

## Curriculum Vitae

### Personal Data

Birthdate: March 29, 1982  
Birthplace: Meissen, Saxony, Germany  
Nationality: German  
Family status: married, 2 children



### Scientific Career

since 2015 Professor (W3) of Computer Science at the University of Bonn and Fraunhofer IAIS  
2013-2015 Head of AKSW Research Group, University of Leipzig ( $\approx$  40 researchers)  
2011-2012 Research visitor, University of Oxford  
2010-2016 Leader of "Machine Learning and Ontology Engineering" group, University of Leipzig ( $\approx$  10 reseachers)

### Scientific Education

2010 PhD awarded, topic: Learning OWL Class Expressions, grade "summa cum laude"  
2006-2010 PhD student at University of Leipzig  
2001-2006 Study of Computer Science at TU Dresden – Diploma with grade 1.1 (best: 1.0, worst: 5.0)  
2005-2006 Erasmus exchange student at University of Bristol (UK), 4 master courses (each with grade "A") in Machine Learning  
2000 Abitur, grade 1.2  
1998-2000 Werner-Heisenberg-Gymnasium Riesa with extended mathematical and scientific education  
1992-1998 St.-Afra-Gymnasium Meissen

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### *Short Overview*

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<b>Research Topics</b>	Linked (Open) Data, Artificial Intelligence/Machine Learning, Question Answering, Large-scale Data Analytics (Big Data)
Community projects	60+ open source projects 40 000+ software/dataset downloads per month
<b>Publications</b>	≈ 90 in international conferences and journals
Major pub. venues <sup>1</sup>	ISWC, WWW, AAI, JWS, SWJ, ESWC, MLJ, ECAI, JMLR
Citations (per year)	<b>10000</b> (1750 in 2016) according to Google Scholar
H-Index	<b>37</b> (34 for the past 5 years) according to Google Scholar
Best Paper Awards	<b>10</b>
<b>Funding</b> acquired	<b>5.8 Mio Euro</b> as (Co-)PI, ≈1.0 Mio Euro/year (past 5 years) EU H2020/FP7, DFG, BmBF, BmWI, DAAD, Industry
<b>Teaching</b> experience	10 years and ≈30 courses
Main teaching topics	Semantic Web, Knowledge Graph Analysis
PhDs/PostDocs	20+ supervised

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<sup>1</sup>ISWC (International Semantic Web Conference), WWW (World Wide Web Conference), AAI (Association for the Advancement of Artificial Intelligence Conference), ESWC (Extended Semantic Web Conference), JWS (Journal of Web Semantics), SWJ (Semantic Web Journal), MLJ (Machine Learning Journal), JMLR (Journal of Machine Learning Research), ECAI (European Conference on Artificial Intelligence)

## 1 Acquired Funding

The table below lists project acronym, topic area, role in the project acquisition (PI = overall principal investigator, Co-PI = leading the contributions for the own organisation), funding program and acquired funding (limited only to own organisation and actual funding, i.e. 90% funding rate and a budget of 1 Mio Euro will be shown as 900k Euro).

<b>Total Funding as (Co-)PI</b>			<b>5.8 Million Euro</b>
<b>QROWD</b> (Crowdsourcing Big Data)			
Co-PI	EU H2020	2016–2019	<b>753 250 Euro</b>
<b>SLIPO</b> (Geospatial Analytics)			
Co-PI	EU H2020	2016–2019	<b>833 500 Euro</b>
<b>Domain Specific Languages</b>			
PI	University of Bonn	2016–2018	<b>70 000 Euro</b>
<b>Cognitive Robotics</b>			
PI	University of Bonn	2016–2018	<b>70 000 Euro</b>
<b>Machine Learning for Certain Theoretical CS Problems</b>			
PI	University of Bonn	2016–2018	<b>140 000 Euro</b>
<b>Smoothed Analysis of ML Algorithms for Knowledge Graphs</b>			
PI	University of Bonn	2016–2018	<b>70 000 Euro</b>
<b>Tensor Factorisation and Visualization for Knowledge Graphs</b>			
PI	University of Bonn	2016–2018	<b>140 000 Euro</b>
<b>GEISER</b> (Geospatial Analytics)			
Co-PI	BmWi	2016–2019	<b>592 920 Euro</b>
<b>HOBBIT</b> (Big Data Benchmarking)			
Co-PI	EU H2020	2015–2018	<b>529 375 Euro</b>
<b>Big Data Europe</b> (Big Data for European Societal Challenges)			
Co-PI	EU H2020	2015–2018	<b>612 500 Euro</b>
<b>DFG Event Support Grant for Semantics 2014</b>			
PI	DFG	2015–2018	<b>20 000 Euro</b>
<b>GeoKnow</b> - Project Enlargement of GeoKnow			
PI	EU H2020	2012–2018	<b>70 000 Euro</b>
<b>GOLD</b> - Generierung von Ontologien aus Linked Data			
PI	DFG	2013–2014	<b>109 200 Euro</b>

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<b>Diachron</b> - Managing the Evolution and Preservation of the Data Web			
Co-PI	EU FP7	2013–2016	<b>531 300 Euro</b>
<b>GeoKnow</b> - Making the Web an Exploratory Place for Geospatial Data			
PI	EU FP7	2012–2015	<b>871 600 Euro</b>
<b>LinkingLOD</b> - Interlinking Knowledge Bases			
Contributor	DFG	2012–2014	<b>89 400 Euro</b>
<b>LOD2</b> - Creating Knowledge out of Interlinked Data			
Major contributor	EU FP7	2010–2014	<b>1 333 900 Euro</b>
<b>LATC</b> - Helping You to Publish and Consume Linked Data			
PI	EU FP7	2010–2012	<b>198 500 Euro</b>
PhD Grant Diego Esteves			
PI	Science without Borders	2014–2017	<b>54 000 Euro</b>
PhD Grant Mohamed Sherif			
PI	DAAD	2012–2015	<b>61 000 Euro</b>
PhD Grant Mofeed Hassan			
PI	DAAD	2012–2015	<b>61 000 Euro</b>
PhD Grant Amrapali Zaveri			
PI	DAAD	2011–2014	<b>48 000 Euro</b>
PhD Grant Mohamed Morsey			
PI	DAAD	2010–2013	<b>61 000 Euro</b>

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Abbreviations:

- ▷ PI = Principal Investigator (overall project leader)
- ▷ EU = European Union
- ▷ DFG = Deutsche Forschungsgemeinschaft (German Research Foundation)
- ▷ BMWi = German Federal Ministry for Economic Affairs and Energy
- ▷ IP = integrated project
- ▷ STREP = Small and medium-scale focused research project
- ▷ SA = support action.

## 2 Awards

### 2.1 Paper Awards

- ▷ International Semantic Web Conference (2016), Best Resource Paper Award for “LODStats: The Data Web Census Dataset” with I. Ermilov, M. Martin and S. Auer
- ▷ Semantic Web Journal Outstanding (Best Paper of the Year) Award (2014) for “DBpedia - A Large-scale, Multilingual Knowledge Base Extracted from Wikipedia” with R. Isele, M. Jakob, A. Jentzsch, D. Kontokostas, P. Mendes, S. Hellmann, M. Morsey, P. van Kleef, S. Auer, C. Bizer
- ▷ Extended Semantic Web Conference (2014) 7-Years Most Influential Paper Award for “What have Innsbruck and Leipzig in common? Extracting Semantic from Wiki Content” with S. Auer
- ▷ Extended Semantic Web Conference (2014) Best Student Paper Award for “Hybrid Acquisition of Temporal Scopes for RDF Data” with A. Rula, M. Palmonari, A. Ngonga, D. Gerber, L. Bühmann
- ▷ WASABI (2014) Best Workshop Paper Award and Extended Semantic Web Conference “Best of Workshops” Award for “CROCUS: Cluster-based ontology data cleansing” with D. Cherix, R. Usbeck, A. Both
- ▷ Outstanding Paper Award Winner at the Literati Network Awards for Excellence (2013) for “DBpedia and the Live Extraction of Structured Data from Wikipedia” with M. Morsey, S. Auer, C. Stadler, S. Hellmann
- ▷ KESW Best System Description Paper at the Knowledge Engineering and Semantic Web Conference (2013) for “Linked Open Data Statistics: Collection and Exploitation” with I. Ermilov, M. Martin, S. Auer
- ▷ International Semantic Web Conference Best Research Paper Award (2011) for “DBpedia SPARQL Benchmark” with M. Morsey, S. Auer and A.-C. Ngonga Ngomo
- ▷ Journal of Web Semantics Most Cited Paper (2006-2010) Award for “DBpedia - A Crystallization Point for the Web of Data” with C. Bizer, G. Kobilarov, S. Auer, C. Becker, R. Cyganiak, S. Hellmann
- ▷ Best Student Paper Award at the International Conference on Inductive Logic Programming (ILP) 2007 for “A Refinement Operator Based Learning Algorithm for the  $\mathcal{ALC}$  Description Logic” and “Foundations of Refinement Operators for Description Logics” (\$1500 price) with P. Hitzler

## 2.2 Other Awards

- ▷ The META Seal of Recognition 2015 for DBpedia (see <http://www.meta-net.eu/meta-seal>)
- ▷ Runner up in the ISWC 2009 Semantic Web challenge for LinkedGeoData (with S. Auer and C. Stadler)
- ▷ DBpedia selected by ReadWriteWeb as top 10 Semantic Web product 2009
- ▷ Nomination for the 2008 award of the Andrew W. Mellon foundation for DBpedia
- ▷ Many prizes in national math olympics on regional, state and country level 1992-2000

## 3 Publications

Criterion	Value
citation count	10000
max. citations per year	1750
h-index	37
i10-index	66
#publications	151
#publications in conferences or journals	94
#publications in top conferences or journals	40
#first author publications	33
#first author publications in conferences or journals	18
#first author publications in top conferences or journals	9
#supervised student first author publications	60
#supervised student first author pub. in conferences or journals	38
#supervised student first author pub. in top conferences or journals	13
#best paper awards	10

The table shows publication statistics with citations according to Google Scholar<sup>1</sup>. The following venues were counted as top conferences and journals: Machine Learning Journal, Journal of Machine Learning Research, Journal of Web Semantics, Semantic Web Journal, International Semantic Web Conference, AAAI Conference, World Wide Web Conference. Supervised student publications are those publications in which one of my PhD, master or bachelor students is first author, supervised by me and I am one of the other authors.

