math.-Tech. Informatiker**, Computing Center, Humboldt-Universität zu Berlin, Germany.
1996	**Abitur**, Gymnasium zum Kienberg, Berlin, Germany.

ADDITIONAL TRAINING

2019 – 2020	**Course design and implementation** (6 hp course), Didacticum, Linköping University
2019 – 2020	**Becoming a teacher in higher education** (6 hp course), Didacticum, Linköping University
2017	**PhD supervision course** (faculty-specific part), Institute of Technology, Linköping University
2017	**Docent course**, Faculty of Engineering LTH, Lund University

PROFESSIONAL EXPERIENCE

since 2021	**Amazon Scholar** in the Neptune graph database team at Amazon Web Services
2021	**Consulting** on Semantic Web and Knowledge Graph technologies, Semcon AB, Sweden
2019 – 2020	**Consulting** on Semantic Web and Knowledge Graph technologies, Scania AB, Sweden
2015 – 2016	**Consulting** on research and development of a framework for graph data analytics on graphics processing units (GPUs), SYSTAP, LLC, Washington, DC, USA.

VISITING SCHOLAR APPOINTMENTS

| 2018 | **Visiting researcher**, Informatics Department, Universidad Técnica Federico Santa María, Chile. Invited by Dr. Carlos Buil-Aranda. September |
| 2016 | **Visiting researcher**, Department of Computer Science, Universidad de Chile, Chile. Invited by Dr. Jorge Pérez. March |

2015	**Visiting researcher**, Department of Computer Science, Pontificia Universidad Catolica de Chile, Chile. Invited by Prof. Marcelo Arenas and Dr. Carlos Buil-Aranda. March
2014	**Visiting researcher**, Department of Mechanical and Industrial Engineering, University of Toronto, Canada. Invited by Prof. Mariano P. Consens. December
2013	**Visiting researcher**, Faculty of Computer Science, Free University of Bozen-Bolzano, Italy. Invited by Dr. Giuseppe Pirrò. December
2010	**Visiting researcher**, Talis Group Ltd, Birmingham, UK. Invited by Dr. Tom Heath. Jul.–Oct.

AWARDS AND HONORABLE MENTIONS

1. **Distinguished Dissertation Award** of the Semantic Web Science Association (SWSA), 2015.
2. **Ten-Year Award** of the Semantic Web Science Association (SWSA), 2019.
3. **Best Research Paper Award** at the 22nd Extended Semantic Web Conference (ESWC), 2025.
4. **Best Research Paper Award** at the 29th Int. Conf. on Cooperative Information Systems (CoopIS), 2023.
5. **Best Research Paper Award** at the 16th SEMANTiCS Conference, 2021.
6. **Best Research Paper Award** at the 22nd Int. Conf. on Information Integration and Web-based Applications & Services (iiWAS), 2020.
7. **Best Research Paper Award** at the 15th SEMANTiCS Conference, 2019.
8. **Best Research Paper Award** at the 14th SEMANTiCS Conference, 2018.
9. **Best Research Paper Award** at the 16th International Semantic Web Conference (ISWC), 2017.
10. **Best Research Paper Award** at the 12th Extended Semantic Web Conference (ESWC), 2015.
11. **Best Research Paper Award** at the 6th Extended Semantic Web Conference (ESWC), 2009.
12. **Best Poster Award** at the 21st Extended Semantic Web Conference (ESWC), 2024.
13. **Best Poster Award** at the 16th International Semantic Web Conference (ISWC), 2017.
14. **Best Poster Award** at the 15th International Semantic Web Conference (ISWC), 2016.
15. **Best Demo Award** at the 13th International Semantic Web Conference (ISWC), October 2014.
16. **Best Reviewer Award** at the 19th Extended Semantic Web Conference (ESWC), 2021.
17. **Best Reviewer Award** at the 11th International Conference on Web Engineering (ICWE), 2011.

PUBLICATIONS

REFEREED JOURNAL ARTICLES

[1] Marcelo Arenas, Enrico Franconi, Janik Hammerer, Olaf Hartig, Katja Hose, Laura Koesten, George Konstantinidis, Leonid Libkin, Wim Martens, Yuya Sasaki, Stefanie Scherzinger, Katherine Thornton, and Hsiang-Yun Wu. "Exploring Exploratory Querying". In: *Proceedings of the VLDB Endowment* 18.13 (2025), pp. 5731–5739

[2] Huanyu Li, Olaf Hartig, Rickard Armiento, and Patrick Lambrix. "Ontology-Based GraphQL Server Generation for Data Access and Data". In: *Semantic Web Journal* 15.5 (2024), pp. 1639–1675

[3] Patrick Lambrix, Rickard Armiento, Huanyu Li, Olaf Hartig, Mina Abd Nikooie Pour, and Ying Li. "The Materials Design Ontology". In: *Semantic Web Journal* 15.2 (2024), pp. 481–515

[4]   Ora Lassila, Michael Schmidt, Olaf Hartig, Brad Bebee, Dave Bechberger, Willem Broekema, Ankesh Khandelwal, Kelvin Lawrence, Carlos Manuel Lopez Enriquez, Ronak Sharda, and Bryan Thompson. "The OneGraph Vision: Challenges of Breaking the Graph Model Lock-In". In: *Semantic Web Journal* 14.1 (2023), pp. 125–134

[5]   Sherif Sakr et al. "The Future Is Big Graphs: A Community View on Graph Processing Systems". In: *Communications of the ACM* 64.9 (2021), pp. 62–71

[6]   Sijin Cheng and Olaf Hartig. "OPT$^+$: A Monotonic Alternative to OPTIONAL in SPARQL". in: *Journal of Web Engineering* 18.1–3 (2019), pp. 169–206

[7]   Olaf Hartig and Giuseppe Pirrò. "SPARQL with Property Paths on the Web". In: *Semantic Web Journal* 8.6 (2017), pp. 773–795
Note: The conference version of this article was awarded the **Best Research Paper Award** in the conference (ESWC 2015).

[8]   Olaf Hartig and Jorge Pérez. "LDQL: A Query Language for the Web of Linked Data". In: *Journal of Web Semantics* 41 (2016), pp. 9–29

[9]   Ruben Verborgh, Miel Vander Sande, Olaf Hartig, Joachim Van Herwegen, Laurens De Vocht, Ben De Meester, Gerald Haesendonck, and Pieter Colpaert. "Triple Pattern Fragments: a Low-cost Knowledge Graph Interface for the Web". In: *Journal of Web Semantics* 37–38 (2016), pp. 184–206

[10] Olaf Hartig. "An Overview on Execution Strategies for Linked Data Queries". In: *Datenbank-Spektrum* 13.2 (2013), pp. 89–99

[11] Olaf Hartig and Andreas Langegger. "A Database Perspective on Consuming Linked Data on the Web". In: *Datenbank-Spektrum* 10.2 (2010), pp. 57–66

BOOKS

[12] Olaf Hartig. *Querying a Web of Linked Data: Foundations and Query Execution*. Vol. 24. Studies on the Semantic Web. IOS Press, 2016. ISBN: 978-1-61499-630-9

PATENTS

[13] Bradley R. Bebee, Bryan B. Thompson, Thomas James Lewis, and Olaf Hartig. *Acceleration Techniques for Graph Analysis Programs*. U.S. Patent 11900079, February 13, 2024

[14] Bradley R. Bebee, Bryan B. Thompson, Thomas James Lewis, and Olaf Hartig. *Acceleration Techniques for Graph Analysis Programs*. U.S. Patent 11200032, December 14, 2021

[15] Bradley R. Bebee, Bryan B. Thompson, Thomas James Lewis, and Olaf Hartig. *Acceleration Techniques for Graph Analysis Programs*. U.S. Patent 10409560, September 10, 2019

REFEREED CONFERENCE PAPERS

[16] Brad Bebee, Ümit V. Çatalyürek, Olaf Hartig, Ankesh Khandelwal, Simone Rondelli, Michael Schmidt, Lefteris Sidirourgos, and Bryan Thompson. "Poseidon: A OneGraph Engine". In: *Companion of the 2026 International Conference on Management of Data (SIGMOD/PODS)*. 2026

[17] Sitt Min Oo and Olaf Hartig. "An Algebraic Foundation for Knowledge Graph Construction". In: *Proceedings of the 22nd Extended Semantic Web Conference (ESWC)*. 2025
Note: This paper was awarded the **Best Research Paper Award** in this conference.

[18] Shahrzad Khayatbashi, Olaf Hartig, and Amin Jalali. "Transforming Event Knowledge Graph to Object-Centric Event Logs: A Comparative Study for Multi-dimensional Process Analysis". In: *Proceedings of the 42nd International Conference on Conceptual Modeling (ER)*. 2023

[19] Sijin Cheng, Sebastián Ferrada, and Olaf Hartig. "Considering Vocabulary Mappings in Query Plans for Federations of RDF Data Sources". In: *Proceedings of the 29th International Conference on Cooperative Information Systems (CoopIS)*. 2023
Note: This paper was awarded the **Best Paper Award** in this conference.

