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Personal Information

Degrees: Dipl.-Ing. (M.Sc.) Bakk. techn. (B.Sc.)

Born: 28 January 1981 in Mödling, Austria

Citizenship: Austrian

Marital Status: unmarried, no children

Research Interests

- Answer Set Programming and Logic Programming
- Computational Logic and Complexity
- Database and Distributed Systems
- Knowledge Representation and Reasoning
- Nonmonotonic Reasoning
- Semantic Web Reasoning

Education

Vienna University of Technology

PhD Student

June 2008–ongoing

Supervisor: O. Univ. Prof. Dr. techn. Thomas Eiter and Dr. techn. Michael Fink

Vienna University of Technology

M.Sc. Computational Intelligence, with distinction

August 2005–October 2007

Master thesis: Integration of Conjunctive Queries over Description Logics into HEX-Programs

Supervisor: O. Univ. Prof. Dr. techn. Thomas Eiter

Vienna University of Technology

B.Sc. Software & Information Engineering

October 2002–August 2005

Bachelor thesis: EA Network Management

Supervisor: Univ. Prof. Dr. Schahram Dustdar

Höhere Technische Bundeslehr- und Versuchsanstalt Mödling

Matura Secondary Technical College in Electronics and Technical Informatics

September 1995–June 2000

Final examination project: MP3zzer: A Hardware MPEG 1 Layer 3 Music Player

Supervisor: Dipl.-Ing. Elmar Volgger

Don Bosco Gymnasium Unterwaltersdorf

Lower Secondary Academic School

September 1991–June 1995

Volksschule Möllersdorf

Primary education

September 1987–June 1991

Awards

July 2011: ICLP-DC 2011 Best Presentation for “Promoting Modular Nonmonotonic Logic Programs” at the *7th ICLP Doctoral Student Consortium*. This paper was selected to be presented at the *Technical Communications Track* at the *27th Int’l Conference on Logic Programming (ICLP 2011)*.

May 2011: LPNMR 2011 Best Paper for “Pushing Efficient Evaluation of HEX Programs by Modular Decomposition” at the *11th Int’l Conference on Logic Programming and Nonmonotonic Reasoning*, joint work with Thomas Eiter, Michael Fink, Giovambattista Ianni, and Peter Schüller. This paper was selected to be presented at the *Large Track of Best Papers from Sister Conferences* at the *22nd Int’l Joint Conference on Artificial Intelligence (IJCAI 2011)*.

November 2009: OCG Förderpreis 2009 (OCG advancement award 2009) for outstanding Master Thesis in the field of Computer Science by the *Austrian Computer Society*.

June 2008: Nominated for the *Best Paper Award* at the European Semantic Web Conference 2008.

May 2008: Nominated for the *Distinguished Young Alumnus/Alumna Award* for outstanding Master’s Thesis at the Faculty of Informatics, Vienna University of Technology.

Grants

FWF project P17503-MATH

Student Grant

Skolem Functions

January, February, June, July 2007

Windhag-Stipendiumstiftung für Niederösterreich

Student Grant 2005/2006

March 2007

FWF project P17212

Student Grant

Answer Set Programming for the Semantic Web

March 2006–August 2006

Academic Career

University Assistant

Vienna University of Technology

Knowledge-Based Systems Group

January 2011–ongoing

Participating in the following projects:

- Austrian Science Foundation FWF project P24090-N23: *Evaluation of ASP Programs with External Source Access*
- Austrian Research Promotion Agency (FFG) project P828897: *MyITS (Mein persönliches intelligentes Mobilitätsservice)*
- Marie Curie Action EU FP7 People programme FP7-247601-NET2: *Net² (A Network for Enabling Networked Knowledge)*
- Austrian Science Foundation FWF project P20841: *Modular HEX-Programs*

Responsibilities:

- Work package coordinator for Net²
- Responsible for Net² and MyITS projects at Vienna University of Technology
- Teaching of courses in Artificial Intelligence, Declarative Problem Solving, Knowledge Based Systems, Logic Programming, Supervising projects and master theses

Research Assistant

Vienna University of Technology

Knowledge-Based Systems Group

June 2008–December 2010

Participating in the following projects:

- Austrian Science Foundation FWF project P20841: *Modular HEX-Programs*
- Large-scale integrating project (IP) EU FP7 programme ICT-231875: *ONTORULE (ONTologies meet business RULEs)*
- Marie Curie Action EU FP7 People programme FP7-247601-NET2: *Net² (A Network for Enabling Networked Knowledge)*

Responsibilities:

- Developing extensions, algorithms, and optimization techniques for modular and distributed evaluation of HEX-programs, modular nonmonotonic logic programs, and heterogeneous nonmonotonic multi-context systems.
- Architecture and prototype implementation of distributed multi-context systems [S2], modular nonmonotonic logic programs and HEX-programs [S4].
- Responsible for Net² project at Vienna University of Technology.