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<sup>1</sup><http://scholar.google.com/citations?user=sEaQ5rgAAAAJ>

### 3.1 Books

- [1] J. Lehmann. *Learning OWL Class Expressions*, volume 6 of *Studies on the Semantic Web*. AKA Heidelberg, 2010. ISBN 978-3-89838-336-3.2010.

### 3.2 Edited Books

- [2] J. Lehmann and J. Völker, editors. *Perspectives On Ontology Learning*. AKA Heidelberg, 2014.

### 3.3 Journal Publications

- [3] M. Acosta, A. J. Zaveri, E. Simperl, D. Kontokostas, F. Flöck, and J. Lehmann. Detecting linked data quality issues via crowdsourcing: A DBpedia study. *Semantic Web Journal*, 2016.
- [4] S. Athanasiou, D. Hladky, G. Giannopoulos, A. Garcia-Rojas, and J. Lehmann. GeoKnow: Making the web an exploratory place for geospatial knowledge. *European Research Consortium in Informatics and Mathematics News*, 2014.
- [5] S. Auer and J. Lehmann. Making the web a data washing machine - creating knowledge out of interlinked data. *Semantic Web Journal*, 1(1-2):97–104, 2010.
- [6] S. Auer, J. Lehmann, A.-C. N. Ngomo, C. Stadler, and J. Unbehauen. Extraktion, mapping und verlinkung von daten im web. *Datenbank-Spektrum*, 13:77–87, 2013.
- [7] L. Bühmann, J. Lehmann, and P. Westphal. DL-learner—a framework for inductive learning on the semantic web. *Journal of Web Semantics*, 39:15 – 24, 2016.
- [8] C. Dirschl, K. Eck, and J. Lehmann. Supporting the data lifecycle at a global publisher using the linked data stack. *European Research Consortium in Informatics and Mathematics News*, 2014.
- [9] D. Gerber, D. Esteves, J. Lehmann, L. Bühmann, R. Usbeck, A.-C. N. Ngomo, and R. Speck. Defacto - temporal and multilingual deep fact validation. *Journal of Web Semantics*, pages 85–101, 2015.
- [10] S. Hellmann, J. Lehmann, and S. Auer. Learning of OWL class descriptions on very large knowledge bases. *International Journal On Semantic Web and Information Systems*, 5(2):25–48, 2009.
- [11] K. Höffner, M. Martin, and J. Lehmann. Linkedspending: Openspending becomes linked open data. *Semantic Web Journal*, 2015.

- [12] K. Höffner, S. Walter, E. Marx, R. Usbeck, J. Lehmann, and A.-C. N. Ngomo. Survey on challenges of question answering in the semantic web. *Semantic Web Journal*, 2016.
- [13] A. Ismayilov, D. Kontokostas, S. Auer, J. Lehmann, and S. Hellmann. Wikidata through the eyes of DBpedia. *Semantic Web Journal*, pages 1–11, 2017.
- [14] J. Lehmann. DL-learner: Learning concepts in description logics. *Journal of Machine Learning Research*, 10:2639–2642, 2009.
- [15] J. Lehmann, S. Auer, L. Bühmann, and S. T. (geb. Dietzold). Class expression learning for ontology engineering. *Journal of Web Semantics*, 9(1):71–81, 2011.
- [16] J. Lehmann, S. Bader, and P. Hitzler. Extracting reduced logic programs from artificial neural networks. *Applied Intelligence*, 3:249–266, 2008.
- [17] J. Lehmann, C. Bizer, G. Kobilarov, S. Auer, C. Becker, R. Cyganiak, and S. Hellmann. DBpedia - a crystallization point for the web of data. *Journal of Web Semantics*, 7(3):154–165, 2009. Journal of Web Semantics Award (Most Cited Article 2006-2010).
- [18] J. Lehmann and O. Corcho. 2nd special issue on linked dataset descriptions. *Semantic Web Journal*, 2015.
- [19] J. Lehmann and P. Hitzler. Concept learning in description logics using refinement operators. *Machine Learning*, 78:203–250, 2010.
- [20] J. Lehmann, K. Höffner, S. Prätör, S. Lehmann, A.-C. N. Ngomo, A. Garcia-Rojas, and S. Athanasiou. GeoKnow: Geo-anwendungen im daten-web. *gis.Business*, 5:48–51, 2013.
- [21] J. Lehmann, R. Isele, M. Jakob, A. Jentzsch, D. Kontokostas, P. Mendes, S. Hellmann, M. Morsey, P. van Kleef, S. Auer, and C. Bizer. DBpedia - a large-scale, multilingual knowledge base extracted from wikipedia. *Semantic Web Journal*, 2014.
- [22] M. Martin, C. Stadler, P. Frischmuth, and J. Lehmann. Increasing the financial transparency of european commission project funding. *Semantic Web Journal*, 2014.
- [23] M. Morsey, J. Lehmann, S. Auer, C. Stadler, and S. Hellmann. DBpedia and the live extraction of structured data from wikipedia. *Program: electronic library and information systems*, 46(2):157–181, 2012. Outstanding Paper Award Winner at the Literati Network Awards for Excellence.
- [24] C. Stadler, J. Lehmann, K. Höffner, and S. Auer. LinkedGeoData: A core for a web of spatial open data. *Semantic Web Journal*, 3(4):333–354, 2012.



- [25] A. J. Zaveri, J. Lehmann, S. Auer, M. Hassan, M. Sherif, and M. Martin. Publishing and interlinking the global health observatory dataset. *Semantic Web Journal*, 2013.
- [26] A. J. Zaveri, A. Rula, A. Maurino, R. Pietrobon, J. Lehmann, and S. Auer. Quality assessment for linked data: A survey. *Semantic Web Journal*, 2015.

### 3.4 Edited Conference Proceedings

- [27] H. Sack, A. Filipowska, J. Lehmann, and S. Hellmann, editors. *Proceedings of 10th International Conference on Semantic Systems, SEMANTiCS, September 4-5, 2014*. ACM, 2014.
- [28] H. Sack, A. Filipowska, J. Lehmann, and S. Hellmann, editors. *Proceedings of the Poster & Demos Track of the 10th International Conference on Semantic Systems, SEMANTiCS, September 4-5, 2014*. CEUR-WS.org, 2014.

### 3.5 Conference Publications

- [29] M. Acosta, A. J. Zaveri, E. Simperl, D. Kontokostas, S. Auer, and J. Lehmann. Crowdsourcing linked data quality assessment. In *12th International Semantic Web Conference, 21-25 October 2013, Sydney, Australia*. Springer, 2013.
- [30] S. Auer, S. Bin, A. Versteden, E. Pauwels, A. Charalambidis, S. Konstantopoulos, J. Lehmann, H. Jabeen, I. Ermilov, G. Sejdiu, A. Ikonomopoulos, S. Andronopoulos, M. Vlachogiannis, C. Pappas, A. Davettas, I. A. Klampanos, E. Grigoropoulos, V. Karkaletsis, V. de Boer, R. Siebes, M. N. Mami, S. Albani, M. Lazzarini, P. Nunes, E. Angiuli, N. Pittaras, G. Giannakopoulos, G. Argyriou, G. Stamoulis, G. Papadakis, M. Koubarakis, P. Karampiperis, A.-C. N. Ngomo, and M.-E. Vidal. The bigdataeurope platform - supporting the variety dimension of big data. In *Proceedings of the 17th International Conference on Web Engineering (ICWE)*, Lecture Notes in Computer Science. Springer, 2017.
- [31] S. Auer, C. Bizer, G. Kobilarov, J. Lehmann, R. Cyganiak, and Z. Ives. DBpedia: A nucleus for a web of open data. In *Proceedings of the 6th International Semantic Web Conference (ISWC)*, volume 4825 of *Lecture Notes in Computer Science*, pages 722–735. Springer, 2008.
- [32] S. Auer, L. Bühmann, J. Lehmann, M. Hausenblas, S. T. (geb. Dietzold), B. van Nuffelen, P. Mendes, C. Dirschl, R. Isele, and H. Williams. Managing the life-cycle of linked data with the lod2 stack. In *Proceedings of the 11st International Semantic Web Conference (ISWC)*. Springer, 2012.