[20] Minh-Hoang Dang, Julien Aimonier-Davat, Pascal Molli, Olaf Hartig, Hala Skaf-Molli, and Yotlan Le Crom. "FedShop: A Benchmark for Testing the Scalability of SPARQL Federation Engines". In: *Proceedings of the 22nd International Semantic Web Conference (ISWC)*. 2023

[21] Sijin Cheng and Olaf Hartig. "LinGBM: A Performance Benchmark for Approaches to Build GraphQL Servers". In: *Proceedings of the 23rd Int. Conf. on Web Information Systems Engineering (WISE)*. 2022

[22] Robin Keskisärkkä, Eva Blomqvist, and Olaf Hartig. "Optimizing RDF Stream Processing for Uncertainty Management". In: *Proceedings of the 16th SEMANTiCS Conference*. 2021
Note: This paper was awarded the **Best Paper Award** in this conference.

[23] Sijin Cheng and Olaf Hartig. "FedQPL: A Language for Logical Query Plans over Heterogeneous Federations of RDF Data Sources". In: *Proceedings of the 22nd International Conference on Information Integration and Web-based Applications & Services (iiWAS)*. 2020
Note: This paper was awarded the **Best Paper Award** in this conference.

[24] Robin Keskisärkkä, Eva Blomqvist, Leili Lind, and Olaf Hartig. "Capturing and Querying Uncertainty in RDF Stream Processing". In: *Proceedings of the 22nd International Conference on Knowledge Engineering and Knowledge Management (EKAW)*. 2020

[25] Robin Keskisärkkä, Eva Blomqvist, Leili Lind, and Olaf Hartig. "RSP-QL*: Enabling Statement-Level Annotations in RDF Streams". In: *Proceedings of the 15th SEMANTiCS Conference*. 2019
Note: This paper was awarded the **Best Paper Award** in this conference.

[26] Muhammad Saleem, Alexander Potocki, Tommaso Soru, Olaf Hartig, and Axel-Cyrille Ngonga Ngomo. "CostFed: Cost-Based Query Optimization for SPARQL Endpoint Federation". In: *Proceedings of the 14th SEMANTiCS Conference*. 2018
Note: This paper was awarded the **Best Paper Award** in this conference.

[27] Olaf Hartig, Ian Letter, and Jorge Pérez. "A Model of Distributed Query Computation in Client-Server Scenarios on the Semantic Web". In: *Proceedings of the 27th International Joint Conference on Artificial Intelligence (IJCAI)*. 2018

[28] Olaf Hartig and Jorge Pérez. "Semantics and Complexity of GraphQL". in: *Proceedings of The Web Conference 2018 (27th International World Wide Web Conference)*. 2018

[29] Olaf Hartig, Ian Letter, and Jorge Pérez. "A Formal Framework for Comparing Linked Data Fragments". In: *Proceedings of the 16th International Semantic Web Conference (ISWC)*. 2017
Note: This paper was awarded the **Best Research Paper Award** in this conference.

[30] Olaf Hartig and Carlos Buil-Aranda. "Bindings-Restricted Triple Pattern Fragments". In: *Proceedings of the 15th Int. Conf. on Ontologies, Databases, and Applications of Semantics (ODBASE)*. 2016

[31] Magnus Knuth, Olaf Hartig, and Harald Sack. "Scheduling Refresh Queries for Keeping Results from a SPARQL Endpoint Up-to-Date". In: *Proceedings of the 15th International Conference on Ontologies, Databases, and Applications of Semantics (ODBASE)*. 2016

[32] Olaf Hartig and M. Tamer Özsu. "Walking without a Map: Ranking-Based Traversal for Querying Linked Data". In: *Proceedings of the 15th International Semantic Web Conference (ISWC)*. 2016

[33] Olaf Hartig and Jorge Pérez. "LDQL: A Query Language for the Web of Linked Data". In: *Proceedings of the 14th International Semantic Web Conference (ISWC)*. 2015

[34] Olaf Hartig and Giuseppe Pirrò. "A Context-Based Semantics for SPARQL Property Paths over the Web". In: *Proceedings of the 12th Extended Semantic Web Conference (ESWC)*. 2015
Note: This paper was awarded the **Best Research Paper Award** in this conference, and it was invited to a special issue of the Semantic Web Journal for selected papers of ESWC 2015.

[35] Günes Aluç, M. Tamer Özsu, Khuzaima Daudjee, and Olaf Hartig. "Executing Queries over Schema-less RDF Databases". In: *Proceedings of the 31st IEEE International Conference on Data Engineering (ICDE)*. 2015

[36] Günes Aluç, Olaf Hartig, M. Tamer Özsu, and Khuzaima Daudjee. "Diversified Stress Testing of RDF Data Management Systems". In: *Proceedings of the 13th International Semantic Web Conference (ISWC)*. 2014

[37] Ruben Verborgh, Olaf Hartig, Ben De Meester, Gerald Haesendonck, Laurens De Vocht, Miel Vander Sande, Richard Cyganiak, Pieter Colpaert, Erik Mannens, and Rik Van de Walle. "Querying Datasets on the Web with High Availability". In: *Proceedings of the 13th International Semantic Web Conference (ISWC)*. 2014

[38] Olaf Hartig and M. Tamer Özsu. "Reachable Subwebs for Traversal-Based Query Execution". In: *Proceedings of the 23rd International World Wide Web Conference (WWW), Web Science Track*. 2014

[39] Olaf Hartig and Johann-Christoph Freytag. "Foundations of Traversal Based Query Execution over Linked Data". In: *Proceedings of the 23rd ACM Conference on Hypertext and Social Media*. 2012

[40] Olaf Hartig. "SPARQL for a Web of Linked Data: Semantics and Computability". In: *Proceedings of the 9th Extended Semantic Web Conference (ESWC)*. 2012

[41] Olaf Hartig. "Zero-Knowledge Query Planning for an Iterator Implementation of Link Traversal Based Query Execution". In: *Proceedings of the 8th Extended Semantic Web Conference (ESWC)*. 2011

[42] Olaf Hartig, Christian Bizer, and Johann-Christoph Freytag. "Executing SPARQL Queries over the Web of Linked Data". In: *Proceedings of the 8th International Semantic Web Conference (ISWC)*. 2009
Note: This paper was awarded the 2019 **Ten-Year Award** of the Semantic Web Science Association.

[43] Olaf Hartig. "Querying Trust in RDF Data with tSPARQL". in: *Proceedings of the 6th Extended Semantic Web Conference (ESWC)*. 2009
Note: This paper was awarded the **Best Research Paper Award** in this conference.

[44] Olaf Hartig and Ralf Heese. "The SPARQL Query Graph Model for Query Optimization". In: *Proceedings of the 4th European Semantic Web Conference (ESWC)*. 2007

BOOK CHAPTERS

[45] Carsten Giebe and Olaf Hartig. "Quo Vadis - Social Media. Eine Analyse der Nutzung von Social Media am Beispiel von Facebook bei den Sparkassen in Deutschland". In: *In Holistische Social-Media-Strategien*. Springer, 2023

[46] Olaf Hartig, Katja Hose, and Juan F. Sequeda. "Linked Data Management". In: *Encyclopedia of Big Data Technologies*. 2019

[47] Maribel Acosta, Olaf Hartig, and Juan F. Sequeda. "Federated RDF Query Processing". In: *Encyclopedia of Big Data Technologies*. 2019

[48] Olaf Hartig. "Linked Data Query Processing based on Link Traversal". In: *Linked Data Management*. Ed. by Andreas Harth, Katja Hose, and Ralf Schenkel. CRC Press, 2014. Chap. 9, pp. 263–282

[49] Gunnar Aastrand Grimnes, Olaf Hartig, Malte Kiesel, and Marcus Liwicki. "Linked Open Data, Semantic Web Datensätze". In: *Semantische Technologien: Grundlagen – Konzepte – Anwendungen*. Ed. by Andreas Dengel. Springer, 2011. Chap. 7, pp. 183–203

REFEREED WORKSHOP PAPERS

[50] Ali Elhalawati, Anastasia Dimou, Olaf Hartig, and Daniel Hernández. "Flexible RML-Based Mapping of Property Graphs to RDF". in: *Proceedings of the 1st Transforming Graph Data Workshop (TGD)*. 2025

[51] Shahrzad Khayatbashi, Olaf Hartig, and Amin Jalali. "Transforming Object-Centric Event Logs to Temporal Event Knowledge Graphs". In: *Proceedings of the 2nd International Workshop on Object-Centric Processes from A to Z (OBJECTS)*. 2024

[52] Olaf Hartig Els de Vleeschauwer Gertjan De Mulder Ben De Meester and Pieter Colpaert. "The Open Circularity Platform: a Decentralized Data Sharing Platform for Circular Value Networks". In: *Proceedings of the 2nd International Workshop on Knowledge Graphs for Sustainability (KG4S)*. 2024

[53] Sijin Cheng and Olaf Hartig. "A Cost Model to Optimize Queries over Heterogeneous Federations of RDF Data Sources". In: *Proceedings of the 1st International Workshop on Data Management for Knowledge Graphs (DMKG)*. 2023

[54] Sijin Cheng and Olaf Hartig. "Source Selection for SPARQL Endpoints: Fit for Heterogeneous Federations of RDF Data Sources?" In: *Proceedings of the 6th Workshop on Storing, Querying and Benchmarking Knowledge Graphs (QuWeDa)*. 2022

[55] Shahrzad Khayatbashi, Sebastián Ferrada, and Olaf Hartig. "Converting Property Graphs to RDF: A Preliminary Study of the Practical Impact of Different Mappings". In: *Proceedings of the Joint Workshop on Graph Data Management Experiences & Systems (GRADES) and Network Data Analytics (NDA) (GRADES & NDA'22)*. 2022