Research Intern

National University of Ireland, Galway

Participating in the following project:

- EU FP6 project IST-034718: *inContext: Interaction & context based technologies for collaborative teams*

Responsibilities:

- Research and implementation of a rule-based RDF(S) triple store GiaBATA [S3] using the Datalog engine DLV^{DB}, PostgreSQL, and DLVHEX.
- Research and implementation of a combination of XQuery and SPARQL: XSPARQL [S1], which is built on the XQilla XQuery engine and the Jena Semantic Web Framework.

Digital Enterprise Research Institute

November 2007–June 2008

Work Experience in Industry

Ho.bit Information Technology Ltd.

Freelance Software Engineer

Worcestershire, UK

July 2004–December 2004

Responsibilities:

- Designed and implemented a license validation system based on XML-RPC and X.509 public key infrastructure in Java.
- Organized the X.509 public key infrastructure using EJBCA.

Siemens Austria AG

Software Engineering Intern

Vienna, Austria

Summer 1999, 2002, 2003

Responsibilities:

- Implemented a software interface to the Erlang Megaco/H.248 Media Gateway Control Protocol stack in C++ and Erlang.
- Ported a H.323 VoIP gateway running on VxWorks to Linux using the ACE C++ Framework and Boost C++ libraries.
- Developed a Python/C++ testing framework for Q.931 connection control and H.323 Voice-over-IP protocol stacks.

E. Moritz GmbH

Software Engineer

Baden, Austria

July 2000–May 2001

Responsibilities:

- Ported a DOS-based Point-of-Sale application to Linux.
- Designed and implemented the network data management for a Point of Sale application.
- Built and maintained the network infrastructure for the public library in Baden.

E. Moritz GmbH

Freelance Software Engineer

Baden, Austria

January 2000–August 2002

Responsibilities:

- Developed a multimedia graphic and sound engine for a casino slot machine.

Civilian Service

Red Cross Austria

First Responder and Ambulance Driver

Baden, Austria

June 2001–May 2002

Alternative service to compulsory military service.

Languages

German: fluent

native tongue

English: proficient user

Level C1 European Common Reference Framework

Teaching

Introduction to Artificial Intelligence

Summer 2012–ongoing

Bachelor course on Artificial Intelligence with Search for Problem Solving, Planning, Constraint Satisfaction Problems, Diagnosis, Vagueness and Probabilistic Reasoning, Learning and Neural Networks

Introduction to Knowledge-Based Systems

Winter 2008, Summer 2012–ongoing

Bachelor course on Knowledge-Based Systems with Classical Logic, Nonmonotonic Reasoning, Answer Set Programming, Probabilistic Reasoning

Knowledge-Based Systems

Summer 2012–ongoing

Master course on Knowledge-Based Systems with Search for Problem Solving, RETE, Predicate Logic, Description Logics, Truth Maintenance Systems, Answer Set Programming, Probabilistic Reasoning

KBS for Business Informatics

Winter 2011–ongoing

Master course on Knowledge-Based Systems for Business Informatics with Search for Problem Solving, RETE, Answer Set Programming, Description Logics

Declarative Problem Solving

Winter 2011–ongoing

Declarative Problem Solving with SAT, QBF, and Answer Set Programming

Logic Programming

Summer 2011

Declarative Problem Solving with Answer Set Programming

Project in Computer Science 1 & 2, Projektpraktikum

Winter 2008–ongoing

- Jürgen Weinberger: XPath Plugin for DLVHEX
- Annemarie Goldmann: Mathematica Plugin for DLVHEX
- Christoph Redl: Decision Diagram & Merging Plugin for DLVHEX

Project in Computational Logic

Summer 2008–ongoing

- Tri Kurniawan Wijaya: A Top-Down Solver for Modular Nonmonotonic Logic Programs
- Seif El-Din Bairakdar: Loop Formula translator for DMCS
- Melisachew Wudage: Wrapper for Pellet
- Minh Dao-Tran: Default Logic Plugin for DLVHEX