- [33] S. Auer, S. T. (geb. Dietzold), J. Lehmann, S. Hellmann, and D. Aumüller. Triplify - lightweight linked data publication from relational databases. In *Proceedings of the 18th World Wide Web Conference (WWW)*, pages 621–630. ACM, 2009.
- [34] S. Auer and J. Lehmann. What have innsbruck and leipzig in common? extracting semantic from wiki content. In E. Franconi, M. Kifer, and W. May, editors, *Proceedings of the 4th European Semantic Web Conference (ESWC)*, volume 4519 of *Lecture Notes in Computer Science*, pages 503–517. Springer, 2007. 7-Years Most Influential Paper Award.
- [35] S. Auer, J. Lehmann, and S. Hellmann. LinkedGeoData - adding a spatial dimension to the web of data. In *Proc. of 7th International Semantic Web Conference ISWC*, volume 5823 of *Lecture Notes in Computer Science*, pages 731–746. Springer, 2009.
- [36] S. Auer, M. Weidl, J. Lehmann, A. J. Zaveri, and K.-S. Choi. I18n of semantic web applications. In *Proceedings of the 9th International Semantic Web Conference*, *Lecture Notes in Computer Science*. Springer, 2010.
- [37] S. Bin, L. Bühmann, J. Lehmann, and A.-C. N. Ngomo. Towards sparql-based induction for large-scale rdf data sets. In G. A. Kaminka, M. Fox, P. Bouquet, E. Hüllermeier, V. Dignum, F. Dignum, and F. van Harmelen, editors, *Proceedings of the 22nd European Conference on Artificial Intelligence (ECAI)*, volume 285, pages 1551–1552, 2016.
- [38] L. Bühmann, D. Fleischhacker, J. Lehmann, A. Melo, and J. Völker. Inductive lexical learning of class expressions. In K. Janowicz, S. Schlobach, P. Lambrix, and E. Hyvönen, editors, *Proceedings of the 19th International Conference on Knowledge Engineering and Knowledge Management (EKAW)*, volume 8876. Springer, 2014.
- [39] L. Bühmann and J. Lehmann. Universal OWL axiom enrichment for large knowledge bases. In *Proceedings of the 18th International Conference on Knowledge Engineering and Knowledge Management (EKAW)*. Springer, 2012.
- [40] L. Bühmann and J. Lehmann. Pattern based knowledge base enrichment. In *12th International Semantic Web Conference, 21-25 October 2013, Sydney, Australia*. Springer, 2013.
- [41] D. Cherix, S. Hellmann, and J. Lehmann. Improving the performance of a sparql component for semantic web applications. In *Proceedings of the 2nd Joint International Semantic Technology Conference (JIST)*. Springer, 2012.
- [42] J. Demter, S. Auer, M. Martin, and J. Lehmann. Lodstats - an extensible framework for high-performance dataset analytics. In *Proceedings of the EKAW 2012*. Springer, 2012.

- [43] A. Dimou, D. Kontokostas, M. Freudenberg, R. Verborgh, J. Lehmann, E. Mannens, S. Hellmann, and R. V. de Walle. Assessing and refining mappings to rdf to improve dataset quality. In *Proceedings of the 14th International Semantic Web Conference*, LNCS. Springer, 2015.
- [44] A. Dimou, D. Kontokostas, M. Freudenberg, R. Verborgh, J. Lehmann, E. Mannens, S. Hellmann, and R. V. de Walle. Test-driven assessment of r2rml mappings to improve dataset quality. In S. Villata, J. Z. Pan, and M. Dragoni, editors, *The 14th International Semantic Web Conference, Posters & Demonstrations Track*, volume 1486. CEUR-WS.org, 2015.
- [45] M. Dubey, S. Dasgupta, A. Sharma, K. Höffner, and J. Lehmann. Asknow: A framework for natural language query formalization in sparql. In *Proc. of the Extended Semantic Web Conference 2016*. Springer, 2016.
- [46] I. Ermilov, J. Lehmann, M. Martin, and S. Auer. Lodstats: The data web census dataset. In *Proceedings of the 15th International Semantic Web Conference (ISWC)*. Springer, 2016. Best Resource Paper Award.
- [47] I. Ermilov, M. Martin, J. Lehmann, and S. Auer. Linked open data statistics: Collection and exploitation. In *Proceedings of the 4th Conference on Knowledge Engineering and Semantic Web (KESW)*. Springer, 2013. Best System Description Award.
- [48] D. Esteves, P. Mendes, D. Moussallem, J. C. Duarte, A. J. Zaveri, J. Lehmann, C. B. Neto, I. Costa, and C. Cavalcanti. Mex interfaces: Automating machine learning metadata generation. In *12th International Conference on Semantic Systems (SEMANTiCS 2016), 12-15 September 2016, Leipzig, Germany*. ACM, 2016.
- [49] D. Esteves, D. Moussallem, C. B. Neto, T. Soru, R. Usbeck, M. Ackermann, and J. Lehmann. Mex vocabulary: A lightweight interchange format for machine learning experiments. In *SEMANTiCS 2015*, pages 169–176. ACM, 2015.
- [50] M. Fossati, D. Kontokostas, and J. Lehmann. Unsupervised learning of an extensive and usable taxonomy for DBpedia. In *Proceedings of the 11th International Conference on Semantic Systems*, pages 177–184. ACM, 2015.
- [51] C. Guéret, P. Groth, C. Stadler, and J. Lehmann. Assessing linked data mappings using network measures. In *Proceedings of the 9th Extended Semantic Web Conference (ESWC)*, volume 7295 of *Lecture Notes in Computer Science*. Springer, 2012.
- [52] U. U. Hassan, E. Curry, A. J. Zaveri, E. Marx, and J. Lehmann. Acryliq: Leveraging DBpedia for adaptive crowdsourcing in linked data quality assessment. In *20th International Conference on Knowledge Engineering and Knowledge Management*

- (EKAW), November 19-23, 2016, Bologna, Italy, Lecture Notes in Computer Science. Springer, 2016.
- [53] P. Heim, S. Hellmann, J. Lehmann, S. Lohmann, and T. Stegemann. Relfinder: Revealing relationships in rdf knowledge bases. In *Proceedings of the 3rd International Conference on Semantic and Media Technologies*, volume 5887 of *Lecture Notes in Computer Science*, pages 182–187. Springer, 2009.
- [54] S. Hellmann, J. Lehmann, and S. Auer. Linked-data aware uri schemes for referencing text fragments. In *Proceedings of EKAW 2012*. Springer, 2012.
- [55] S. Hellmann, J. Lehmann, S. Auer, and M. Brümmer. Integrating nlp using linked data. In *Proceedings of the 12nd International Semantic Web Conference (ISWC)*. Springer, 2013.
- [56] S. Hellmann, J. Lehmann, J. Unbehauen, C. Stadler, T. N. Lam, and M. Strohmaier. Navigation-induced knowledge engineering by example. In *Proceedings of the 2nd Joint International Semantic Technology Conference (JIST)*. Springer, 2012.
- [57] S. Hellmann, C. Stadler, J. Lehmann, and S. Auer. DBpedia live extraction. In *Proceedings of the 8th International Conference on Ontologies, DataBases, and Applications of Semantics (ODBASE)*, volume 5871 of *Lecture Notes in Computer Science*, page 1209–1223. Springer, 2009.
- [58] K. Höffner and J. Lehmann. Towards question answering on statistical linked data. In *Proceedings of the 10th SEMANTiCs - Transfer, Engineering, Community (SEMANTiCs)*. ACM, 2014.
- [59] K. Höffner, J. Lehmann, and R. Usbeck. Cubeqa - question answering on rdf data cubes. In *Proceedings of the 15th International Semantic Web Conference (ISWC)*. Springer, 2016.
- [60] K. Höffner, C. Unger, L. Bühmann, J. Lehmann, A.-C. N. Ngomo, D. Gerber, and P. Cimiano. Tbsl question answering system demo. In *Proceedings of the 4th Conference on Knowledge Engineering and Semantic Web (KESW)*. Springer, 2013.
- [61] J. Iglesias and J. Lehmann. Towards integrating fuzzy logic capabilities into an ontology-based inductive logic programming framework. In *Proc. of the 11th International Conference on Intelligent Systems Design and Applications ISDA*, 2011.
- [62] G. Kobilarov, C. Bizer, S. Auer, and J. Lehmann. DBpedia - a linked data hub and data source for web applications and enterprises. In *Proceedings of Developers Track of 18th International World Wide Web Conference*, 2009.

