

Curriculum Vitae

Ralf Möller (born: 6. June 1964)

7. October 2008

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Education/Career:

- 1984 – 1990: University of Hamburg, Computer Science Department, Diplom-Informatiker (MSc)
- 1991 – 1996: University of Hamburg, Computer Science Department, Dr. rer nat. (PhD)
- 1996 – 2001: University of Hamburg, Computer Science Department, Habilitation
- 2001–2003: University of Applied Sciences, Wedel, Computer Science Department, Professor for Computer Science
- 2003–now: Hamburg University of Technology, Electrical Engineering and Information Technology Department, Professor for Computer Science (C3)

Research Grants

- DLS: Description Logics and Spatial reasoning, Deutsche Forschungsgemeinschaft (DFG), NE 279/8-1/-2, Co-investigators: V. Haarslev, B. Neumann, (2000 – 2003).
- PRAESINT: Probabilistische Präferenzmaße für wissensbasierte Szeneninterpretation, Deutsche Forschungsgemeinschaft (DFG), Co-investigators: B. Neumann (2007 – 2010).
- TONES (Thinking ONtologiES) is an Information Societies Technology 3-year STREP FET project financed within the European Union 6th Framework Programme under contract number FP6-7603, <https://infserver.unibz.it/tones/> (2005-2008).
- BOEMIE (Bootstrapping Ontology Evolution with Multimedia Information Extraction) is an IST 6th Framework Programme Project (FP6-027538), <http://zeus.iit.demokritos.gr/boemie/> (2006-2009).
- CASAM Computer-Aided Semantic Annotation of Multimedia) is a 7th Framework Programme research project (2008-2011)
- Grants from companies for PhD students of my group:
 - IBM Eclipse Innovation Award (Miguel Garcia)
 - Ernst von Siemens Promotionsstipendium (Thomas Hubauer)

Application-Oriented Research Projects

- FIS: Suchalgorithmen und Interaktionstechniken für Fahrplan-Informationssysteme (Bus/Subway schedule information system), Labor für Künstliche Intelligenz, Fachbereich Informatik, Universität Hamburg, 1991.
- BAND: Benutzeradaptiver Netzinformationssystem (User-adaptive Network Information Service), Labor für Künstliche Intelligenz, Fachbereich Informatik, Universität Hamburg, 1999.

- PETS: Prüfplanerstellung für Technische Systeme (Control plan generation for technical systems), Labor für Künstliche Intelligenz, Fachbereich Informatik, Universität Hamburg, 1996.
- INDIA: Intelligente Diagnosesysteme In Der Anwendung (Intelligent Diagnosis in Industrial Applications), Labor für Künstliche Intelligenz, Fachbereich Informatik, Universität Hamburg, 1996.

Participation in European Networks of Excellence

- MONET: European Network of Excellence, funded by the European Commission, via Esprit. The Network provides a long-term framework for research integration and co-operation that will: co-ordinate European research in model-based and qualitative reasoning systems, and promote technology transfer into industry.

Invited Presentations at International Meetings

- Description Logics and Their Use for Building Intelligent Information Systems, Artificial Intelligence Laboratory Massachusetts Institute of Technology, 1998.
- Modeling and Reasoning about Domain Knowledge, User Actions and Intention-Based Dialog Structures for Interactive Systems Development, A Demonstration of the HAMVIS-System, Artificial Intelligence Laboratory Massachusetts Institute of Technology, 1998.
- Spatial Reasoning with the Description Logic ALCRP(D), AT&T Bell Labs, Murray Hill, NJ, June 1999.
- Has CLIM a Future in Web-Based Applications?, LUGM'98: Third Lisp User Group Meeting 1998 in Munich, Germany, 10, February 1998.
- Dynamic Object-Oriented Programming and Beyond, LUGM'97: Second Lisp User Group Meeting 1997 in Munich, Germany, 5. February 1997.

- Workshop on Methods for Modalities: M4M (invited speaker), 2003.
- Workshop on Ontology Evolution and Multimedia Information Extraction (invited speaker), 2006.
- International Lisp Conference ILC'07 (keynote speaker), 2007.
- Applications of Semantic Web Technologies at Informatik'07 (panelist), 2007.
- OWL Experiences and Directions – OWLED'07 (panelist) 2007.
- Semantic and Digital Media Technologies – SAMT'07 (presenter of a tutorial), 2007
- Colloquium University of Zürich, 2008.