Supervising Master Theses

Winter 2008–ongoing

- Harald Beck (ongoing): co-supervised (with Thomas Eiter) “*Inconsistency Management for Traffic Measures*”
- Artem Konev (graduated April 2012): co-supervised (with Thomas Eiter and Stijn Heymans) “*Reasoning with RDF(S) and F-logic*”
- Tri Kurniawan Wijaya (graduated August 2011): co-supervised (with Thomas Eiter and Minh Dao-Tran) “*Top-Down Evaluation Techniques for Modular Nonmonotonic Logic*”
- Seif El-Din Bairakdar (graduated April 2011): co-supervised (with Thomas Eiter and Michael Fink) “*Local Optimisation for Multi-Context Systems with Constraint Pushing*”
- Patrik Schneider (graduated January 2011): co-supervised (with Thomas Eiter) “*Evaluation of Description Logic Programs using an RDBMS*”
- Stefan Bischof (graduated November 2010): co-supervised (with Thomas Eiter and Axel Polleres) “*Implementation and Optimization of Queries in XSPARQL*”
- Christian Drescher (graduated September 2010): co-supervised (with Thomas Eiter and Michael Fink) “*Symmetry Breaking for Answer Set Programming*”, won the **Best EMCL Master Thesis Award 2010** of the European Master’s Program in Computational Logic
- Christoph Redl (graduated July/October 2010): co-supervised (with Thomas Eiter) “*Development of a Belief Merging Framework for dlhex*” and “*Merging of Biomedical Decision Diagrams*”
- Ksenia Rybenko (graduated June 2009): co-supervised (with Thomas Eiter) “*Collaborative Process Management in Construction by Means of Rules and Ontologies*”
- Minh Dao-Tran (graduated June 2008): co-supervised (with Thomas Eiter) “*Default Reasoning on Top of Ontologies with dl-Programs*”

Professional Activities

Talks given at Conferences and Workshops.....

- Promoting Modular Nonmonotonic Logic Programs** **Lexington, Kentucky**
27th Int'l Conference on Logic Programming (ICLP'11) and 7th ICLP DC *July 2011*
- Model Streaming for Distributed Nonmonotonic Multi-Context Systems** **Vancouver, Canada**
2nd Int'l Workshop on Logic-based Interpretation of Context (Log-IC'11) *May 2011*
- Decomposition of Distributed Nonmonotonic Multi-Context Systems** **Helsinki, Finland**
12th European Conference on Logics in Artificial Intelligence (JELIA'10) *September 2010*
- Decomposition of Distributed Nonmonotonic Multi-Context Systems** **Toronto, Canada**
13th Int'l Workshop on Non-Monotonic Reasoning (NMR'10) *May 2010*
- Distributed Nonmonotonic Multi-Context Systems: Evaluation and Decomposition** **Vienna, Austria**
Workshop on Hybrid Knowledge Representation and Reasoning (HKRR'10) *March 2010*
- Decomposition of Knowledge Bases with External Functions** **Pasadena, California**
21st Int'l Joint Conference on Artificial Intelligence (IJCAI'09) *July 2009*
- 5th European Semantic Web Conference (ESWC'08)** **Tenerife, Spain**
XSPARQL: Traveling between the XML and RDF Worlds - and Avoiding the XSLT Pilgrimage *June 2008*

Invited Talks.....

- Workshop on Business Models, Business Rules and Ontologies (BuRO'10)** **Brixen/Bressanone, Italy**
Combining Nonmonotonic Knowledge Bases for Modular and Distributed Knowledge-Based Information Systems *September 2010*
- Digital Enterprise Research Institute** **National University of Ireland, Galway**
Distributed Nonmonotonic Multi-Context Systems, Seminar talk *December 2009*
- Knowledge-Based Systems Group** **Vienna University of Technology**
Modular Nonmonotonic Logic Programming Revisited, Seminar talk *March 2009*

Tutorials.....

- Reasoning Web Summer School 2009** **Brixen/Bressanone, Italy**
Answer Set Programming: A Primer *September 2009*
- Reasoning Web Summer School 2008** **Venice, Italy**
Rules and Ontologies for the Semantic Web *September 2008*

Demos and Posters.....

- 12th European Conference on Logics in Artificial Intelligence (JELIA'10)** **Helsinki, Finland**
The DMCS Solver for Distributed Nonmonotonic Multi-Context Systems *September 2010*
- 6th European Semantic Web Conference (ESWC'09)** **Heraklion, Greece**
A Rule System for Querying Persistent RDFS Data *June 2009*
- Junior Scientist Conference 2008** **Vienna, Austria**
Decomposing HEX-Programs: Preliminary Results *November 2008*
- 2nd Int'l Conference on Web Reasoning and Rule Systems (RR'08)** **Karlsruhe, Germany**
DLVHEX: A Solver for Semantic Web Reasoning under Answer Set Semantics *October 2008*
- 20th Int'l Workshop on Description Logics (DL'07)** **Brixen-Bressanone, Italy**
Exploiting Conjunctive Queries for Description Logic Programs *June 2007*

Organization.....