- [63] D. Kontokostas, M. Brümmer, S. Hellmann, J. Lehmann, and L. Ioannidis. Nlp data cleansing based on linguistic ontology constraints. In *Proc. of the Extended Semantic Web Conference 2014*, Lecture Notes in Computer Science. Springer, 2014.
- [64] D. Kontokostas, C. Mader, C. Dirschl, K. Eck, M. Leuthold, J. Lehmann, and S. Hellmann. Semantically enhanced quality assurance in the jurion business use case. In *Proceedings of the 13th Extended Semantic Web Conference (ESWC)*. Springer, 2016.
- [65] D. Kontokostas, P. Westphal, S. Auer, S. Hellmann, J. Lehmann, R. Cornelissen, and A. J. Zaveri. Test-driven evaluation of linked data quality. In *Proceedings of the 23th World Wide Web Conference (WWW)*. ACM, 2014.
- [66] D. Kontokostas, A. J. Zaveri, S. Auer, and J. Lehmann. Triplecheckmate: A tool for crowdsourcing the quality assessment of linked data. In *Proceedings of the 4th Conference on Knowledge Engineering and Semantic Web (KESW)*. Springer, 2013.
- [67] J. Lehmann. Hybrid learning of ontology classes. In *Proceedings of the 5th International Conference on Machine Learning and Data Mining (MLDM)*, volume 4571 of *Lecture Notes in Computer Science*, pages 883–898. Springer, 2007.
- [68] J. Lehmann and L. Bühmann. ORE - a tool for repairing and enriching knowledge bases. In *Proceedings of the 9th International Semantic Web Conference*, Lecture Notes in Computer Science. Springer, 2010.
- [69] J. Lehmann and L. Bühmann. Autosparql: Let users query your knowledge base. In *Proceedings of ESWC 2011*, volume 6643 of *Lecture Notes in Computer Science*, pages 63–79, 2011.
- [70] J. Lehmann, T. Furche, G. Grasso, A.-C. N. Ngomo, C. Schallhart, A. Sellers, C. Unger, L. Bühmann, D. Gerber, and K. Höffner. Deqa: Deep web extraction for question answering. In *Proceedings of the 11st International Semantic Web Conference (ISWC)*. Springer, 2012.
- [71] J. Lehmann, D. Gerber, M. Morsey, and A.-C. N. Ngomo. Defacto - deep fact validation. In *Proceedings of the 11st International Semantic Web Conference (ISWC)*. Springer, 2012.
- [72] J. Lehmann and C. Haase. Ideal downward refinement in the el description logic. In *Proceedings of the 19th International Conference on Inductive Logic Programming*, volume 5989 of *Lecture Notes in Computer Science*, pages 73–87. Springer, 2009.
- [73] J. Lehmann and P. Hitzler. Foundations of refinement operators for description logics. In H. Blockeel, J. W. Shavlik, and P. Tadepalli, editors, *Proceedings of the*

- 17th International Conference on Inductive Logic Programming (ILP)*, volume 4894 of *Lecture Notes in Computer Science*, pages 161–174. Springer, 2008. Best Student Paper Award (1500 dollar sponsored by the Machine Learning Journal).
- [74] J. Lehmann and P. Hitzler. A refinement operator based learning algorithm for the ALC description logic. In H. Blockeel, J. W. Shavlik, and P. Tadepalli, editors, *Proceedings of the 17th International Conference on Inductive Logic Programming (ILP)*, volume 4894 of *Lecture Notes in Computer Science*, pages 147–160. Springer, 2008. Best Student Paper Award (1500 dollar sponsored by the Machine Learning Journal).
- [75] J. Lehmann, Q. Nguyen, and T. Ermilov. Can we create better links by playing games? In *Proceedings of the 7th IEEE International Conference on Semantic Computing (ICSC)*. Springer, 2013.
- [76] J. Lehmann, J. Schüppel, and S. Auer. Discovering unknown connections - the DBpedia relationship finder. In *Proceedings of the 1st SABRE Conference on Social Semantic Web (CSSW)*, 2007.
- [77] D. Lukovnikov, A. Fischer, S. Auer, and J. Lehmann. Neural network-based question answering over knowledge graphs on word and character level. In *Proceedings of the 26th international conference on World Wide Web*. ACM, 2017.
- [78] D. Lukovnikov, C. Stadler, and J. Lehmann. Ld viewer-linked data presentation framework. In *Proceedings of the 10th SEMANTiCs - Transfer, Engineering, Community (SEMANTiCs)*. ACM, 2014.
- [79] E. Marx, K. Höffner, S. Shekarpour, A.-C. N. Ngomo, J. Lehmann, and S. Auer. Exploring term networks for semantic search over rdf knowledge graphs. In E. Garoufallou, I. S. Coll, A. Stellato, and J. Greenberg, editors, *Proceedings of the 10th International Conference on Metadata and Semantics Research (MTSR)*, 2016.
- [80] E. Marx, S. Shekarpour, T. Soru, A. M. Brasoveanu, M. Saleem, C. B. Neto, A. Weichselbraun, J. Lehmann, A.-C. N. Ngomo, and S. Auer. Torpedo: Improving the state-of-the-art rdf dataset slicing. In *11th IEEE International Conference on Semantic Computing, Jan 30-Feb 1, 2017, San Diego, California, USA*, 2017.
- [81] E. Marx, R. Usbeck, A.-C. N. Ngomo, K. Höffner, J. Lehmann, and S. Auer. Towards an open question answering architecture. In *Proceedings of the 10th SEMANTiCs - Transfer, Engineering, Community (SEMANTiCs)*, 2014.
- [82] M. Morsey, J. Lehmann, S. Auer, and A.-C. N. Ngomo. DBpedia sparql benchmark – performance assessment with real queries on real data. In *Proc. of the International Semantic Web Conference*. Springer, 2011. Best Paper Award.

- [83] M. Morsey, J. Lehmann, S. Auer, and A.-C. N. Ngomo. Usage-centric benchmarking of rdf triple stores. In *Proceedings of the 26th Association for the Advancement of Artificial Intelligence Conference (AAAI)*. AAAI Press, 2012.
- [84] A.-C. N. Ngomo, L. Bühmann, C. Unger, J. Lehmann, and D. Gerber. Sorry, i don't speak sparql - translating sparql queries into natural language. In *Proceedings of the 22nd International Conference on World Wide Web (WWW)*. ACM, 2013.
- [85] A.-C. N. Ngomo, J. Lehmann, and M. Hassan. Transfer learning of link specifications. In *Proceedings of the 7th IEEE International Conference on Semantic Computing (ICSC)*. Springer, 2013.
- [86] S. Pokharel, M. Sherif, and J. Lehmann. Ontology based data access and integration for improving the effectiveness of farming in nepal. In *Proceedings of the 13th IEEE/WIC/ACM International Conference on Web Intelligence (WI)*. ACM, 2014.
- [87] T. Riechert, K. Lauenroth, and J. Lehmann. SwORE - softwiki ontology for requirements engineering. In S. Auer, C. Bizer, C. Müller, and A. Zhdanova, editors, *Proceedings of the 1st Conference on Social Semantic Web*, volume P-113 of *Lecture Notes in Informatics*, 2007.
- [88] T. Riechert, K. Lauenroth, J. Lehmann, and S. Auer. Towards semantic based requirements engineering. In *Proceedings of the 7th International Conference on Knowledge Management (I-KNOW)*, 2007.
- [89] G. Rizzo, N. Fanizzi, J. Lehmann, and L. Bühmann. Integrating new refinement operators in terminological decision trees learning. In *Proceedings of the 20th International Conference on Knowledge Engineering and Knowledge Management (EKAW)*, Lecture Notes in Computer Science, pages 511–526. Springer, 2016.
- [90] A. Rula, M. Palmonari, A.-C. N. Ngomo, D. Gerber, J. Lehmann, and L. Bühmann. Hybrid acquisition of temporal scopes for rdf data. In *Proc. of the Extended Semantic Web Conference 2014*, 2014. Best Student Paper Award.
- [91] S. Shekarpour, K. Höffner, J. Lehmann, and S. Auer. Keyword query expansion on linked data using linguistic and semantic features. In *Proceedings of the 7th IEEE International Conference on Semantic Computing (ICSC)*. Springer, 2013.
- [92] M. Sherif, S. Coelho, R. Usbeck, S. Hellmann, J. Lehmann, M. Brümmer, and A. Both. Nif4oggd - nlp interchange format for open german governmental data. In *Proceedings of the 9th Language Resources and Evaluation Conference (LREC)*, 2014.

- [93] M. Sherif, A.-C. N. Ngomo, and J. Lehmann. Automating rdf dataset transformation and enrichment. In *Proceedings of the 12nd Extended Semantic Web Conference (ESWC)*, pages 371–387. Springer, 2015.
- [94] M. Sherif, A.-C. N. Ngomo, and J. Lehmann. Wombat - a generalization approach for automatic link discovery. In *14th Extended Semantic Web Conference, Portoroz, Slovenia, 28th May - 1st June 2017*. Springer, 2017.
- [95] C. Unger, L. Bühmann, J. Lehmann, A.-C. N. Ngomo, P. Cimiano, and D. Gerber. Template-based question answering over rdf data. In *Proceedings of the 21st International World Wide Web Conference*, pages 639–648. ACM, 2012.
- [96] G. Vaidya, D. Kontokostas, M. Knuth, J. Lehmann, and S. Hellmann. DBpedia commons: Structured multimedia metadata from the wikimedia commons. In *Proceedings of the 14th International Semantic Web Conference (ISWC)*, pages 281–289. Springer, 2015.
- [97] A. J. Zaveri, D. Kontokostas, M. Sherif, L. Bühmann, M. Morsey, S. Auer, and J. Lehmann. User-driven quality evaluation of DBpedia. In *Proceedings of the 9th International Conference on Semantic Systems (I-Semantics)*. ACM, 2013.
- [98] A. J. Zaveri, R. Pietrobon, S. Auer, J. Lehmann, M. Martin, and T. Ermilov. Redd-observatory: Using the web of data for evaluating the research-disease disparity. In *Proceedings of the 10th International Conference on Web Intelligence (WI)*, 2011.