Invited Presentations at National and International Meetings

- Colloquium University of Bremen, 2005.
- Colloquium University of Oldenburg, 2005.
- Colloquium University of Zurich, 2008.
- Colloquium University of Bielefeld, 2008.
- Colloquium University of Bremen, 2008.

Invited Attendee at closed workshops and symposia

- 2008 International Workshop on Description Logics (DL2008)
- 2007 OWL Experiences and Directions (OWLED'07)
- 2007 International Workshop on Description Logics (DL2007)
- 2006 International Workshop on Description Logics (DL2006)

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- 1998 International Workshop on Description Logics (DL98)
- 1997 International Workshop on Description Logics (DL97)
- 1996 International Workshop on Description Logics (DL96)

Research Assistants / PhD Students

S. Espinosa (2006-now), M. Garcia (2006-now), A. Kaplunova (2002-now), A. Kaya (2006-now), S. Melzer (2006-now), T. Naeth (2007-now), S. Wandelt (2006-now), M. Wessel (2000-2007)

Editorial Board Memberships

- Knowledge and Information Systems: An International Journal, Springer.

Internal PhD Examinerships

- Spezifikation von interoperablen Webservices mit XQuery, Marcus Venzke, PhD Thesis, 2003.
- A Hypercube-based Peer-to-Peer Data Store Resilient against Peer Population Fluctuation, Dietrich Fahrenholtz, PhD Thesis, 2007.

- Efficient Planning and Offline Routing Approaches for IP Networks, Eueung Mulyana, PhD Thesis, 2006.
- Flexible und konfigurierbare Software-Architekturen für datenintensive ontologiebasierte Informationssysteme, Michael Wessel, PhD Thesis, submitted 2007.

External PhD Examinerships

- Questions and Answers: Reasoning and Querying in Description Logic, Sergio Tessaris, PhD Thesis, Univ. Manchester, 2001.
- Inconsistency Management in Model-Driven Engineering, Ragnhild van der Straeten, PhD Thesis, Vrije Universiteit Brussel, 2005.
- On the Computation of Common Subsumers in Description Logics, Anni-Yasmin Turhan, PhD Thesis, Technische Universität Dresden, 2007

Workshop Chairmanships

- 2001 International Workshop on Applications of Description Logics: ADL-2001
- 2002 International Workshop on Applications of Description Logics: ADL-2002
- 2004 International Workshop on Applications of Description Logics: ADL-2004
- 2004 International Description Logic Workshop: DL'2004 (PC co-chair)
- 2006 Frühjahrstreffen der GI-Fachgruppe Datenbanken am 6. und 7. April 2006 in Hamburg zum Themenbereich Informationssicherheit und Datenschutz
- 2008 Dagstuhl Workshop on Logics and Probabilities for Scene Interpretation (Co-Organizer)

Conference and Workshop Committee Memberships

- 1999 International Description Logic Workshop: DL'99
- 2001 International Description Logic Workshop: DL'2001
- 2001 International Conference on Conceptual Structures: ICCS'2001
- 2002 The Conference on Automated Deduction: CADE-2002
- 2003 International Description Logic Workshop: DL'2003
- 2005 International Description Logic Workshop: DL'2005
- 2005 Special Issue on Bridging Communities: Semantically Augmented Metadata for Services, Grids, and Software Engineering
- 2006 AAAI-06, The Twenty-First National Conference on Artificial Intelligence
- 2006 ECAI-06, The 17th European Conference on Artificial Intelligence
- 2006 ESWC-06, 3rd European Semantic Web Conference
- 2006 ESCoR-06, The FLoC'06 Workshop on Empirically Successful Computerized Reasoning
- 2006 RoW06, Reasoning on the Web, Workshop at WWW2006.
- 2006 SEA2006, Software Engineering and Applications.
- 2006 IEEE/WIC/ACM International Conference on Web Intelligence (WI'06)
- 2006 International Description Logics Workshop DL-2006
- 2007 IJCAI-07, International Joint Conference on Artificial Intelligence
- 2007 European Semantic Web Conference
- 2007 ESCoR-JAL