[56] Olaf Hartig. "Foundations to Query Labeled Property Graphs using SPARQL*". In: *Proceedings of the 1st International Workshop on Approaches for Making Data Interoperable (AMAR)*. 2019

[57] Olaf Hartig and Jan Hidders. "Defining Schemas for Property Graphs by using the GraphQL Schema Definition Language". In: *Proceedings of the 2nd Joint International Workshop on Graph Data Management Experiences & Systems (GRADES) and Network Data Analytics (NDA) (GRADES-NDA'19)*. 2019

[58] Yun Wan Kim, Mariano P. Consens, and Olaf Hartig. "An Empirical Analysis of GraphQL API Schemas in Open Code Repositories and Package Registries". In: *Proceedings of the 13th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*. 2019

[59] Olaf Hartig. "Foundations of RDF* and SPARQL* – An Alternative Approach to Statement-Level Metadata in RDF". in: *Proceedings of the 11th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*. 2017

[60] Olaf Hartig and Jorge Pérez. "An Initial Analysis of Facebook's GraphQL Language". In: *Proceedings of the 11th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*. 2017

[61] Olaf Hartig. "LDQL: A Language for Linked Data Queries". In: *Proceedings of the 9th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*. 2015

[62] Jun Zhao and Olaf Hartig. "Towards Interoperable Provenance Publication on the Linked Data Web". In: *Proceedings of the 5th Linked Data on the Web Workshop (LDOW)*. 2012

[63] Olaf Hartig. "How Caching Improves Efficiency and Result Completeness for Querying Linked Data". In: *Proceedings of the 4th Linked Data on the Web Workshop (LDOW)*. 2011

[64] Olaf Hartig and Frank Huber. "A Main Memory Index Structure to Query Linked Data". In: *Proceedings of the 4th Linked Data on the Web Workshop (LDOW)*. 2011

[65] Olaf Hartig and Jun Zhao. "Publishing and Consuming Provenance Metadata on the Web of Linked Data". In: *Proceedings of the 3rd International Provenance and Annotation Workshop (IPAW)*. 2010

[66] Olaf Hartig. "Towards a Data-Centric Notion of Trust in the Semantic Web". In: *Proceedings of the 2nd Workshop on Trust and Privacy on the Social and Semantic Web (SPOT)*. 2010

[67] Olaf Hartig and Jun Zhao. "Using Web Data Provenance for Quality Assessment". In: *Proceedings of the 1st International Workshop on the Role of Semantic Web in Provenance Management (SWPM)*. 2009

[68] Olaf Hartig, Hannes Mühleisen, and Johann-Christoph Freytag. "Linked Data for Building a Map of Researchers". In: *Proceedings of the 5th Workshop on Scripting and Development for the Semantic Web (SFSW)*. 2009
Note: This paper was awarded the **Scripting Challenge Award** in this workshop.

[69] Olaf Hartig. "Provenance Information in the Web of Data". In: *Proceedings of the 2nd Linked Data on the Web Workshop (LDOW)*. 2009

[70] Olaf Hartig, Martin Kost, and Johann-Christoph Freytag. "Automatic Component Selection with Semantic Technologies". In: *Proceedings of the 4th International Workshop on Semantic Web Enabled Software Engineering (SWESE)*. 2008

EDITED PROCEEDINGS

[71] Cinzia Cappiello, Olaf Hartig, Mohamed Sellami, and Ali Ouni, eds. *31st International Conference, CoopIS 2025, Marbella, Spain, October 20–22, 2025, Proceedings*. Vol. 15535. Lecture Notes in Computer Science. Springer, 2025. ISBN: 978-3-032-15537-5

[72] Olaf Hartig and Zoi Kaoudi, eds. *Proceedings of the 7th Joint Workshop on Graph Data Management Experiences & Systems (GRADES) and Network Data Analytics (NDA)*. ACM, 2024

[73] Albert Meroño-Peñuela, Anastasia Dimou, Raphaël Troncy, Olaf Hartig, Maribel Acosta, Mehwish Alam, Heiko Paulheim, and Pasquale Lisena, eds. *The Semantic Web - 21st International Conference, ESWC 2024, Hersonissos, Crete, Greece, May 26-30, 2024, Proceedings, Part I*. vol. 14664. Lecture Notes in Computer Science. Springer, 2024. ISBN: 978-3-031-60625-0

[74] Albert Meroño-Peñuela, Anastasia Dimou, Raphaël Troncy, Olaf Hartig, Maribel Acosta, Mehwish Alam, Heiko Paulheim, and Pasquale Lisena, eds. *The Semantic Web - 21st International Conference, ESWC 2024, Hersonissos, Crete, Greece, May 26-30, 2024, Proceedings, Part II*. vol. 14665. Lecture Notes in Computer Science. Springer, 2024. ISBN: 978-3-031-60634-2

[75] Olaf Hartig and Yuichi Yoshida, eds. *Proceedings of the 6th Joint Workshop on Graph Data Management Experiences & Systems (GRADES) and Network Data Analytics (NDA)*. ACM, 2023

[76] Mehwish Alam et al., eds. *Joint Proceedings of the ESWC 2023 Workshops and Tutorials co-located with 20th European Semantic Web Conference (ESWC)*. vol. 3443. CEUR Workshop Proceedings. 2023

[77] Olaf Hartig and Oshani Seneviratne, eds. *Proceedings of the Doctoral Consortium at ISWC 2022, co-located with the 21st International Semantic Web Conference (ISWC)*. CEUR Workshop Proceedings, Vol-3165. 2022

[78] Ladjel Bellatreche, Marlon Dumas, Panagiotis Karras, Raimundas Matulevicius, Ahmed Awad, Matthias Weidlich, Mirjana Ivanovic, and Olaf Hartig, eds. *New Trends in Database and Information Systems - AD-BIS 2021 Short Papers, Doctoral Consortium and Workshops: DOING, SIMPDA, MADEISD, MegaData, CAoNS, Tartu, Estonia, August 24-26, 2021, Proceedings*. Vol. 1450. Communications in Computer and Information Science. Springer, 2021. ISBN: 978-3-030-85081-4

[79] Andreas Harth, Valentina Presutti, Raphaël Troncy, Maribel Acosta, Axel Polleres, Javier D. Fernández, Josiane Xavier Parreira, Olaf Hartig, Katja Hose, and Michael Cochez, eds. *The Semantic Web: ESWC 2020 Satellite Events - ESWC 2020 Satellite Events, Heraklion, Crete, Greece, May 31 - June 4, 2020, Revised Selected Papers*. Vol. 12124. Lecture Notes in Computer Science. Springer, 2020. ISBN: 978-3-030-62326-5

[80] Chiara Ghidini, Olaf Hartig, Maria Maleshkova, Vojtech Svátek, Isabel F. Cruz, Aidan Hogan, Jie Song, Maxime Lefrançois, and Fabien Gandon, eds. *The Semantic Web - ISWC 2019 - 18th International Semantic Web Conference, Auckland, New Zealand, October 26-30, 2019, Proceedings, Part I*. vol. 11778. Lecture Notes in Computer Science. Springer, 2019. ISBN: 978-3-030-30792-9

[81] Chiara Ghidini, Olaf Hartig, Maria Maleshkova, Vojtech Svátek, Isabel F. Cruz, Aidan Hogan, Jie Song, Maxime Lefrançois, and Fabien Gandon, eds. *The Semantic Web - ISWC 2019 - 18th International Semantic Web Conference, Auckland, New Zealand, October 26-30, 2019, Proceedings, Part II*. vol. 11779. Lecture Notes in Computer Science. Springer, 2019. ISBN: 978-3-030-30795-0

[82] Pascal Hitzler, Sabrina Kirrane, Olaf Hartig, Victor de Boer, Maria-Esther Vidal, Maria Maleshkova, Stefan Schlobach, Karl Hammar, Nelia Lasierra, Steffen Stadtmüller, Katja Hose, and Ruben Verborgh, eds. *The Semantic Web: ESWC 2019 Satellite Events - ESWC 2019 Satellite Events, Portorož, Slovenia, June 2-6, 2019, Revised Selected Papers*. Vol. 11762. Lecture Notes in Computer Science. Springer, 2019. ISBN: 978-3-030-32326-4

[83] Matthias Wauer, Mohamed Ahmed Sherif, Muhammad Saleem, Olaf Hartig, Ricardo Usbeck, Ruben Verborgh, and Axel-Cyrille Ngonga Ngomo, eds. *Joint Proceedings of the 3rd Int. Workshop on Geospatial Linked Data (GeoLD) and the 2nd Workshop on Querying the Web of Data (QuWeDa), co-located with the 15th Extended Semantic Web Conference (ESWC)*. CEUR Workshop Proceedings, Vol-2110. 2018

[84] Eva Blomqvist, Diana Maynard, Aldo Gangemi, Rinke Hoekstra, Pascal Hitzler, and Olaf Hartig, eds. *The Semantic Web - 14th International Conference, ESWC 2017, Portorož, Slovenia, May 28 - June 1, 2017, Proceedings, Part I*. vol. 10249. Lecture Notes in Computer Science. 2017. ISBN: 978-3-319-58067-8

[85] Eva Blomqvist, Diana Maynard, Aldo Gangemi, Rinke Hoekstra, Pascal Hitzler, and Olaf Hartig, eds. *The Semantic Web - 14th International Conference, ESWC 2017, Portorož, Slovenia, May 28 - June 1, 2017, Proceedings, Part II*. vol. 10250. Lecture Notes in Computer Science. 2017. ISBN: 978-3-319-58450-8