### 3.6 Edited Workshop Proceedings

- [99] M. Acosta, L. Aroyo, A. Bernstein, J. Lehmann, N. Noy, and E. Simperl, editors. *Proceedings of the 1st International Workshop on Crowdsourcing the Semantic Web*, volume 1030. CEUR-WS.org, 2013.
- [100] J. Völker, H. Paulheim, J. Lehmann, and M. Niepert, editors. *Proc. of the 1st Workshop on Knowledge Discovery and Data Mining Meets Linked Open Data (Know@LOD)*, volume 868. CEUR-WS.org, 2012.
- [101] J. Völker, H. Paulheim, J. Lehmann, M. Niepert, and H. Sack, editors. *Proc. of the 2nd Workshop on Knowledge Discovery and Data Mining Meets Linked Open Data (Know@LOD)*, volume 992. CEUR-WS.org, 2013.
- [102] J. Völker, H. Paulheim, J. Lehmann, H. Sack, and V. Svatek, editors. *Proceedings of the 3rd Knowledge Discovery and Data Mining Meets Linked Open Data Know@LOD Workshop in conjunction with the Extended Semantic Web Conference ESWC 2014*. CEUR-WS.org, 2014.



- [103] J. Völker, H. Paulheim, J. Lehmann, and V. Svatek, editors. *Proceedings of the 4th Knowledge Discovery and Data Mining Meets Linked Open Data (Know@LOD) Workshop in conjunction with the Extended Semantic Web Conference (ESWC) 2015.*, volume 1365. CEUR-WS.org, 2015.

### 3.7 Workshop Publications

- [104] D. Cherix, R. Usbeck, A. Both, and J. Lehmann. Crocus: Cluster-based ontology data cleansing. In *Proceedings of the 2nd International Workshop on Semantic Web Enterprise Adoption and Best Practice (WASABI)*, 2014. WASABI Best Workshop Paper and ESWC Best of Workshops Paper.
- [105] D. Cherix, R. Usbeck, A. Both, and J. Lehmann. Lessons learned—the case of crocus: Cluster-based ontology data cleansing. In *ESWC Best of Workshops Proceedings*. Springer, 2014.
- [106] A. Garcia-Rojas, S. Athanasiou, J. Lehmann, and D. Hladky. GeoKnow: Leveraging geospatial data in the web of data. In *Open Data on the Web Workshop*, 2013.
- [107] J. J. L. Grange, J. Lehmann, S. Athanasiou, A. Garcia-Rojas, G. Giannopoulos, D. Hladky, R. Isele, A.-C. N. Ngomo, M. Sherif, and C. Stadler. The GeoKnow generator: Managing geospatial data in the linked data web. In *Proceedings of the Linking Geospatial Data Workshop*, 2014.
- [108] O. Gunes, C. Schallhart, T. Furche, J. Lehmann, and A.-C. N. Ngomo. Eager: extending automatically gazetteers for entity recognition. In *Proceedings of the 3rd Workshop on the People’s Web Meets NLP: Collaboratively Constructed Semantic Resources and their Applications to NLP*, 2012.
- [109] M. Hassan, J. Lehmann, and A.-C. N. Ngomo. Interlinking: Performance assessment of user evaluation vs. supervised learning approaches. In *Proceedings of the 8th Workshop on Linked Data on the Web (LDOW2015), Florence, Italy*. CEUR-WS.org, 2015.
- [110] J. Lehmann, S. Auer, S. Capadisli, K. Janowicz, C. Bizer, T. Heath, A. Hogan, and T. Berners-Lee. Ldow2017: 10th workshop on linked data on the web. In *Proceedings of the 28th International Conference Companion on World Wide Web*. ACM, 2017.
- [111] J. Lehmann, S. Bader, and P. Hitzler. Extracting reduced logic programs from artificial neural networks. In *Proceedings of the IJCAI-05 Workshop on Neural-Symbolic Learning and Reasoning, NeSy’05*, 2005.

- [112] J. Lehmann and A.-C. N. Ngomo. The GeoKnow project. In *ESWC EU Project Networking Track*, 2014.
- [113] D. Lukovnikov, C. Stadler, D. Kontokostas, S. Hellmann, and J. Lehmann. DBpedia viewer - an integrative interface for DBpedia leveraging the DBpedia service ecosystem. In *Proc. of the Linked Data on the Web 2014 Workshop*, 2014.
- [114] E. Marx, A. J. Zaveri, M. Hassan, S. Rautenberg, J. Lehmann, A.-C. N. Ngomo, and G. Cheng. Dbtrends : Publishing and benchmarking rdf ranking functions. In *2nd International Workshop on Summarizing and Presenting Entities and Ontologies, co-located with the 13th Extended Semantic Web Conference*. CEUR-WS.org, 2016.
- [115] A.-C. N. Ngomo, J. Lehmann, S. Auer, and K. Höffner. Raven - active learning of link specifications. In *Proceedings of the Ontology Matching Workshop*, 2011.
- [116] T. Riechert, K. Lauenroth, and J. Lehmann. Semantisch unterstuetztes requirements engineering. In *Proceedings of the SABRE-07 SoftWiki Workshop*, 2007. extended german version of "Towards Semantic based Requirements Engineering".
- [117] M. Sherif, M. Hassan, T. Soru, A.-C. N. Ngomo, and J. Lehmann. Lion's den: Feeding the linklion. In *Proceedings of the 11th Workshop on Ontology Matching co-located with ISWC*. CEUR-WS.org, 2016.
- [118] C. Stadler and J. Lehmann. Jpa criteria queries over rdf data. In *Workshop on Querying the Web of Data co-located with the Extended Semantic Web Conference*, 2017.
- [119] C. Stadler, M. Martin, J. Lehmann, and S. Hellmann. Update strategies for DBpedia live. In *6th Workshop on Scripting and Development for the Semantic Web Colocated with ESWC*, 2010.
- [120] C. Stadler, J. Unbehauen, P. Westphal, M. Sherif, and J. Lehmann. Simplified rdb2rdf mapping. In *Proceedings of the 8th Workshop on Linked Data on the Web (LDOW2015), Florence, Italy*. CEUR-WS.org, 2015.
- [121] C. Stadler, P. Westphal, and J. Lehmann. Jassa - a javascript suite for sparql-based faceted search. In *Proceedings of the ISWC Developers Workshop 2014*. CEUR-WS.org, 2014.
- [122] A. J. Zaveri, K. Nowick, and J. Lehmann. Towards biomedical data integration for analyzing the evolution of cognition. In *Proceedings of Ontology and Data in Life Sciences Workshop ODLS, Lecture Notes in Informatics (LNI)*. GI, 2013.

### 3.8 Poster Publications

- [123] F. Badie, T. Soru, and J. Lehmann. A fuzzy knowledge representation model for student performance assessment. In *2014 IEEE 14th International Conference on Advanced Learning Technologies ICAIT*, 2014.
- [124] D. Esteves, D. Moussallem, C. B. Neto, J. Lehmann, C. Cavalcanti, and J. C. Duarte. Interoperable machine learning metadata using mex. In S. Villata, J. Z. Pan, and M. Dragoni, editors, *International Semantic Web Conference (Posters & Demos)*, volume 1486. CEUR-WS.org, 2015.
- [125] C. Guéret, P. Groth, C. Stadler, and J. Lehmann. Linked data quality assessment through network analysis. In *ISWC 2011 Posters and Demos*, 2011.
- [126] S. Hellmann, J. Lehmann, and S. Auer. Learning of OWL class descriptions on very large knowledge bases. In *7th International Semantic Web Conference (ISWC)*, 2008.
- [127] E. Marx, T. Soru, D. Esteves, A.-C. N. Ngomo, and J. Lehmann. An open question answering framework. In *The 14th International Semantic Web Conference, Posters & Demonstrations Track*. CEUR-WS.org, 2015.
- [128] R. Speck, D. Esteves, J. Lehmann, and A.-C. N. Ngomo. Defacto - a multilingual fact validation interface. In S. Villata, J. Z. Pan, and M. Dragoni, editors, *14th International Semantic Web Conference (ISWC 2015) Semantic Web Challenge*, 2015.

### 3.9 Demos

- [129] S. Auer, S. T. (geb. Dietzold), J. Lehmann, and T. Riechert. Ontowiki - a tool for social, semantic collaboration. In *Proceedings of the WWW-07 Workshop on Social and Collaborative Construction of Structured Knowledge (CKC)*, 2007.
- [130] S. Auer and J. Lehmann. LinkedGeoData - collaboratively created geo-information for the semantic web. 2009. Semantic Web Challenge, ISWC 2009.
- [131] A. Both, M. Wauer, A. Garcia-Rojas, D. Hladky, and J. Lehmann. GeoKnow generator workbench – an integrated tool supporting the linked data lifecycle for enterprise usage. In *Proc. of the 11th Conference on Semantic Systems - Posters and Demos*. ACM, 2015.
- [132] I. Ermilov, K. Höffner, J. Lehmann, and D. Mouromtsev. kore: Using linked data for openscience information integration. In *SEMANTiCS 2015*, 2015.