- 2007 Workshop on Model-Driven Software Development: MDSD Today
- 2007 International Description Logics Workshop DL-2007
- 2007 IEEE/WIC/ACM International Conference on Web Intelligence (WI'07)
- 2007 3rd International Workshop on Scalable Semantic Web Knowledge Base Systems (SSWS 2007)
- 2007 International Conference on Computational Intelligence and Security (CIS'07)
- 2007 International Conference on Semantic and Digital Media Technologies (SAMT'07)
- 2007 DL Steering Committee Member
- 2007 Workshop on Multimedia Annotation and Retrieval enabled by Shared Ontologies (MARESO)
- 2008 European Conference on Artificial Intelligence (ECAI'08)
- 2008 European Lisp Symposium (ELS'2008)
- 2008 Third Asian Semantic Web Conference (ASWC 2008)
- 2008 Fifth European Semantic Web Conference (ESWC'2008)
- 2008 Seventh International Semantic Web Conference (ISWC 2008)
- 2008 Knowledge Representation and Reasoning (KR&R 2008)
- 2008 Second International Conference on Web Reasoning and Rule Systems (RR-2008)
- 2008 International Description Logics Workshop DL-2008
- 2008 OWL – Experience and Directions Workshop (OWLED-2008)
- 2008 Scalable Semantic Web Systems (SSWS-2008)
- 2008 ESWC Workshop on Ontologies: Reasoning and Modularity (WORM-08)
- 2009 WWW2009

Publications of Ralf Möller

Habilitationsschrift / Habilitation Thesis

Möller, R. (2001). *Expressive Description Logics: Foundations for Practical Applications*. Fachbereich Informatik, Universität Hamburg, Juli 2001.

Doktorarbeit / PhD Thesis

Möller, R. (1996). *HAMVIS: Generierung von Visualisierungen in einem Rahmensystem zur systematischen Entwicklung von Benutzungsschnittstellen*. Infix-Verlag.

Books

Schultz C., Möller, R. (2007). *Quantifier Elimination over Real Closed Fields: Mathematical Basis, Solution Techniques, Practical Integration into a Description Logic System*. VDM Verlag Dr. Müller.

Journal Articles

Haarslev, V. und Möller, R. (2008). On the Scalability of Description Logic Instance Retrieval. *Journal of Automated Reasoning*.

Wessel, M. und Möller, R. (2007). Flexible Software Architectures for Ontology-Based Information Systems. *Journal of Applied Logic, Special Issue on Emperically Successful Systems*, 2007.

Neumann, B. & Möller, R. (2007). On Scene Interpretation with Description Logics. *Image and Vision Computing, Special Issue on Cognitive Vision*, 2007.

Möller, R. & Haarslev, V. (2003). Description logics for the semantic web: Racer as a basis for building agent systems. *Künstliche Intelligenz*, pages 10–15.

Haarslev, V., Lutz, C., und Möller, R. (1999). A description logic with concrete domains and a role-forming predicate operator. *Journal of Logic and Computation*, 9(3):351–384.

Haarslev, V. und Möller, R. (1992). Visualization and graphical layout in object-oriented systems. *Journal of Visual Languages and Computing*, 3(1):1–23.

Book Contributions

Möller, R. & Haarslev, V. (2008). Tableaux-based Reasoning. In S. Staab und R. Studer, Editors, *In Handbook of Ontologies*, Second Edition. Springer Verlag.

Möller, R. & Neumann, B. (2008). Ontology-based reasoning techniques for multimedia interpretation and retrieval. In Paola Hobson, Ioannis Kompatsiaris, editors, *In Semantic Multimedia and Ontologies : Theory and Applications*. Springer Verlag.

Neumann, B. & Möller, R. (2006). On Scene Interpretation with Description Logics. In H.H. Nagel, editor, *Cognitive Vision Systems - Sampling the Spectrum*, Springer Verlag, 2006.

Möller, R., Haarslev, V., & Neumann, B. (2004). Expressive description logics for agent-based information retrieval. In J. Cuenca, Y., Demazeau, Garcia, A., & Treur, J., editors, *Knowledge Engineering and Agent Technology*, Volume 52, *Frontiers in Artificial Intelligence and Applications*. IOS Press.

Möller, R. & Haarslev, V. (2003). *Description Logic Handbook*. chapter Description Logic Systems. Cambridge University Press.

Haarslev, V., Möller, R., & Wessel, M. (2000). *Diagrammatic Representation and Reasoning*, chapter Visual Spatial Query Languages: A Semantics Using Description Logic. Springer-Verlag.