[86] Eva Blomqvist, Katja Hose, Heiko Paulheim, Agnieszka Lawrynowicz, Fabio Ciravegna, and Olaf Hartig, eds. *The Semantic Web: ESWC 2017 Satellite Events, Portorož, Slovenia, May 28 – June 1, 2017, Revised Selected Papers*. Vol. 10577. Lecture Notes in Computer Science. 2017. ISBN: 978-3-319-70406-7

[87] Olaf Hartig, Juan Sequeda, and Aidan Hogan, eds. *Proceedings of the Seventh International Workshop on Consuming Linked Data (COLD 2016), co-located with the 15th International Semantic Web Conference (ISWC)*. CEUR Workshop Proceedings, Vol-1666. 2016

[88] Olaf Hartig, Juan Sequeda, and Aidan Hogan, eds. *Proceedings of the Sixth International Workshop on Consuming Linked Data (COLD 2015), co-located with the 14th International Semantic Web Conference (ISWC)*. CEUR Workshop Proceedings, Vol-1426. 2015

[89] Olaf Hartig, Aidan Hogan, and Juan Sequeda, eds. *Proceedings of the Fifth International Workshop on Consuming Linked Data (COLD), co-located with the 13th International Semantic Web Conference (ISWC)*. CEUR Workshop Proceedings, Vol-1264. 2014

[90] Fernando Bobillo, Rommel N. Carvalho, Davide Ceolin, Paulo Cesar G. da Costa, Claudia d'Amato, Nicola Fanizzi, Kathryn B. Laskey, Kenneth J. Laskey, Thomas Lukasiewicz, Trevor P. Martin, Matthias Nickles, Michael Pool, Tom De Nies, Olaf Hartig, Paul T. Groth, and Stephen Marsh, eds. *Proceedings of the 10th Int. Workshop on Uncertainty Reasoning for the Semantic Web (URSW), co-located with the 13th International Semantic Web Conference (ISWC)*. CEUR Workshop Proceedings, Vol-1259. 2014

[91] Olaf Hartig, Juan Sequeda, Aidan Hogan, and Takahide Matsutsuka, eds. *Proceedings of the Fourth International Workshop on Consuming Linked Data (COLD), co-located with the 12th International Semantic Web Conference (ISWC)*. CEUR Workshop Proceedings, Vol-1034. 2013

[92] Juan Sequeda, Andreas Harth, and Olaf Hartig, eds. *Proceedings of the Third International Workshop on Consuming Linked Data (COLD), co-located with the 11th International Semantic Web Conference (ISWC)*. CEUR Workshop Proceedings, Vol-905. 2012

[93] Olaf Hartig, Andreas Harth, and Juan Sequeda, eds. *Proceedings of the Second International Workshop on Consuming Linked Data (COLD), co-located with the 10th International Semantic Web Conference (ISWC)*. CEUR Workshop Proceedings, Vol-782. 2011

[94] Olaf Hartig, Andreas Harth, and Juan Sequeda, eds. *Proceedings of the First International Workshop on Consuming Linked Data (COLD), co-located with the 9th International Semantic Web Conference (ISWC)*. CEUR Workshop Proceedings, Vol-665. 2010

REFEREED CONFERENCE DEMOS

[95] Huanyu Li, Olaf Hartig, Rickard Armiento, and Patrick Lambrix. "OBG-gen: Ontology-Based GraphQL Server Generation for Data Integration". In: *Proceedings of the Posters, Demos and Industry Tracks of the 21st International Semantic Web Conference (ISWC)*. 2023

[96] Alexander Potocki, Muhammad Saleem, Tommaso Soru, Olaf Hartig, and Axel-Cyrille Ngonga Ngomo. "Federated SPARQL Query Processing Via CostFed". In: *Proceedings of Posters and Demos at the 16th International Semantic Web Conference (ISWC)*. 2017

[97] Ruben Verborgh, Olaf Hartig, Ben De Meester, Gerald Haesendonck, Laurens De Vocht, Miel Vander Sande, Richard Cyganiak, Pieter Colpaert, Erik Mannens, and Rik Van de Walle. "Low-Cost Queryable Linked Data through Triple Pattern Fragments". In: *Proceedings of Posters and Demos at the 13th International Semantic Web Conference (ISWC)*. 2014
Note: This demo was awarded the **Best Demo Award** in this conference.

[98] Olaf Hartig. "SQUIN: A Traversal Based Query Execution System for the Web of Linked Data". In: *Proceedings of the 2013 ACM SIGMOD International Conference on Management of Data*. 2013

[99] Olaf Hartig, Jun Zhao, and Hannes Mühleisen. "Automatic Integration of Metadata into the Web of Linked Data". In: *Proceedings of the 2nd Workshop on Trust and Privacy on the Social and Semantic Web (SPOT)*. 2010

[100] Olaf Hartig, Martin Kost, and Johann-Christoph Freytag. "Designing Component-Based Semantic Web Applications with DESWAP". in: *Proceedings of Posters and Demos at the 7th International Semantic Web Conference (ISWC)*. 2008

REFEREED CONFERENCE POSTERS

[101] Olaf Hartig, Gregory Todd Williams, Michael Schmidt, Ora Lassila, Carlos-Manuel Lopez-Enriquez, and Bryan Thompson. "Datatypes for Lists and Maps in RDF Literals". In: *Proceedings of Posters and Demos at the 21st Extended Semantic Web Conference (ESWC)*. 2024
Note: This poster was awarded the **Best Poster Award** in this conference.

[102] Sijin Cheng and Olaf Hartig. "Towards Query Processing over Heterogeneous Federations of RDF Data Sources". In: *Proceedings of Posters and Demos at the 19th Extended Semantic Web Conference (ESWC)*. 2022

[103] Olaf Hartig. "RDF* and SPARQL*: An Alternative Approach to Annotate Statements in RDF". in: *Proceedings of Posters and Demos at the 16th International Semantic Web Conference (ISWC)*. 2017
Note: This poster was awarded the **People's Choice Best Poster Award** in this conference.

[104] Olaf Hartig and Carlos Buil-Aranda. "Reducing the Network Load of Triple Pattern Fragments by Supporting Bind Joins". In: *Proceedings of Posters and Demos at the 15th International Semantic Web Conference (ISWC)*. 2016
Note: This poster was awarded the **People's Choice Best Poster Award** in this conference.

[105] Olaf Hartig and Tom Heath. "Query Prediction with Context Models for Populating Personal Linked Data Caches". In: *Proceedings of the Poster Session at the 23rd ACM Conference on Hypertext and Social Media*. 2012

[106] Olaf Hartig and Tom Heath. "Populating Personal Linked Data Caches using Context Models". In: *Proceedings of the Poster Session at the 21th International World Wide Web Conference (WWW)*. 2012

[107] Olaf Hartig and Jun Zhao. "Integrating Provenance into the Web of Data". In: *Proceedings of Posters and Demos at the 7th Extended Semantic Web Conference (ESWC)*. 2010

THESES

[108] Olaf Hartig. "Querying a Web of Linked Data: Foundations and Query Execution". PhD thesis. Humboldt-Universität zu Berlin, Germany, 2014
Note: This dissertation was awarded the **2015 Distinguished Dissertation Award** of the Semantic Web Science Association.

[109] Olaf Hartig. "Grundlagen regelbasierter Optimierung für SPARQL". Diploma thesis. Humboldt-Universität zu Berlin, Germany, 2006

OTHER PUBLICATIONS

[110] Olaf Hartig, Pierre-Antoine Champin, Gregg Kellogg, and Andy Seaborne, eds. *RDF 1.2 Concepts and Abstract Syntax*. W3C Working Draft. Jan. 2026

[111] Olaf Hartig, Andy Seaborne, Ruben Taelman, Gregory Williams, and Thomas Pellissier Tanon, eds. *SPARQL 1.2 Query Language*. W3C Working Draft. Jan. 2026

[112] Piero A. Bonatti, John Domingue, Anna Lisa Gentile, Andreas Harth, Olaf Hartig, Aidan Hogan, Katja Hose, Ernesto Jimenez-Ruiz, Deborah L. McGuinness, Chang Sun, Ruben Verborgh, and Jesse Wright. "Towards Computer-Using Personal Agents". In: *CoRR* arXiv/2503.15515 (2025)

[113] Olaf Hartig and Gregory Williams, eds. *SPARQL CDTs: Representing and Querying Lists and Maps as RDF Literals*. June 2024

[114] Valeria Fionda et al. "Tutorials at The Web Conference 2023". In: *Companion Proceedings of the ACM Web Conference*. ACM, 2023

[115] Olaf Hartig, Pierre-Antoine Champin, Gregg Kellogg, and Andy Seaborne, eds. *RDF-star and SPARQL-star*. W3C Community Group Report. Dec. 2021

[116] Olaf Hartig, Maria-Esther Vidal, and Johann-Christoph Freytag. "Federated Semantic Data Management (Dagstuhl Seminar 17262)". In: *Dagstuhl Reports* 7.6 (2017), pp. 135–167

[117] Olaf Hartig and Olivier Curé. "Semantic Data Management in Practice (Tutorial Description)". In: *Companion Volume of the Proceedings of the 26th International Conference on World Wide Web (WWW)*. 2017