- [133] S. Hellmann, J. Lehmann, S. Auer, and M. Nitzschke. Nif combinator: Combining nlp tool output. Springer, 2012.
- [134] S. Hellmann, J. Unbehauen, and J. Lehmann. Hanne - a holistic application for navigational knowledge engineering. In *Proceedings of ISWC Posters&Demos*, 2010.
- [135] D. Kontokostas, P. Westphal, S. Auer, S. Hellmann, J. Lehmann, and R. Cornelissen. A test-driven framework for debugging the web of data. In *Proceedings of the 23rd international conference on World Wide Web*. ACM, 2014.
- [136] J. Lehmann and S. Knappe. DBpedia navigator. 2008. Semantic Web Challenge.
- [137] K. Lyko, K. Höffner, R. Speck, A.-C. N. Ngomo, and J. Lehmann. Saim - one step closer to zero-configuration link discovery. In *Proc. of the Extended Semantic Web Conference Posters & Demos*. Springer, 2013.
- [138] A.-C. N. Ngomo, L. Bühmann, C. Unger, J. Lehmann, and D. Gerber. Sparql2nl - verbalizing sparql queries. In *Proc. of WWW 2013 Demos*. ACM, 2013.
- [139] C. Stadler, N. Arndt, M. Martin, and J. Lehmann. Rdf editing on the web with rex. 2015.

### 3.10 Book Contributions

- [140] S. Auer, J. Lehmann, and C. Bizer. Semantische mashups auf basis vernetzter daten. In *Social Semantic Web*, volume 2 of *X.media press*, pages 259–286. Springer, 2009.
- [141] S. Auer, J. Lehmann, and A.-C. N. Ngomo. Introduction to linked data and its lifecycle on the web. In *Reasoning Web*. 2011.
- [142] S. Auer, J. Lehmann, A.-C. N. Ngomo, and A. J. Zaveri. Introduction to linked data and its lifecycle on the web. In *Reasoning Web*. 2013.
- [143] S. Hellmann, V. Bryl, L. Bühmann, M. Dojchinovski, D. Kontokostas, J. Lehmann, U. Milošević, P. Petrovski, V. Svatek, and M. Stanojevic. Knowledge base creation, enrichment and repair. In *Linked Open Data—Creating Knowledge Out of Interlinked Data*. 2014.
- [144] S. Hellmann, J. Lehmann, and S. Auer. Learning of OWL class expressions on very large knowledge bases and its applications. In *Semantic Services, Interoperability and Web Applications: Emerging Concepts*. IGI Global, 2011.
- [145] S. Hellmann, C. Stadler, and J. Lehmann. The german DBpedia: A sense repository for linking entities. In *Linked Data in Linguistics*. Springer, 2012.

- [146] P. Hitzler, J. Lehmann, and A. Polleres. Logics for the semantic web. In *Logic and Computation*, volume 9 of *Handbook of the History of Logic*. Elsevier, 2014.
- [147] J. Lehmann, S. Athanasiou, A. Both, A. Garcia-Rojas, G. Giannopoulos, D. Hladky, K. Höffner, J. J. L. Grange, A.-C. N. Ngomo, and M. Sherif. Managing geospatial linked data in the GeoKnow project. In *The Semantic Web in Earth and Space Science*, *Studies on the Semantic Web*, pages 51–78. IOS Press, 2015.
- [148] J. Lehmann and L. Bühmann. Linked data reasoning. In *Management und Bewirtschaftung vernetzter Unternehmensdaten mit Semantic Web-Technologien*. Springer, 2014.
- [149] J. Lehmann, N. Fanizzi, L. Bühmann, and C. d’Amato. Concept learning. In J. Lehmann and J. Völker, editors, *Perspectives on Ontology Learning*, pages 71–91. AKA Heidelberg, 2014.
- [150] J. Lehmann and J. Völker. An introduction to ontology learning. In J. Lehmann and J. Völker, editors, *Perspectives on Ontology Learning*, pages ix–xvi. AKA Heidelberg, 2014.
- [151] A.-C. N. Ngomo, S. Auer, J. Lehmann, and A. J. Zaveri. Introduction to linked data and its lifecycle on the web. In *Reasoning Web*. 2014.

### **3.11 Theses**

- [152] J. Lehmann. Concept learning in description logics. Master’s thesis, TU Dresden, 2006. Diploma Thesis in Computer Science, supervisors: Dr. habil. Pascal Hitzler, Prof. Steffen Hölldobler.
- [153] J. Lehmann. *Learning OWL Class Expressions*. PhD thesis, University of Leipzig, 2010. PhD in Computer Science, supervisors: Prof. Klaus-Peter Fähnrich, Dr. Sören Auer.

### **3.12 Technical Reports**

- [154] J. Lehmann, S. Athanasiou, A. Both, L. Bühmann, A. Garcia-Rojas, G. Giannopoulos, D. Hladky, K. Höffner, J. J. L. Grange, and A.-C. N. Ngomo. The GeoKnow handbook. Technical report, 2015.
- [155] J. Lehmann and C. Haase. Ideal downward refinement in the el description logic. Technical report, Universität of Leipzig, 2009.
- [156] J. Lehmann and P. Hitzler. Foundations of refinement operators for description logics. Technical report, Universität Leipzig, 2007. A slightly older, but extended version including proofs of the ILP 2007 article with the same name.

- [157] J. Lehmann and P. Hitzler. A refinement operator based learning algorithm for the ALC description logic. Technical report, Universität Leipzig, 2007. An extended version including proofs of the ILP 2007 article with the same title.
- [158] A.-C. N. Ngomo, J. Lehmann, S. Auer, and K. Höffner. Raven – towards zero-configuration link discovery. Technical report, University of Leipzig, 2012.
- [159] P. Westphal, C. Stadler, and J. Lehmann. Quality assurance of rdb2rdf mappings. Technical report, University of Leipzig, 2014.

### **3.13 Project Deliverables**

I (co-)authored more than 30 project deliverables.

## **4 Research Community Services**

### **4.1 Journal Editorial Boards**

- ▷ Semantic Web Journal, since 2010
- ▷ Journal of Information Technology Research, since 2008

### **4.2 General Chair**

- ▷ Computer Science Conference for University of Bonn Students (CSCUBS), 2016
- ▷ European Data Forum (EDF), 2015

### **4.3 Program Chair**

- ▷ European Data Forum (EDF), 2014
- ▷ SEMANTiCs - Transfer, Engineering, Community (SEMANTiCs), 2014

### **4.4 Sponsorship Chair**

- ▷ International Semantic Web Conference (ISWC), 2014

### **4.5 Track/Area Chair**

- ▷ Extended Semantic Web Conference (ESWC), 2016
- ▷ Extended Semantic Web Conference (ESWC), 2013
- ▷ Extended Semantic Web Conference (ESWC), 2011

### **4.6 Event Organisation**

- ▷ Indian-Summer School on Linked Data (ISSLOD), 2011
- ▷ Leipziger Semantic Web Tag (LSWT), 2011

### **4.7 Workshop Chair**

- ▷ Linked Data on the Web (LDOW), 2017
- ▷ International Workshop on Knowledge Discovery and Data Mining Meets Linked Open Data (Know@LOD), 2016
- ▷ International Workshop on Knowledge Discovery and Data Mining Meets Linked Open Data (Know@LOD), 2015

- ▷ Special session on: Open Data and Geographical Information System applications (ODaGIS), 2015
- ▷ International Workshop on Geospatial Linked Data (GeoLD), 2014
- ▷ International Workshop on Knowledge Discovery and Data Mining Meets Linked Open Data (Know@LOD), 2014
- ▷ Linked Data Europe (LDE), 2014
- ▷ International Workshop on Crowdsourcing the Semantic Web (CrowdSem), 2013
- ▷ International Workshop on Knowledge Discovery and Data Mining Meets Linked Open Data (Know@LOD), 2013
- ▷ International Workshop on Knowledge Discovery and Data Mining Meets Linked Open Data (Know@LOD), 2012

#### **4.8 Panel Member**

- ▷ Extended Semantic Web Conference (ESWC), 2011

#### **4.9 Research Proposal Reviewing**

- ▷ Reviewer for Österreichische Forschungsförderungsgesellschaft (FFG) 2016
- ▷ Reviewer for Österreichische Forschungsförderungsgesellschaft (FFG) 2015
- ▷ Reviewer for the European Science Foundation (ESF) in the Horizon2020 Program 2015
- ▷ Reviewer for the Netherlands Organisation for Scientific Research (NWO) 2015
- ▷ Reviewer for Österreichische Forschungsförderungsgesellschaft (FFG) 2013