Möller, R. (1998). HAMVIS: Generierung von Visualisierungen in einem Rahmensystem zur systematischen Entwicklung von Benutzungsschnittstellen. In *Ausgezeichnete Informatikdissertationen 1996*, Gesellschaft für Informatik, Teubner Verlag, 1998, pages 62–78.

Möller, R. (1996). Reasoning about Domain Knowledge and User Actions for Interactive Systems Development. In Sutcliffe, A., Benyon, D., van Assche, F., Hrsg., *Domain Knowledge for Interactive System Design*, pages 119-133, Chapman & Hall.

Haarslev, V. und Möller, R. (1990). Vipex: Visual programming of experimental systems. In Chang, S., Hrsg., *Visual Languages and Visual Programming*, pages 185–212. Plenum Press, New York and London.

Edited Proceedings

Bechhofer, S., Haarslev, V., Lutz, C., & Möller, R., editors (2004). *KI-2004 Workshop on Applications of Description Logics (ADL'04)*. Available at CEUR Workshop Proceedings.

Haarslev, V. & Möller, R., editors (2004). *International Workshop on Description Logics (DL2004)*. Available as CEUR Workshop Proceedings.

Görz, G. und Haarslev, V. und Lutz, C. und Möller, R. (2002). *Working Notes of the International Workshop on Applications of Description Logics*, Aachen, 2002.

Görz, G. und Haarslev, V. und Lutz, C. und Möller, R. (2001). *Working Notes of the International Workshop on Applications of Description Logics*, Wien, 2001.

Goble, C. und McGuinness, D. und Möller, R. und Patel-Schneider, P. (2001). *Working Notes of the International Workshop on Description Logics*, Stanford Univ., Palo Alto, CA, 2001.

Lambrix, P. und Borgida, A. und Lenzerini, M. und Möller, R. und Patel-Schneider, P. (1999). *Proceedings of the International Workshop on Description Logics*, Linköping, Sweden, 1999.

Refereed Conference Papers

S. Wandelt and R. Möller (2008). Island Reasoning for ALCHI Ontologies. In *Proc. 5th international conference on formal ontology in information systems (FOIS 08)*.

Espinosa Peraldi S., Kaya, A., Melzer, S., Möller, R., Haarslev, V., & Wessel, M. (2007). Towards a Media Interpretation Framework for the Semantic Web. In *Proc. of the 2007 IEEE/WIC/ACM International Conference on Web Intelligence (WI'07)*.

- Garcia, M. & Möller, R. (2007). Certification of Transformations Algorithms in Model-Driven Software Development. In Proc. of *Software Engineering 2007*, W.-G. Bleek, J. Räscher, and H. Züllighoven, Editors, Volume 105 of GI-Edition Lecture Notes in Informatics, pages 107–118.
- Möller, R., Haarslev, V., & Wessel, M. (2006a). On the scalability of description logic instance retrieval. In Freksa, C. & Kohlhase, M., editors, *29. Deutsche Jahrestagung für Künstliche Intelligenz*, Lecture Notes in Artificial Intelligence. Springer Verlag.
- Haarslev, V. & Möller, R. (2004). Optimization techniques for retrieving resources described in OWL/RDF documents: First results. In *Ninth International Conference on the Principles of Knowledge Representation and Reasoning, KR 2004, Whistler, BC, Canada, June 2-5*, pages 163–173.
- Haarslev, V. & Möller, R. (2003). Racer: An owl reasoning agent for the semantic web. In *Proceedings of the International Workshop on Applications, Products and Services of Web-based Support Systems, in conjunction with the 2003 IEEE/WIC International Conference on Web Intelligence, Halifax, Canada, October 13*, pages 91–95.
- Haarslev, V. & Möller, R. (2001). High Performance Reasoning with Very Large Knowledge Bases: A Practical Case Study. In *Seventeenth international joint conference on artificial intelligence, IJCAI-01, August 4-10, 2001, Seattle, Washington, USA*. Nebel, B., editor (2001), pages 161–168. Morgan-Kaufmann.
- Haarslev, V. & Möller, R. (2001). RACER System Description. In *Proceedings of the First International Joint Conference, IJCAR 2001, Siena, Italy*, pages 701–706. Springer Verlag Goré, R. and Leitsch, A. and Nipkow, T., editors (2001).
- Haarslev, V. & Möller, R. (2001). Exploiting Pseudo Models for TBox and ABox Reasoning in Expressive Description Logics. In *Proceedings of the First International Joint Conference, IJCAR 2001, Siena, Italy*, 10 pages. Springer Verlag Goré, R. and Leitsch, A. and Nipkow, T., editors (2001).