[118] Olaf Hartig. "Reconciliation of RDF* and Property Graphs". In: *CoRR* arXiv/1409.3288 (2014)

[119] Olaf Hartig and Bryan Thompson. "Foundations of an Alternative Approach to Reification in RDF". in: *CoRR* arXiv/1406.3399 (2014)

[120] Olaf Hartig and M. Tamer Özsu. "Linked Data Query Processing (Tutorial Description)". In: *Proceedings of the 30th IEEE International Conference on Data Engineering (ICDE)*. 2014

[121] Günes Aluç, M. Tamer Özsu, Khuzaima Daudjee, and Olaf Hartig. *chameleon-db: a Workload-Aware Robust RDF Data Management System*. Tech. rep. CS-2013-10. University of Waterloo, Sept. 2013

[122] Graham Klyne, Paul Groth, Luc Moreau, Olaf Hartig, Yogesh Simmhan, James Myers, Timothy Lebo, Khalid Belhajjame, Simon Miles, and Stian Soiland-Reyes. *PROV-AQ: Provenance Access and Query*. W3C Working Group Note. 2013

[123] Olaf Hartig. "An Introduction to SPARQL and Queries over Linked Data (Tutorial Description)". In: *Proceedings of the 12th International Conference on Web Engineering (ICWE)*. 2012

[124] Olaf Hartig, Juan Sequeda, Jamie Taylor, and Patrick Sinclair. "How to Consume Linked Data on the Web (Tutorial Description)". In: *Companion Volume of the Proceedings of the 19th International Conference on World Wide Web (WWW)*. 2010

[125] Yolanda Gil, James Cheney, Paul Groth, Olaf Hartig, Simon Miles, Luc Moreau, and Paulo Pinheiro da Silva, eds. *Provenance XG Final Report*. W3C Incubator Group Report. 2010

PRESENTATIONS

TUTORIALS

1. Olaf Hartig and Ruben Taelman. "An Introduction to GraphQL." Half-day tutorial at the 18th Int. Semantic Web Conf. (ISWC), Auckland, New Zealand, 2019.

2. Olaf Hartig and Olivier Curé. "Semantic Data Management in Practice." Half-day tutorial at the 16th Int. Semantic Web Conf. (ISWC), Vienna, Austria, 2017.

3. Olaf Hartig and Olivier Curé. "Semantic Data Management in Practice." Half-day tutorial at the 26th Int. World Wide Web Conf. (WWW), Perth, Australia, 2017.

4. Olaf Hartig and M. Tamer Özsu. "Linked Data Query Processing." 1.5h tutorial at the 30th IEEE Int. Conference on Data Engineering (ICDE), Chicago, IL, USA, 2014.

5. Paul Groth, Jun Zhao, and Olaf Hartig. "Getting to know PROV - the W3C Provenance Specifications." Half-day tutorial at the 10th Extended Semantic Web Conf. (ESWC), Montpellier, France, 2013.

6. Olaf Hartig. "Linked Data Query Processing." Half-day tutorial at the 22th Int. World Wide Web Conference (WWW), Rio de Janeiro, Brazil, 2013.

7. Olaf Hartig. "An Introduction to SPARQL and Queries over Linked Data." Half-day tutorial at the 12th Int. Conference on Web Engineering (ICWE), Berlin, Germany, 2012.

8. Olaf Hartig and Juan Sequeda. "How to Consume Linked Data on the Web." Half-day tutorial at the 19th Int. World Wide Web Conf. (WWW), Raleigh, NC, USA, 2010.

9. Juan Sequeda, Olaf Hartig, Patrick Sinclair, and Jamie Taylor. "How to Consume Linked Data on the Web." Half-day tutorial at the 8th Int. Semantic Web Conf. (ISWC), Washington DC, USA, 2009.

10. Tom Heath, Michael Hausenblas, Chris Bizer, Richard Cyganiak, and Olaf Hartig. "How to Publish Linked Data on the Web." Half-day tutorial at the 7th Int. Semantic Web Conf. (ISWC), Karlsruhe, Germany, 2008.

INVITED TALKS

1. "GraphQL and RDF: Quo Vadis?" Keynote at the 7th Workshop on Storing, Querying and Benchmarking Knowledge Graphs (QuWeDa) at the 22nd Int. Semantic Web Conf. (ISWC), Athens, Greece, Nov. 2023.

2. "Towards Querying Heterogeneous Federations of Interlinked Knowledge Graphs." Invited talk at the FWO Scientific Research Network on "Knowledge Graph For Data Integration", Leuven, Belgium, Mar. 2023.

3. "Towards Querying Heterogeneous Federations of Interlinked Knowledge Graphs." Keynote at the 18th SEMANTiCS Conference, Vienna, Austria, Sep. 2022.

4. "Reflections on Linked Data Querying and Other Related Topics." Invited talk in the DKG/SWSA talk series, online, Mar. 2022.

5. "Metadata for RDF Statements: The RDF-star Approach." Invited talk in the Lotico talk series, co-presented with Pierre-Antoine Champin, online, Mar. 2021.

6. "Let's Rethink our Optimization Criteria for Web Querying: A Case for Response Time Focused Query Processing." Keynote at the 3rd Workshop on Querying and Benchmarking the Web of Data (QuWeDa) co-located with the 18th Int. Semantic Web Conf. (ISWC), Auckland, New Zealand, Oct. 2019.

7. "Fundamental Properties of the GraphQL Language." Invited talk at the GraphQL Europe 2018 Conference, Berlin, Germany, Jun. 2018.

8. "The RDF*/SPARQL* Approach to Statement-Level Metadata in RDF." Keynote at Web Stream Processing workshop (WSP) co-located with the 27th Int. World Wide Web Conf. (The Web Conference 2018), Lyon, France, Apr. 2018.

9. "DASL: A Scala-based DSL for Graph Analytics on GPUs." Talk at the 4th Workshop on Graph-based Technologies and Applications (GraphTA), Barcelona, Spain, Mar. 2016.

10. "Rethinking Online SPARQL Querying to Support Incremental Result Visualization." Keynote at the 5th Int. Workshop on Usage Analysis and the Web of Data (USEWOD 2015) co-located with the 12th Extended Semantic Web Conf. (ESWC 2015), Portoroz, Slovenia, Jun. 2015.

11. "Integrating the Property Graph and RDF Data Models." Talk at the 5th Technical User Community meeting of the Linked Data Benchmark Council, Athens, Greece, Nov. 2014.

12. "Linked Data Management and SPARQL Querying." Lecture at the Indian-Summer School on Linked Data, Leipzig, Germany, Sep. 2011.

FUNDING AND PROJECTS

ACQUIRED FUNDING

– Project Grant (projektbidrag) of the Swedish Research Council (Vetenskapsrådet), 2025.
  Role: principal investigator
  Budget: overall 4,100,000 SEK over four years
  Acceptance rate: 18%

– Wallenberg Academy Fellow Grant of the Knut and Alice Wallenberg Foundation, 2024.
  Role: principal investigator
  Budget: overall 9 MSEK over five years

– Starting Grant (etableringsbidrag) of the Swedish Research Council (Vetenskapsrådet), 2019.
  Role: principal investigator
  Budget: overall 3,812,000 SEK over four years
  Acceptance rate: 16%

– Grant of the Centrum för Industriell Informationsteknologi (CENIIT) at Linköping University, 2016.
  Role: principal investigator
  Budget: overall 2,700,000 SEK over six years

- Collaborative Support Program Grant (# N62909-15-1-C001) awarded by the U.S. Office of Naval Research Global to support the 5th International Workshop on Consuming Linked Data (COLD 2014), 2014.
  - Role: principal investigator
  - Budget: 9,950 USD
- Collaborative Support Program Grant (# N62909-13-1-C264) awarded by the U.S. Office of Naval Research Global to support the 4th International Workshop on Consuming Linked Data (COLD 2013), 2013.
  - Role: contribution to the proposal
  - Budget: 9,200 USD

INVOLVEMENT IN OTHER PROJECTS

- Onto-DESIDE: Ontology-based Decentralized Sharing of Industry Data in the European Circular Economy.
  - Period: 2022–2025
  - Funded by: European Commission (Horizon Europe)
  - Roles: deputy project coordinator, researcher
- SPIRIT: Scalable Privacy Preserving Intelligence Analysis for Resolving Identities.
  - Period: 2018–2021
  - Funded by: European Commission (Horizon 2020)
  - Roles: de-facto work package leader, researcher
- SymbiCloud: Robot-assisterade hastigt bildade kunskapsnätverk.
  - Period: 2016–2021
  - Funded by: Swedish Foundation for Strategic Research (Stiftelsen för Strategisk Forskning)
  - Role: researcher

PROFESSIONAL SERVICES

CO-ORGANIZED EVENTS

- **Workshop co-organizer** of the 2nd International Workshop on Data Management for Knowledge Graphs (DMKG), co-located with the ISWC Conference, Bari, Italy, 2026.
- **Resource track co-chair** of the 23rd Extended Semantic Web Conf. (ESWC), Dubrovnik, Croatia, 2026.
- **Program co-chair** of the 31st Int. Conf. on Cooperative Information Systems (CoopIS), Spain, 2025.
- **In-Use track co-chair** of the 21st Extended Semantic Web Conf. (ESWC), Hersonissos, Greece, 2024.
- **Workshop co-organizer** of the 7th Joint Workshop on Graph Data Management Experiences & Systems (GRADES) and Network Data Analytics (NDA), co-located with the ACM SIGMOD Conference, Santiago, Chile, 2024.
- **Tutorials co-chair** of the Web Conference 2023, Austin, TX, USA, 2023.
- **Workshop co-organizer** of the 6th Joint Workshop on Graph Data Management Experiences & Systems (GRADES) and Network Data Analytics (NDA), co-located with the ACM SIGMOD Conference, Seattle, WA, USA, 2023.
- **Workshop co-organizer** of the 1st International Workshop on Data Management for Knowledge Graphs (DMKG), co-located with the ESWC Conference, Hersonissos, Greece, 2023.
- **Doctoral consortium co-chair** of the 21st Int. Semantic Web Conf. (ISWC), Hangzhou, China, 2022.
- **Doctoral consortium co-chair** of the 25th Europ. Conf. on Advances in Databases and Information Systems (ADBIS), Tartu, Estonia, 2021.
- **Replication studies track co-chair** of the 18th Ext. Semantic Web Conf. (ESWC), Hersonissos, Greece, 2021.