#### **4.10 Special Issue Editorial Boards**

- ▷ Semantic Web Journal Special Issue on Linked Dataset Descriptions 2013

#### **4.11 Programme Committees**

- ▷ Association for the Advancement of Artificial Intelligence Conference (AAAI), 2017
- ▷ Question Answering over Linked Data (QALD), 2017
- ▷ Association for the Advancement of Artificial Intelligence Conference (AAAI), 2016
- ▷ Question Answering over Linked Data (QALD), 2016
- ▷ Top-K Shortest Path in Large Typed RDF Graphs Challenge (Top-K), 2016
- ▷ Association for the Advancement of Artificial Intelligence Conference (AAAI), 2015



- ▷ Extended Semantic Web Conference (ESWC), 2014
- ▷ International Semantic Web Conference (ISWC), 2014
- ▷ International Workshop on NoSQL Databases and Linked Data Applications (NoSQL-Net), 2014
- ▷ Natural Language Interfaces for Web of Data (NLIWoD), 2014
- ▷ ACM Conference on Hypertext and Social Media (Hypertext), 2013
- ▷ Association for the Advancement of Artificial Intelligence Conference (AAAI), 2013
- ▷ International Joint Conference on Artificial Intelligence (IJCAI), 2013
- ▷ International Semantic Web Conference (ISWC), 2013
- ▷ International Workshop on Description Logics (DL), 2013
- ▷ Linked Data on the Web (LDOW), 2013
- ▷ Ontologies and Data in Life Sciences (ODLS), 2013
- ▷ International Conference on Knowledge Capture (K-Cap), 2013
- ▷ Extended Semantic Web Conference (ESWC), 2012
- ▷ GIScience in the Big Data Age 2012 (GiBDA), 2012
- ▷ Interacting with Linked Data (ILD), 2012
- ▷ International Conference on Knowledge Engineering and Knowledge Management (EKAW), 2012
- ▷ International Conference on World Wide Web (WWW), 2012
- ▷ International Semantic Web Conference (ISWC), 2012
- ▷ Linked Data on the Web (LDOW), 2012
- ▷ Studentenkonferenz Informatik Leipzig (SKIL), 2012
- ▷ Very Large Data Search (VLDS), 2012
- ▷ Extended Semantic Web Conference (ESWC), 2011
- ▷ International Conference on Web Engineering (ICWE), 2011
- ▷ International Joint Conference on Artificial Intelligence (IJCAI), 2011
- ▷ International Semantic Web Conference (ISWC), 2011
- ▷ International Workshop on Inductive Reasoning and Machine Learning for the Semantic Web (IRMLeS), 2011
- ▷ Linked Data on the Web (LDOW), 2011
- ▷ Massive Information Sharing and Integration (MISI), 2011

- ▷ Studentenkonferenz Informatik Leipzig (SKIL), 2011
- ▷ Extended Semantic Web Conference (ESWC), 2010
- ▷ Studentenkonferenz Informatik Leipzig (SKIL), 2010
- ▷ Workshop On Linked Spatiotemporal Data (LSTD), 2010
- ▷ Workshop on Inductive Reasoning and Machine Learning on the Semantic Web (IRMLeS), 2010
- ▷ Workshop on Trust and Privacy on the Social and Semantic Web (SPOT), 2010
- ▷ European Semantic Web Conference (ESWC), 2009
- ▷ International Workshop on Web Semantics (WebS), 2009
- ▷ Workshop on Inductive Reasoning and Machine Learning on the Semantic Web (IRMLeS), 2009
- ▷ Workshop on Scripting and Development for the Semantic Web (SFSW), 2009
- ▷ European Semantic Web Conference (ESWC), 2009
- ▷ I-Semantics (IS), 2008
- ▷ International Conference on Semantic Systems (I-Semantics), 2008
- ▷ Workshop on Scripting for the Semantic Web (SFSW), 2008
- ▷ SABRE Conference on Social Semantic Web (CSSW), 2007

#### **4.12 Reviewing**

The list does not include PC memberships. For journals, I listed the year in which I performed reviews.

- ▷ Machine Learning (MLj), 2017
- ▷ Journal of Machine Learning Research (JMLR), 2016
- ▷ Machine Learning (MLj), 2016
- ▷ Journal of Web Semantics (JWS), 2015
- ▷ Journal of Information Technology Research (JITR), 2014
- ▷ Journal of Machine Learning Research (JMLR), 2014
- ▷ Language Resources and Evaluation Conference (LREC), 2014
- ▷ International Conference on World Wide Web (WWW), 2013
- ▷ Journal of Web Semantics (JWS), 2013
- ▷ Knowledge-Based Systems (KNOSYS), 2013

- ▷ IEEE Intelligent Systems, 2012
- ▷ International Symposium on Rules (RuleML), 2012
- ▷ International Workshop on Description Logics (DL), 2012
- ▷ Journal of Information Technology Research (JITR), 2012
- ▷ Journal of Web Semantics (JWS), 2012
- ▷ Semantic Web Journal (SWJ), 2012
- ▷ IEEE Intelligent Systems, 2011
- ▷ International Conference on Inductive Logic Programming (ILP), 2011
- ▷ International Journal On Semantic Web and Information Systems (IJSWIS), 2011
- ▷ Knowledge-Based Systems (KNOSYS), 2011
- ▷ Semantic Web Journal (SWJ), 2011
- ▷ International Conference on Inductive Logic Programming (ILP), 2010
- ▷ Journal of Web Semantics (JWS), 2010
- ▷ Knowledge-Based Systems (KNOSYS), 2010
- ▷ Semantic Web Journal (SWJ), 2010
- ▷ European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML PKDD), 2009
- ▷ IEEE International Conference on Semantic Computing (ICSC), 2009
- ▷ International Semantic Web Conference (ISWC), 2009
- ▷ Journal of Information Technology Research (JITR), 2009
- ▷ Journal of Web Semantics (JWS), 2009
- ▷ IEEE International Conference on Web Services (ICWS), 2008
- ▷ International Journal of Metadata, Semantics and Ontologies (IJMSO) (IJMSO), 2008
- ▷ Workshop on Linked Data on the Web (LDOW), 2008
- ▷ European Semantic Web Conference (ESWC), 2007
- ▷ International Joint Conference on Neural Networks (IJCNN), 2007
- ▷ Journal of Web Semantics (JWS), 2007

## 5 Selected Presentations

### 5.1 Invited Talks

- [LA09] Jens Lehmann and Sören Auer. Semantic wikis and the web of data, 2009. Keynote talk at 1st KYOTO EU project workshop.
- [LAS12] Jens Lehmann, Sören Auer, and Claus Stadler. Managing the life-cycle of large scale web datasets, 2012. Keynote talk at the Joint Workshop on Knowledge Evolution and Ontology Dynamics at ISWC 2012.
- [LB11] Jens Lehmann and Lorenz Bühmann. Ontology semantics, repair and enrichment, 2011. Lecture at the Indian Summer School on Linked Data (ISSLOD).
- [LB13] Jens Lehmann and Lorenz Bühmann. The linked data life-cycle, 2013. Invited Lecture Series at the ICCL Summer School 2013.
- [Leh10] Jens Lehmann. Ontology learning, 2010. Invited Talk at Reasoning Web Summer School 2010 in Dresden.
- [Leh14a] Jens Lehmann. GeoKnow and LinkedGeoData, 2014. Keynote at PILOD 2.0 congress in Hilversum.
- [Leh14b] Jens Lehmann. The GeoKnow project, 2014. Invited Talk at the Joint Research Centre (Ispira).
- [Leh14c] Jens Lehmann. Machine learning methods for analysing and linking rdf data, 2014. Keynote at the SUM 2014 conference.

### 5.2 Invited Colloquia Talks and Tutorials

- [LA11] Jens Lehmann and Sören Auer. The linked data lifecycle, 2011. Presentation at the chair for Prozessleittechnik.
- [Leh09] Jens Lehmann. Presentation of aksw group and OWL class expressions learning, 2009. Invited Talk at AIFB Karlsruhe.
- [Leh11a] Jens Lehmann. Data web tutorial, 2011. Leipziger Semantic Web Tag.
- [Leh11b] Jens Lehmann. DBpedia overview, 2011. Leipziger Semantic Web Tag.
- [Leh12] Jens Lehmann. Latc datasets in the eu data cloud, 2012. 1st European Data Forum.
- [Leh13] Jens Lehmann. Aksw research projects overview, 2013. Talk at the University of Montpellier (France).

- [Leh14] Jens Lehmann. GeoKnow project overview, 2014. Talk at the Linked Data Europe Workshop in Athens, Greece.
- [LS11] Jens Lehmann and Claus Stadler. LinkedGeoData overview, 2011. Leipziger Semantic Web Tag.
- [LS13] Jens Lehmann and Claus Stadler. LinkedGeoData and GeoKnow, 2013. Invited talk at the Information Sciences Institute, University of Southern California.

In addition, many talks were given by me at conferences.