- Haarslev, V. & Möller, R., Wessel, M. (2001). The Description Logic \mathcal{ALCNHR}^+ Extended with Concrete Domains: A Practically Motivated Approach. In *Proceedings of the First International Joint Conference, IJ-CAR 2001, Siena, Italy*, 10 pages. Springer Verlag Goré, R. and Leitsch, A. and Nipkow, T., editors (2001).
- Haarslev, V. & Möller, R. (2000). Expressive ABox reasoning with number restrictions, role hierarchies, and transitively closed roles. In *Proceedings of the Seventh International Conference on Principles of Knowledge Representation and Reasoning (KR'2000), Breckenridge, Colorado, USA, 2000*. Cohn, A., Giunchiglia, F., & Selman, B., editors (2000).
- Haarslev, V. & Möller, R. (2000). Consistency testing: The RACE experience. In *Proceedings International Conference Tableaux'2000*, pages 57–61. Springer-Verlag.
- Möller, R., Neumann, B., & Wessel, M. (1999). Towards computer vision with description logics: Some recent progress. In *Proceedings Integration of Speech and Image Understanding, Corfu, Greece*, pages 101–115. IEEE Computer Society, Los Alamitos.
- Möller, R. und Wessel, M. (1999). Terminological default reasoning about spatial information: A first step. In *Proc. of COSIT'99, International Conference on Spatial Information Theory, Stade*, pages 189–204. Springer Verlag, Berlin.
- Haarslev, V., Möller, R., und Wessel, M. (1999). On specifying semantics of visual spatial query languages. In *1999 IEEE Symposium on Visual Languages, Tokyo, Japan, Sep. 13-16*, pages 4–11. IEEE Computer Society Press, Los Alamitos.
- Mantay, T., Möller, R., und Kaplunova, A. (1999). Computing probabilistic least common subsumers in description logics. In Burgard, W., Christaller, T., und Cremers, A., Hrsg., *Proceedings KI-99, 23. Deutsche Jahrestagung für Künstliche Intelligenz*, pages 89–100. Springer-Verlag.
- Haarslev, V. und Möller, R. (1999). Applying an \mathcal{ALC} ABox consistency tester to modal logic SAT problems. In Murray, N. V., Hrsg., *Proceedings, International Conference on Automatic Reasoning with Analytic Tableaux and Related Methods, TABLEAUX'99, Saratoga Springs, NY*,

USA, number 1617 in Lecture Notes in Artificial Intelligence, pages 24–28. Springer Verlag, Berlin.

- Haarslev, V., Lutz, C., und Möller, R. (1998). Foundations of spatioterminological reasoning with description logics. In Cohn, T., Schubert, L., und Shapiro, S., Hrsg. (1998). *Proceedings of the Sixth International Conference on Principles of Knowledge Representation and Reasoning (KR'98), Trento, Italy, June 2-5, 1998*, pages 112–123.
- Möller, R., Haarslev, V., und Neumann, B. (1998). Semantics-based Information Retrieval. In *Int. Conf. on Information Technology and Knowledge Systems IT&KNOWS'99*, Vienna, Budapest, Jose Cuenca (Hrsg.), pp. 48–61.
- Haarslev, V. und Möller, R. (1997). SBox: A qualitative spatial reasoner—progress report. In Ironi, L., Hrsg., *11th International Workshop on Qualitative Reasoning, Cortona, Tuscany, Italy, June 3-6, 1997, Pubblicazioni N. 1036, Istituto di Analisi Numerica C.N.R. Pavia (Italy)*, pages 105–113.
- Möller, R. (1996). A Functional Layer for Description Logics: Knowledge Representation Meets Object-Oriented Programming. In *Proceedings OOPSLA-96, Object-Oriented Programming: Systems, Languages and Applications, San Jose*, pages 142–153.
- Möller, R. (1996). Knowledge-based Dialog Structuring for Graphics Interaction. In *Proceedings ECAI-96, European Conference on Artificial Intelligence, Budapest, Hungary*, pages 271–275.
- Lange, H. und Möller, R. und Neumann, B. (1996). Avoiding Combinatorial Explosion in Automatic Test Generation: Reasoning about Measurements is the Key. In Burgard, W., Christaller, T., und Cremers, A., Hrsg., *Proceedings KI-96, 20. Deutsche Jahrestagung für Künstliche Intelligenz*, pages 213–216. Springer-Verlag.
- Haarslev, V., Möller, R., und Schröder, C. (1994). Combining spatial and terminological reasoning. In Nebel, B. und Dreschler-Fischer, L., Hrsg., *KI-94: Advances in Artificial Intelligence – Proc. 18th German Annual Conference on Artificial Intelligence, Saarbrücken, Sept. 18–23, 1994*,