- **Workshops & tutorials co-chair** of the 17th Ext. Semantic Web Conf. (ESWC), Hersonissos, Greece, 2020.
- **Research track co-chair** of the 18th Int. Semantic Web Conf. (ISWC), Auckland, New Zealand, 2019.
- **Poster & demos co-chair** of the 16th Extended Semantic Web Conf. (ESWC), Portoroz, Slovenia, 2019.
- **Co-organizer** of a tutorial week on Linked Data and Semantic Web technologies, Linköping, Sweden, 2018.
- **Co-organizer** of a Dagstuhl Seminar on Federated Semantic Data Management, Dagstuhl, Germany, 2017.
- **Co-organizer** of the 6th "Linked Data in Sweden" Day, Linköping, Sweden, 2017.
- **Proceedings chair** of the 14th Extended Semantic Web Conference (ESWC), Portoroz, Slovenia, 2017.
- **Workshop co-organizer** of the 2nd Int. Workshop on Query the Web of Data (QuWeDa 2018), co-located with the 15th Extended Semantic Web Conference (ESWC), Hersonissos, Greece, 2018.
- **Workshop co-organizer** of the 7th Int. Workshop on Consuming Linked Data (COLD 2016), co-located with the 15th Int. Semantic Web Conference (ISWC 2016), Kobe, Japan, 2016.
- **Workshop co-organizer** of the 6th Int. Workshop on Consuming Linked Data (COLD 2015), co-located with the 14th Int. Semantic Web Conference (ISWC 2015), Bethlehem, PA, USA, 2015.
- **Workshop co-organizer** of the 5th Int. Workshop on Consuming Linked Data (COLD 2014), co-located with the 13th Int. Semantic Web Conference (ISWC 2014), Riva del Garda, Italy, 2014.
- **Workshop co-organizer** of the 3rd Int. Workshop on Methods for Establishing Trust in Open Data (METHOD 2014), co-located with the 13th Int. Semantic Web Conference (ISWC 2014), Riva del Garda, Italy, 2014.
- **Workshop co-organizer** of the 4th Int. Workshop on Consuming Linked Data (COLD 2013), co-located with the 12th Int. Semantic Web Conference (ISWC 2013), Sydney, Australia, 2013.
- **Workshop co-organizer** of the 3rd Int. Workshop on Consuming Linked Data (COLD 2012), co-located with the 11th Int. Semantic Web Conference (ISWC 2012), Boston, USA, 2012.
- **Semantic technologies coordinator** of the 9th Extended Semantic Web Conference (ESWC 2012), Hersonissos, Greece, 2012.
- **Workshop co-organizer** of the 2nd Int. Workshop on Consuming Linked Data (COLD 2011), co-located with the 10th Int. Semantic Web Conference (ISWC 2011), Bonn, Germany, 2011.
- **Co-organizer** of the 2nd Linked Data-a-thon at the 10th Int. Semantic Web Conference (ISWC 2011), Bonn, Germany, 2011.
- **Workshop co-organizer** of the 1st Int. Workshop on Consuming Linked Data (COLD 2010), co-located with the 9th Int. Semantic Web Conference (ISWC 2010), Shanghai, China, 2010.

JOURNAL REVIEWER

- Semantic Web Journal: 2014, 2016, 2017, 2018, 2020 (2), 2021 (2), 2022 (3), 2023 (5), 2024 (3), 2025 (2), 2026
- Journal on Web Semantics (JWS): 2010 (3), 2011, 2014, 2015, 2016, 2017, 2018
- Transactions on Graph Data and Knowledge (TGDK): 2025
- VLDB Journal: 2016, 2024, 2025
- International Journal of Cooperative Information Systems (IJCIS): 2026
- PeerJ Computer Science: 2022
- ACM Computing Surveys: 2016
- ACM Journal of Data and Information Quality (JDIQ): 2014, 2015, 2016 (2)
- Information Systems (IS): 2014, 2015
- IEEE Transactions on Knowledge and Data Engineering (TKDE): 2013, 2016, 2017 (2)
- IEEE Computer: 2013

- International Journal on Semantic Web and Information Systems (IJSWIS): 2013
- Knowledge and Information Systems (KAIS): 2011
- PLOS ONE: 2017

PROGRAM COMMITTEE MEMBER

- The Web Conference (earlier: World Wide Web Conference, WWW): 2012, 2013, 2016–2021, 2022 (Senior PC Member)
- International Semantic Web Conference (ISWC): 2010 (Poster & Demo Track), 2016, 2017 (Senior PC Member), 2018 (Doct. Cons. PC Member), 2020–2026 (Senior PC Member), 2023 & 2025 (Doct. Cons. PC Member)
- Extended Semantic Web Conference (ESWC): 2010–2017, 2018 (Track Co-Chair), 2019–2022, 2023–2025 (Senior PC Member) 2020 & 2022–2024 & 2026 (Doctoral Cons. PC Member)
  Note: I was awarded a *best reviewer award* in ESWC 2022.
- International Conference on Business Information Systems (BIS): 2025
- IEEE International Conference on Data Engineering (ICDE): 2015
- International Joint Conference on Artificial Intelligence (IJCAI): 2011 (Senior PC Member)
- International Joint Conference on Knowledge Graphs (IJCKG): 2021 (Senior PC Member)
- International Conference on Web Engineering (ICWE): 2011, 2012
  Note: I was awarded the *best reviewer award* in ICWE 2011.
- International Conference on Information Quality (ICIQ): 2010, 2011, 2013
- International Conference on Semantic Systems (Semantics): 2009–2011, 2013, 2014, 2017
- Conference on Semantic Technology and Knowledge Engineering (STAKE): 2010
- Workshop on Trust, Autonomy and Accountability in PKG-Based Agentic AI (TAAPAAI): 2026
- International Workshop on Knowledge Graphs for Sustainability (KG4S): 2023, 2024, 2025
- SEMANTICS Developers Workshop (SemDev): 2025
- International Workshop on Querying the Web of Data (QuWeDa): 2017–2020, 2022, 2023
- Trusting Decentralised Knowledge Graphs and Web Data (TrusDeKW) Workshop: 2023
- Workshop on Search, Exploration, and Analysis in Heterogeneous Datastores (SEA Data): 2021, 2024
- Workshop on Squaring the Circle on Graphs (SCG): 2021
- Alberto Mendelzon International Workshop on Foundation of Databases and the Web (AMW): 2017, 2019
- Workshop on Linked Data on the Web (LDOW): 2009–2012, 2014
- International Workshop on Linked Web Data Management (LWDM): 2013–2016
- International Workshop on Data Engineering meets the Semantic Web (DESWEB): 2014
- International Provenance and Annotation Workshop (IPAW): 2010, 2012, 2016
- International Workshop on Methods for Establishing Trust in Open Data (METHOD): 2012, 2013, 2015
- International Workshop on Decentralizing the Semantic Web (DeSemWeb): 2018
- International Workshop on Benchmarking Linked Data (BLINK): 2016
- International Workshop on Hyperlinking in the Web of Linked Things (WLT): 2014
- Workshop on Legal Knowledge and the Semantic Web (LK&SW): 2013
- International Workshop on Resource Discovery (RED): 2013
- IUI Workshop on Context-aware Retrieval and Recommendation (CaRR): 2011

- International Workshop on the Role of Semantic Web in Provenance Management (SWPM): 2010, 2012
- International Workshop on Traceability and Compliance of Semi-Structured Processes (TC4SP): 2010, 2011
- International Workshop on Trust and Privacy on the Social and Semantic Web (SPOT): 2010
- International Workshop on Social Data on the Web (SDoW): 2009–2011