## 6 Seminars and Teaching

- ▷ Exercises "Knowledge Graph Analysis", University of Bonn, 2016/17
- ▷ lecturer "Knowledge Graph Analysis", University of Bonn, 2016/17
- ▷ Seminar "Knowledge Graph Analysis", University of Bonn, 2016/17
- ▷ Accompanying Master Thesis Seminar, University of Bonn, 2016
- ▷ seminar "Model-Driven Software Engineering", University of Bonn, 2016
- ▷ lecturer "Semantic Web", University of Leipzig, 2015
- ▷ practical course "Moderne Informationssysteme / Semantic Web", University of Leipzig, 2015
- ▷ lecturer "Semantic Web", University of Leipzig, 2014
- ▷ practical course "Semantic Web", University of Leipzig, 2014
- ▷ "Linked Data Lifecycle" lecture at ICCL Summer School, TU Dresden, 2013
- ▷ lecture "Social and Semantic Web" in "Content and Media Management" studies, Leipzig School of Media, 2013
- ▷ lecturer "Semantic Web", University of Leipzig, 2013
- ▷ practical course "Semantic Web", University of Leipzig, 2013
- ▷ practical course "Software Engineering", University of Leipzig, 2012/13
- ▷ seminar "Semantic Web", University of Leipzig, 2012/13
- ▷ lecture "Social and Semantic Web" in "Content and Media Engineering" studies, Leipzig School of Media, 2012
- ▷ lecturer "Semantic Web", University of Leipzig, 2012
- ▷ practical course "Semantic Web", University of Leipzig, 2012
- ▷ assistant lecturer Semantic Web, University of Leipzig, 2011
- ▷ LSWT Data Web Tutorial, Leipzig School of Media, 2011
- ▷ practical course "Semantic Web", University of Leipzig, 2011
- ▷ "Ontology Learning" lecture in Reasoning Web Summer School, TU Dresden, 2010
- ▷ assistant lecturer "Semantic Web", University of Leipzig, 2010
- ▷ practical course "Semantic Web", University of Leipzig, 2010
- ▷ assistant lecturer "Semantic Web", University of Leipzig, 2009
- ▷ practical course "Semantic Web", University of Leipzig, 2009

- ▷ seminar "Softwareproduktlinienentwicklung und Semantic Web", University of Leipzig, 2008/09
- ▷ seminar "Semantische Unterstützung von Software Entwicklungsprozessen", University of Leipzig, 2007/08
- ▷ seminar "Semantic Web Applications", University of Leipzig, 2007
- ▷ seminar "Semantic Web Services and Interfaces", University of Leipzig, 2006/07
- ▷ research seminar of the chair of Business Information Systems, University of Leipzig, 2006-2010

## **7 Supervision**

### **7.1 Assistant Professors**

- ▷ Asja Fischer, Assistant Professor, University of Bonn, since 2016 (Akademischer Rat)

### **7.2 Supervised Postdoctoral Researchers**

- ▷ Hamed Shariat Yazdi, Postdoctoral Researcher, University of Bonn, since 2016
- ▷ Mohamed Sherif, Postdoctoral Researcher, University of Leipzig, since 2016
- ▷ Henning Petzka, Postdoctoral Researcher, Fraunhofer IAIS, University of Bonn, since 2016
- ▷ Alexander Kister, Postdoctoral Researcher, University of Bonn, since 2016
- ▷ Bastian Haarmann, Postdoctoral Researcher, Fraunhofer IAIS, since 2016
- ▷ Hajira Jabeen, Postdoctoral Researcher, University of Leipzig, since 2015
- ▷ Günter Kniesel, Postdoctoral Researcher, University of Bonn, since 2015
- ▷ Amrapali J. Zaveri, Postdoctoral Researcher, University of Leipzig, 2015

### **7.3 Supervised PhD Students**

- ▷ Gezim Sejdiu, PhD student, University of Bonn, since 2016
- ▷ Mohnish Dubey, PhD student, University of Bonn, since 2015
- ▷ Diego Esteves, PhD student, University of Leipzig, since 2015
- ▷ Simon Bin, PhD student, University of Leipzig, since 2015
- ▷ Patrick Westphal, PhD student, University of Leipzig, since 2013
- ▷ Dimitris Kontokostas, PhD student, University of Leipzig, since 2012
- ▷ Mofeed Hassan, PhD student, University of Leipzig, since 2012
- ▷ Konrad Höffner, PhD student, University of Leipzig, since 2012
- ▷ Lorenz Bühmann, PhD student, University of Leipzig, since 2010
- ▷ Claus Stadler, PhD student, University of Leipzig, since 2010
- ▷ Mohamed Sherif, PhD student, University of Leipzig, Automating Geospatial RDF Dataset Integration and Enrichment, 2012-2016
- ▷ Sebastian Hellmann, PhD student, University of Leipzig, Integrating Natural Language Processing (NLP) and Language Resources Using Linked Data, 2010-2014



- ▷ Amrapali J. Zaveri, PhD student, University of Leipzig, Linked Data Quality Assessment and its Application to Societal Progress Measurement, 2010-2014
- ▷ Mohamed Morsey, PhD student, University of Leipzig, Efficient Extraction and Query Benchmarking of Wikipedia Data, 2010-2013

#### **7.4 Supervised Master/Diploma Students**

- ▷ Sofia Kosovan, master thesis, University of Bonn, since 2016
- ▷ Yujie Diao, master thesis, University of Bonn, 2016
- ▷ Frank Nietzsche, master thesis, University of Leipzig, 2015-2016
- ▷ Eduard Metzler, diploma thesis, University of Leipzig, Anwendung von Lernalgorithmen an Phaenotyp-Ontologien einer Hausmaus mit Hilfe des DL-Learners, 2013
- ▷ Christian Kötteritzsch, master thesis, University of Leipzig, Anwendung von Ontologielernverfahren im medizinischen Bereich, 2011
- ▷ Lorenz Bühmann, master thesis, University of Leipzig, Reparatur und Erweiterung von OWL Ontologien, 2010
- ▷ Steffen Becker, diploma thesis, University of Leipzig, Musikempfehlungen im Semantic Web, 2010
- ▷ Sebastian Hellmann, diploma thesis, University of Leipzig, Comparison of Concept Learning Algorithms, 2007/2008
- ▷ Sebastian Knappe, diploma thesis, University of Leipzig, Navigation in DBpedia mit Hilfe maschinellen Lernens, 2007/2008
- ▷ Jörg Schüppel, diploma thesis, University of Leipzig, Semantikextraktion aus Wikipedia, 2006/2007 (with Sören Auer)

#### **7.5 Supervised Bachelor Students**

- ▷ Quan Nguyen, bachelor thesis, University of Leipzig, Spielbasierte Verifikation von Links im Semantic Web, 2012
- ▷ Marco Wittig, bachelor thesis, University of Leipzig, 2011
- ▷ Vu Duc Minh, bachelor thesis, University of Leipzig, 2008
- ▷ Lorenz Bühmann, bachelor thesis, University of Leipzig, Erweiterung und Reparatur von Ontologien, 2008
- ▷ Christian Kötteritzsch, bachelor thesis, University of Leipzig, Entwicklung eines DL-Learner Plugins für Protégé, 2008

- ▷ Maria Moritz, bachelor thesis, University of Leipzig, 2008 (with Sebastian Dietzold)
- ▷ Rolland Brunec, bachelor thesis, University of Leipzig, 2007/2008
- ▷ Tom Weiland, bachelor thesis, University of Leipzig, 2007/2008
- ▷ Ruslan Masold, bachelor thesis, University of Leipzig, 2007/2008
- ▷ Tilo Hielscher, bachelor thesis, University of Leipzig, 2007/2008
- ▷ Fan Zhang, bachelor thesis, University of Leipzig, 2007
- ▷ Anke Gonschorreck, bachelor thesis, University of Leipzig, 2007

In addition, the work of more than 20 student assistants was supervised.

## **8 International Experience**

### **8.1 Employers & Visits**

- ▷ since 2015: Professor, University of Bonn and Fraunhofer IAIS, Germany
- ▷ 2006-2015: Researcher, University of Leipzig, Germany
- ▷ 2011-2012: Research Visitor, University of Oxford, UK
- ▷ 2005-2006: Erasmus Student, University of Bristol, UK
- ▷ 2001-2006: Dresden University of Technology, Germany
- ▷ 2001: System Service Meissen, Germany
- ▷ 1999: Delegation member "International Historical Forum of Youth", Opole, Poland
- ▷ 1998: 4 week language course in Brighton, UK; obtained language diploma: grade "Advanced", level "Excellent"

### **8.2 International Projects**

In the following funded projects I had an active role involving collaboration with researchers and practitioners from several countries (incomplete list):

- ▷ Big Data Europe (Germany, Greece, Belgium, Austria, France, UK, Italy, Norway, Spain)
- ▷ GeoKnow (Germany, Greece, Switzerland, UK)
- ▷ LATC (Germany, Netherlands, Ireland, UK)
- ▷ LOD2 (Austria, Belgium, Czech Republic, France, Germany, Ireland, Korea, Netherlands, Poland, Serbia, Slovenia, UK)
- ▷ OntoWiki EU (Austria, Germany, Slovenia, UK)

See Section 1 for further information on my involvement in those projects.

### **8.3 Lab Diversity**

So far, I supervised researchers of the following nationalities: Austrian, Brazilian, Chinese, Egyptian, German, Greece, Indian, Iranian, Pakistan, Russian, Spanish, Vietnamese. This includes researchers of both genders and researchers with disabilities.

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Visit <http://jens-lehmann.org> for more information and updates.