- volume 861 of *Lecture Notes in Artificial Intelligence*, pages 142–153. Springer Verlag, Berlin.
- Möller, R. (1993). Visualisierungen und Benutzungsschnittstellen: Anwendungen und Forschungsfragen. In Reichel, H. (Hrsg.), *Proceedings 23. GI-Jahrestagung, Dresden*, pages 322–327.
- Haarslev, V. und Möller, R. (1990). A declarative formalism for specifying graphical layout. In *1990 IEEE Workshop on Visual Languages, Skokie, Illinois, Oct. 4-6*, pages 54–59. IEEE Computer Society Press, Los Alamitos.
- Haarslev, V. und Möller, R. (1990). A framework for visualizing object-oriented systems. In *ECOOP/OOPSLA '90, European Conference on Object-Oriented Programming and Object Oriented Programming: Systems, Languages and Applications, Oct. 21-25, 1990, Ottawa/Canada*, volume 25, pages 237–244. ACM Press.
- Möller, R. und Haarslev, V. (1990). Layoutspezifikationen für komplexe graphische Objekte. In Kansy, K. und Wißkirchen, P., Hrsg., *GI-Fachgespräch Graphik und KI, Königswinter 3./4. April 1990*, number 239 in *Informatik Fachberichte*, pages 78–91. Springer Verlag, Berlin.
- Haarslev, V. und Möller, R. (1989). Visualisierungen beim Entwicklungsprozeß experimenteller Programmsysteme. In Oberquelle, H. und Maaß, S., Hrsg., *Software-Ergonomie '89, Hamburg, 29.-31. Mar. 1989*, Berichte des German Chapter ACM und GI, pages 427–436, Stuttgart. Teubner-Verlag.
- Haarslev, V. und Möller, R. (1988). Eine graphische Umgebung zur experimentellen Bildverarbeitung. In Bunke, H., Kübler, O., und Stucki, P., Hrsg., *Mustererkennung, 10. DAGM-Symposium Zürich, 27.-29. Sep. 1988*, volume 180 of *Informatik-Fachberichte*, pages 319–325. Springer Verlag, Berlin.
- Haarslev, V. und Möller, R. (1988). Visualisierung und Animation in der experimentellen Bildauswertung. In Barth, W., Hrsg., *GI/ÖCG-Fachgespräch Visualisierungstechniken und Algorithmen, Wien, 26.-27. Sep. 1988*, number 182 in *Informatik-Fachberichte*, pages 213–223. Springer Verlag, Berlin.

Haarslev, V. und Möller, R. (1988). Visualization of experimental systems. In *1988 IEEE Workshop on Visual Languages, Pittsburgh/PA, Oct. 10-12*, pages 175–182. IEEE Computer Society Press, Los Alamitos.

Refereed Workshop Papers

V. Haarslev and R. Möller (2008). The revival of structural subsumption in tableau-based description logic reasoners. In *Proceedings of the 2008 International Workshop on Description Logics (DL-2008)*.

J. Faddoul, N. Farsinia, V. Haarslev and R. Möller (2008). A Hybrid Tableau Algorithm for ALCQ. In *Proceedings of the 2008 International Workshop on Description Logics (DL-2008)*.

Castano S., Espinosa, S., Ferrara, A., Karkaletsis, V., Kaya, A., Melzer, S., Möller, R. & Petasis G. (2007). Ontology Dynamics with Multimedia Information: The BOEMIE Evolution Methodology. In *Proc. International Workshop on Ontology Dynamics (OWLED 2007)*.

Wessel, M., & Möller R. (2007). Design Principles and Realization Techniques for User Friendly, Interactive, and Scalable Ontology Browsing and Inspection. In *International Workshop on OWL: Experiences and Directions (OWLED 2007)*.