OTHER

- **Evaluator** for the German Research Foundation (DFG), 2025 (2 times), 2026.
- **Evaluator** for the Belgian Fund for Scientific Research (F.R.S.–FNRS), 2023.
- **Evaluator** for the Chilean National Science and Technology Commission (CONICYT), 2025.
- **Evaluator** for the Chilean National Science and Technology Commission (CONICYT), 2021.
- **Evaluator** for the Chilean National Science and Technology Commission (CONICYT), 2015.
- **Working group leader** in COST action CA19134 on Distributed Knowledge Graphs, 2019–2024
- **Associate Editor** of the Transactions on Graph Data and Knowledge (since January 2023)
- **Associate Editor** of the Journal of Web Semantics (2017 – 2023)
- **Co-editor** of the Semantic Web Journal special issue on "Storing and Querying the Web of Data", 2020.
- **Co-editor** of the "Big Semantic Data Processing" section of the Encyclopedia of Big Data Technologies published by Springer, since 2017.
- **Scientific committee member**, 12th EDBT Summer School, 2015.
- **Invited expert** in the World Wide Web Consortium (W3C) RDF-star Working Group, since 2023.
- **Invited expert** in the World Wide Web Consortium (W3C) Provenance Working Group, 2011 – 2013.
- **Invited expert** in the World Wide Web Consortium (W3C) Provenance Incubator Group, 2009 – 2010.
- **Member of PhD committees**, Robin Keskisärkkä (Linköping University, licenciate committee, 2017), Ruben Taelman (Ghent University, 2019), Rudra Pratap Deb Nath (Aalborg University, 2020), Julian Bruyat (Université de Lyon, 2024)

TEACHING AND SUPERVISION

COURSES

- **Database Technology**, Linköping University. Spring 2026.
  Class size and level: 197 undergraduate students
  My roles: course leader, examiner, sole lecturer

- **Database Technology**, Linköping University. Fall 2025.
  Class size and level: 152 undergraduate students
  My roles: course leader, examiner, sole lecturer

- **Databases and Information Security for Bioinformatics**, Linköping University. Fall 2025.
  Class size and level: 32 undergraduate students
  My roles: course leader, examiner, lecturer of 7 lectures

- **Big Data Analytics**, Linköping University. Spring 2025.
  Class size and level: 83 undergraduate students
  My role: course leader, examiner, lecturer of 2 lectures

- **Database Technology**, Linköping University. Spring 2025.
  Class size and level: 198 undergraduate students
  My roles: course leader, examiner, sole lecturer

– **Database Technology**, Linköping University. Fall 2024.
  Class size and level: 144 undergraduate students
  My roles: course leader, examiner, sole lecturer

– **Databases and Information Security for Bioinformatics**, Linköping University. Fall 2024.
  Class size and level: 36 undergraduate students
  My roles: course leader, examiner, lecturer of 7 lectures

– **Big Data Analytics**, Linköping University. Spring 2024.
  Class size and level: 90 undergraduate students
  My role: course leader, examiner, lecturer of 2 lectures

– **Database Technology**, Linköping University. Spring 2024.
  Class size and level: 189 undergraduate students
  My roles: course leader, examiner, sole lecturer

– **Database Technology**, Linköping University. Fall 2023.
  Class size and level: 197 undergraduate students
  My roles: course leader, examiner, sole lecturer

– **Databases and Information Security for Bioinformatics**, Linköping University. Fall 2023.
  Class size and level: 38 undergraduate students
  My roles: course leader, examiner, lecturer of 7 lectures

– **Big Data Analytics**, Linköping University. Spring 2023.
  Class size and level: 102 undergraduate students
  My role: course leader, examiner, lecturer of 2 lectures

– **Database Technology**, Linköping University. Spring 2023.
  Class size and level: 191 undergraduate students
  My roles: course leader, examiner, sole lecturer

– **Database Technology**, Linköping University. Fall 2022.
  Class size and level: 169 undergraduate students
  My roles: course leader, examiner, sole lecturer

– **Database Technology**, Linköping University. Spring 2022.
  Class size and level: 216 undergraduate students
  My roles: course leader, examiner, sole lecturer

– **Databases and Information Security for Bioinformatics**, Linköping University. Spring 2022.
  Class size and level: 36 undergraduate students
  My roles: course leader, examiner, lecturer of 7 lectures

– **Big Data Analytics**, Linköping University. Spring 2022.
  Class size and level: 121 undergraduate students
  My role: course leader, examiner, lecturer of 2 lectures

– **Database Technology**, Linköping University. Fall 2021.
  Class size and level: 170 undergraduate students
  My roles: course leader, examiner, sole lecturer

– **Database Technology**, Linköping University. Spring 2021.
  Class size and level: 215 undergraduate students
  My roles: course leader, examiner, sole lecturer

– **Databases and Information Security for Bioinformatics**, Linköping University. Spring 2021.
  Class size and level: 42 undergraduate students
  My roles: course leader, examiner, lecturer of 7 lectures

- **Big Data Analytics**, Linköping University. Spring 2021.
  Class size and level: 103 undergraduate students
  My role: course leader, examiner, lecturer of 2 lectures

- **Database Technology**, Linköping University. Fall 2020.
  Class size and level: 156 undergraduate students
  My roles: course leader, examiner, sole lecturer

- **Semantic Web Technologies**, Linköping University. Fall 2020.
  Class size and level: 10 graduate students
  My roles: course leader, examiner, lecturer

- **Advanced Data Models and Databases**, Linköping University. Fall 2020.
  Class size and level: 25 undergraduate students
  My role: lecturer of 4 lectures

- **Database Technology**, Linköping University. Spring 2020.
  Class size and level: 217 undergraduate students
  My roles: course leader, examiner, sole lecturer

- **Big Data Analytics**, Linköping University. Spring 2020.
  Class size and level: 118 undergraduate students
  My role: course leader, examiner, lecturer of 2 lectures

- **Information Security**, Linköping University. Spring 2020.
  Class size and level: 30 undergraduate students
  My role: lecturer of 2 lectures

- **Database Technology**, Linköping University. Fall 2019.
  Class size and level: 209 undergraduate students
  My roles: course leader, examiner, sole lecturer

- **Advanced Data Models and Databases**, Linköping University. Fall 2019.
  Class size and level: 15 undergraduate and graduate students
  My role: lecturer of 4 lectures

- **Database Technology**, Linköping University. Spring 2019.
  Class size and level: 240 undergraduate students
  My roles: course leader, examiner, sole lecturer

- **Big Data Analytics**, Linköping University. Spring 2019.
  Class size and level: 105 undergraduate students
  My role: lecturer of 2 lectures

- **Information Security**, Linköping University. Spring 2019.
  Class size and level: 30 undergraduate students
  My role: lecturer of 2 lectures

- **Database Technology**, Linköping University. Fall 2018.
  Class size and level: 133 undergraduate students
  My roles: course leader, examiner, sole lecturer

- **Advanced Data Models and Databases**, Linköping University. Fall 2018.
  Class size and level: 15 undergraduate and graduate students
  My role: lecturer of 4 lectures

- **Database Technology**, Linköping University. Spring 2018.
  Class size and level: 230 undergraduate students
  My roles: course leader, examiner, sole lecturer

– **Semantic Web Technologies**, Linköping University. Spring 2018.
    Class size and level: 8 graduate students
    My roles: course leader, examiner, lecturer

– **Information Security**, Linköping University. Spring 2018.
    Class size and level: 30 undergraduate students
    My role: lecturer of 1 lecture

– **Database Technology**, Linköping University. Fall 2017.
    Class size and level: 124 undergraduate students
    My roles: course leader, examiner, sole lecturer

– **Advanced Data Models and Databases**, Linköping University. Fall 2017.
    Class size and level: 33 undergraduate and graduate students
    My role: lecturer of 3 lectures

– **Database Technology**, Linköping University. Spring 2017.
    Class size and level: 257 undergraduate students
    My roles: course leader, examiner, sole lecturer

– **Database Technology**, Linköping University. Fall 2016.
    Class size and level: 103 undergraduate students
    My roles: course leader, examiner, sole lecturer (with new lecture notes created by me), lab assistant

– **Advanced Data Models and Databases**, Linköping University. Fall 2016.
    Class size and level: 21 undergraduate and graduate students
    My role: lecturer of 3 lectures (developed by me)

– **Computer Applications in Business: Databases**, University of Waterloo. Winter 2014.
    Class size and level: 112 undergraduate students
    My roles: course leader, examiner, sole lecturer

– **Principles of Database Management and Use**, University of Waterloo. Winter 2013.
    Class size and level: 10 graduate students
    My roles: course leader, examiner, sole lecturer (with new lecture notes created by me)

SEMINARS

– **Web Search**, Humboldt-Universität zu Berlin. Summer 2009.
    Level: Diploma students; note: this seminar was developed by me

– **SPARQL – Querying the Web of Data**, Humboldt-Universität zu Berlin. Winter 2008/2009.
    Level: Diploma students; note: this seminar was developed by me

TUTORIALS

– **Foundations of Database Systems**, Humboldt-Universität zu Berlin.
    Terms: Summer 2011, Summer 2012
    Level: Bachelor students

– **Foundations of Programming**, Humboldt-Universität zu Berlin.
    Term: Summer 2010
    Level: Bachelor students

– **Introduction to Database Systems**, Humboldt-Universität zu Berlin.
    Terms: Winter 2007/2008, Winter 2008/2009, Winter 2009/2010, Winter 2010/2011
    Level: Diploma students

– **Implementation of Database Systems**, Humboldt-Universität zu Berlin.
    Terms: Summer 2008, Winter 2009/2010
    Level: Diploma students

SUPERVISION OF PHD STUDENTS AS MAIN SUPERVISOR

1. Adriana Concha, Department of Computer and Information Science, Linköping University,
   ongoing since October 2024.
2. Sijin Cheng *"Query Processing over Heterogeneous Federations of Graph Data"*
   Department of Computer and Information Science, Linköping University,
   successfully graduated in 2024.