Espinosa Peraldi S., Kaya, A., Melzer, S., Möller, R., Haarslev, V., & Wessel, M. (2007). Multimedia Interpretation as Abduction. In *Proc. of the 2007 International Workshop on Description Logics DL'07*.

Wandelt, S, & Möller R. (2007). Scalability of OWL Reasoning: Role Condensates. In *Proc. International Workshop on Scalable Semantic Web Systems (SSWS'07)*.

Kaplunova, A., Möller R. & Wessel, M. (2007). Leveraging the Expressivity of Grounded Conjunctive Query Languages. In *Proc. International Workshop on Scalable Semantic Web Systems (SSWS'07)*.

Berger T., Kaplunova, A., Kaya A., & Möller R. (2007). Towards a Scalable and Efficient Middleware for Instance Retrieval Inference Services. In *International Workshop on OWL: Experiences and Directions (OWLED 2007)*.

- Turhan, A.-Y., Bechhofer, S., Kaplunova, A., Liebig, T., Luther, M., Moeller, R., Noppens, O., Patel-Schneider, P., Suntisrivaraporn, B., & Weithoener, T. (2006). Dig 2.0 – towards a flexible interface for description logic reasoners. In Grau, B. C., Hitzler, P., Shankey, C., & Wallace, E., editors, *OWL: Experiences and Directions* (OWLED 2006).
- Lutz, C., Baader, F., Franconi, E., Lembo, D., Möller, R., Rosati, R., Sattler, U., Suntisrivaraporn, B., & Tessaris, S. (2006). Reasoning support for ontology design. In Grau, B. C., Hitzler, P., Shankey, C., & Wallace, E., editors, *OWL: Experiences and Directions 2006*.
- Möller, R., Haarslev, V., & Wessel, M. (2006b). On the scalability of description logic instance retrieval. In *Proc. of the 2006 International Workshop on Description Logics DL'06*.
- Wessel, M. & Möller, R. (2006). A flexible DL-based architecture for deductive information systems. In Sutcliffe, G., Schmidt, R., & Schulz, S., editors, *Proc. IJCAR-06 Workshop on Empirically Successful Computerized Reasoning (ESCoR)*, pages 92–111.
- Wessel, M. & Möller, R. (2005). A high performance semantic web query answering engine. In Horrocks, I., Sattler, U., & Wolter, F., editors, *Proc. International Workshop on Description Logics*.
- Haarslev, V., Möller, R., & Wessel, M. (2005). Description logic inference technology: Lessons learned in the trenches. In Horrocks, I., Sattler, U., & Wolter, F., editors, *Proc. International Workshop on Description Logics*.
- Haarslev, V., Möller, R., van der Straeten, R., & Wessel, M. (2004). Extended query facilities for Racer and an application to software-engineering problems. In *Proceedings of the 2004 International Workshop on Description Logics (DL-2004)*, Whistler, BC, Canada, June 6-8, pages 148–157.
- Haarslev, V., Möller, R., & Wessel, M. (2004). Querying the semantic web with racer + nrql. In *Proceedings of the KI-2004 International Workshop on Applications of Description Logics (ADL'04)*, Ulm, Germany, September 24.

- Haarslev, V. & Möller, R. (2003). Racer: A core inference engine for the semantic web. The 1ST Canadian Semantic Web Interest Group Meeting (SWIG04), November 19, 2004, Universite du Quebec a Montreal, Montreal, Quebec, Canada. pages 27–36.
- Haarslev, V. & Möller, R. (2003). The DIG description logic interface. In *Proceedings of the International Workshop on Description Logics (DL-2003), Rome, Italy, September 5-7*.
- Haarslev, V. & Möller, R. (2003). Description logic systems with concrete domains: Applications for the semantic web. In *Proceedings of the International Workshop on Knowledge Representation meets Databases (KRDB-2003), Hamburg, Germany, September 15-1*.
- Haarslev, V. & Möller, R. (2003). Incremental query answering for implementing document retrieval services. In *Proceedings of the International Workshop on Description Logics (DL-2003), Rome, Italy, September 5-7*, pages 85–94.
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- Foundations of Machine Learning and Data Mining
- Intelligent Autonomous Systems:
An Application in E-Commerce
- Introduction to Databases
- Software Engineering

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