SUPERVISION OF PHD STUDENTS AS CO-SUPERVISOR

1. Mina Abd Nikooie Pour, Department of Computer and Information Science, Linköping University,
   ongoing, my role: co-supervisor since September 2021.
2. Ying Li, Department of Computer and Information Science, Linköping University,
   ongoing, my role: co-supervisor since September 2021.
3. Huanyu Li *"Ontology-Driven Data Access and Data Integration with an Application in the Materials Design Domain"*
   Department of Computer and Information Science, Linköping University,
   successfully graduated in 2022, my role: co-supervisor since June 2017.
4. Robin Keskisärkkä *"Complex Event Processing under Uncertainty in RDF Stream Processing"*
   Department of Computer and Information Science, Linköping University,
   successfully graduated in 2021, my role: co-supervisor since December 2017.
5. Jenni Reuben Shanthamoorthy *"Go the Extra Mile for Accountability: Privacy Protection Measures for Emerging Information Management Systems"*
   Department of Computer Science, Karlstad University,
   successfully graduated in 2020, my role: co-supervisor since August 2017.
6. Günes Aluç *"Scalable, Adaptive and Distributed RDF Management"*
   Cheriton School of Computer Science, University of Waterloo,
   successfully graduated in 2015, my role: co-supervisor from June 2012 to November 2014.

SUPERVISION AND EXAMINATION OF MASTER, DIPLOMA, AND BACHELOR STUDENTS

1. Arvid Fredriksson *"Compression-Aware Query Processing for Time Series Databases"*
   Master's Thesis, Linköping University, ongoing, my roles: examiner, de-facto supervisor
2. Christoffer Näs and Elin Rydebrink *"History for Graph Databases"*
   Master's Thesis, Linköping University, ongoing, my roles: examiner, de-facto supervisor
3. Kent Thang *"Ensuring Schema Compliance in Neo4j: Post-Import Validation with Cypher Queries"*
   Master's Thesis, Linköping University, 2026, my roles: examiner, de-facto supervisor
4. Erik Voldstad *"NetKG: A Knowledge-Graph-Based Approach to Network Documentation"*
   Master's Thesis, Linköping University, 2025, my roles: examiner, de-facto supervisor
5. Oscar Hoffmann and Fredrik Ramberg *"A Comparative Study of Naïve RAG and GraphRAG"*
   Master's Thesis, Linköping University, 2025, my roles: examiner, de-facto supervisor
6. Philip Norberg and Petter Svensson *"Dynamic Auto-Scaling Solutions for DICOM Image Import in Azure"*
   Master's Thesis, Linköping University, 2025, my roles: examiner, de-facto supervisor

7. Paul Blåberg Kristoffersson and David Envall *"Enhancing Log Analysis through Data Storage and Visualization Tools"*
   Master's Thesis, Linköping University, 2024, my roles: examiner, de-facto supervisor

8. Ludvig Bolin and Emil Carlsson *"Configuration Optimization of Elasticsearch for Medical Documents"*
   Master's Thesis, Linköping University, 2024, my roles: examiner, de-facto supervisor

9. Angelica Ferlin and Linn Petersson *"Analysing, Designing, and Evaluating Database Schema Designs in Azure Data Explorer"*
   Master's Thesis, Linköping University, 2024, my roles: examiner, de-facto supervisor

10. Juliette Winneroth *"Using Vocabulary Mapping for Federated RDF Query Processing"*
    Master's Thesis, Linköping University, 2023, my roles: examiner

11. Emilia Renström and Alva Ringi *"A Declarative Approach to GraphQL Schema Wrapping"*
    Master's Thesis, Linköping University, 2023, my roles: examiner, de-facto supervisor

12. Sara Abrahamsson *"A Model to Evaluate Frontend Frameworks for Single Page Applications Written in JavaScript"*
    Master's Thesis, Linköping University, 2023, my roles: examiner, de-facto supervisor

13. Wiktor Karlsson *"Integrating GraphQL APIs into an RDF Federation"*
    Master's Thesis, Linköping University, 2023, my roles: examiner

14. Markus Gustafsson and Pontus Jarnemyr *"A Declarative Approach to GraphQL Schema Wrapping"*
    Master's Thesis, Linköping University, 2022, my roles: examiner, de-facto supervisor

15. Alexandra Goltsis *"A Performance Comparison of SQL and NoSQL Databases for 5G Radio Base Station Configuration"*
    Master's Thesis, Linköping University, 2022, my roles: examiner

16. Muhammad Ismail *"Evaluation of Generic GraphQL Servers for Accessing Legacy Databases"*
    Master's Thesis, Linköping University, 2022, my roles: examiner, de-facto supervisor.

17. Tim Hellberg and Filip Ström *"An Analysis of Cloud Services for an IoT Scenario"*
    Master's Thesis, Linköping University, 2021, my roles: examiner, de-facto supervisor.

18. Karl Söderbäck *"Organizing HLA Data for Improved Navigation and Searchability"*
    Master's Thesis, Linköping University, 2021, my roles: examiner, de-facto supervisor.

19. Linn Mattsson *"Implementing Facebook's GraphQL Interface on top of a Graph Database"*
    Master's Thesis, Linköping University, 2021, my roles: examiner, de-facto supervisor.

20. Markus Larsson and David Ångström *"Benchmarking GraphQL Server Generator Tools"*
    Bachelor Thesis, Linköping University, 2020, my roles: examiner, de-facto supervisor.

21. Lukas Lindqvist *"A Study of Existing Techniques for Building an Efficient GraphQL Server"*
    Master's Thesis, Linköping University, 2020, my roles: examiner, de-facto supervisor.

22. Robin Christensen *"An Analysis of Notions of Differential Privacy for Edge-Labeled Graphs"*
    Master's Thesis, Linköping University, 2020, my roles: examiner, de-facto supervisor.

23. Jonatan Pålsson *"Querying Federations of Eiffel Event Data Repositories"*
    Master's Thesis, Linköping University, 2020, my roles: examiner, de-facto supervisor.

24. Andreas Lundquist *"Combining Result Size Estimation and Query Execution for the GraphQL Query Language"*
    Master's Thesis, Linköping University, 2020, my roles: examiner, de-facto supervisor.

25. Rickard Hellenberg *"Implementing a Database Abstraction Layer and Evaluating Databases for the Eiffel Event Persistence Solution"*
    Master's Thesis, Linköping University, 2019, my roles: supervisor.

26. Jonas Lind and Kieron Soames *"Detecting Cycles in GraphQL Schemas"*
    Bachelor Thesis, Linköping University, 2019, my roles: examiner, de-facto supervisor.

27. Amir Hakim and Jesper Eriksson *"Format Conversions and Query Rewriting for RDF* and SPARQL*"*
Bachelor Thesis, Linköping University, 2018, my roles: examiner, de-facto supervisor.

28. Joakim Ericsson *"Object Migration in a Distributed, Heterogeneous SQL Database Network"*
Master's Thesis, Linköping University, 2018, my roles: examiner, de-facto supervisor.

29. Tim Andersson *"Result Size Calculation for Facebook's GraphQL Query Language"*
Bachelor Thesis, Linköping University, 2018, my roles: examiner, de-facto supervisor.

30. John Bengtson and Christoffer Nilsson *"Combining MongoDB and Elasticsearch to Achieve a Highly Available Search Engine"*
Master's Thesis, Linköping University, 2017, my roles: examiner, de-facto supervisor.

31. Gustav Stenhag *"Defining a power system's historical operating states – The design, implementation and use of a computer-based framework"*
Master's Thesis, Linköping University, 2017, my role: supervisor.

32. Niklas Blomqvist and Philip Johansson *"An Approach to Achieve DBMS Vendor Independence for Ides AB's Platform"*
Bachelor Thesis, Linköping University, 2017, my roles: examiner, de-facto supervisor.

33. Robert Habrman *"Creating a Database and a User Interface for Storing Test Data for Radar Equipment"*
Bachelor Thesis, Linköping University, 2017, my roles: examiner, de-facto supervisor.

34. Steffen Andre *"Querying the Web of Linked Data and Adhering to the Robots Exclusion Protocol"* (in German).
Diploma Thesis, Humboldt-Universität zu Berlin, 2014, my role: supervisor.

35. Annika Flemming. *"Quality Characteristics of Linked Data Publishing Data Sources"* (in German).
Diploma Thesis, Humboldt-Universität zu Berlin, 2011, my role: supervisor.

36. Thomas Riegmann. *"Provenance-Based Trust Assessment of Web Data"* (in German).
Diploma Thesis, Humboldt-Universität zu Berlin, 2010, my role: supervisor.

37. Jan Wehrs. *"Caching Strategies for an Efficient Query Processing in the Web of Data"* (in German).
Diploma Thesis, Humboldt-Universität zu Berlin, 2010, my role: supervisor.

38. Robert Nagel. *"Efficient Management of Trust Ratings for Web Data"* (in German).
Diploma Thesis, Humboldt-Universität zu Berlin, 2009, my role: supervisor.

39. Heiko Müller. *"Trust Management for a Semantic Tagging Service"* (in German).
Diploma Thesis, Humboldt-Universität zu Berlin, 2009, my role: supervisor.

40. Hermann Schwarz. *"Visualization of OWL-S Process Models"* (in German).
Semester Thesis, Humboldt-Universität zu Berlin, 2007, my role: supervisor.

41. Carmen Valero. *"Intelligent Search for Software and Supported Functionalities in DESWAP."*
Master's Thesis, Humboldt-Universität zu Berlin, 2007, my role: supervisor.

March 10, 2026