- RR 2012:** Int'l Conference on Web Reasoning and Rule Systems 2012, Vienna, Austria, September 10–12, 2012
- RW 2012:** Reasoning Web Summer School 2012, Vienna, Austria, September 3–8, 2012

Program Committees

ISWC 2012: 11th Int'l Semantic Web Conference 2012, Boston, USA, November 11–15, 2012

ISWC 2011: 10th Int'l Semantic Web Conference 2011, Bonn, Germany, October 23–27, 2011

IJCAI 2011: 22nd Int'l Joint Conference on Artificial Intelligence 2011, Barcelona, Catalonia (Spain), July 16–22, 2011

ISWC 2010: 9th Int'l Semantic Web Conference 2010, Posters and Demonstrations Track, Shanghai, China, November 7–11, 2010

BuRO 2010: 1st Int'l Workshop on Business Rules and Ontologies 2010, co-located with RR 2010, Bressanone/Brixen, Italy September 22-24, 2010

Reviewing for Journals

TPLP: Theory and Practice of Logic Programming, 2010

WWWJ: World Wide Web, 2010

Reviewing for Conferences and Workshops

ECAI: European Conference on Artificial Intelligence 2010

ESWC: European Semantic Web Conference 2008

FOIKS: Intl. Symposium on Foundations of Information and Knowledge Systems 2010

ICLP: Intl. Conference on Logic Programming 2009, 2010, 2012

ICSC: IEEE Intl. Conference on Semantic Computing 2008

IJCAI: Intl. Joint Conference on Artificial Intelligence 2009, 2011

IJCAR: Intl. Joint Conference on Automated Reasoning 2012

INAP: Intl. Conference on Applications of Declarative Programming and Knowledge Management 2011

ISWC: Intl. Semantic Web Conference 2009, 2010, 2011, 2012

JELIA: European Conference on Logics in Artificial Intelligence 2010

KR: Intl. Conference on the Principles of Knowledge Representation and Reasoning 2010

LPNMR: Intl. Conference on Logic Programming and Nonmonotonic Reasoning 2009

PRIMA: Intl. Conference on Principles and Practice of Multi-Agent Systems 2010

SUM: Intl. Conference on Scalable Uncertainty Management 2008

WWW: Intl. World Wide Web Conference 2008, 2009, 2010

ALPSWS: Workshop on Applications of Logic Programming to the (Semantic) Web and Web Services 2008

BuRO: Intl. Workshop on Business Models, Business Rules and Ontologies 2010

CIA: Intl. Workshop on Cooperative Information Agents 2008

DL: Intl. Workshop on Description Logics 2009

RW: Reasoning Web Summer School 2009

Publications and Software

Articles in Journals

Thomas Eiter, Giovambattista Ianni, Thomas Krennwallner, and Roman Schindlauer. **Exploiting conjunctive queries in description logic programs.** *Annals of Mathematics and Artificial Intelligence: Logic in AI: A Special Issue Dedicated to Victor W. Marek on the Occasion of His 65th birthday*, 53(1–4):115–152, August 2008. Published online: 27 January 2009.

Book Chapters

Minh Dao-Tran, Thomas Eiter, Michael Fink, and Thomas Krennwallner. **Dynamic Distributed Nonmonotonic Multi-Context Systems.** In Gerhard Brewka, Victor Marek, and Mirosław Truszczyński, editors, *Nonmonotonic Reasoning, Essays Celebrating its 30th Anniversary*, Lexington, Kentucky, U.S.A., October 22–25, 2010, volume 31

of *Studies in Logic*, pages 63–88. College Publications, London, July 2011.

Włodzimierz Drabent, Thomas Eiter, Giovambattista Ianni, Thomas Krennwallner, Thomas Lukasiewicz, and Jan Maluszynski. **Hybrid Reasoning with Rules and Ontologies**. In Francois Bry and Jan Maluszynski, editors, *Semantic Techniques for the Web: The REVERSE Perspective*, volume 5500 of *LNCS*, pages 1–49. Springer, September 2009.

Thomas Eiter, Giovambattista Ianni, and Thomas Krennwallner. **Answer Set Programming: A Primer**. In Sergio Tessaris, Enrico Franconi, Thomas Eiter, Claudio Gutierrez, Siegfried Handschuh, Marie-Christine Rousset, and Renate A. Schmidt, editors, *5th International Reasoning Web Summer School (RW 2009), Brixen/Bressanone, Italy, August 30–September 4, 2009*, volume 5689 of *LNCS*, pages 40–110. Springer, September 2009.

Thomas Eiter, Giovambattista Ianni, Thomas Krennwallner, and Axel Polleres. **Rules and Ontologies for the Semantic Web**. In Cristina Baroglio, Piero A. Bonatti, Jan Maluszynski, Massimo Marchiori, Axel Polleres, and Sebastian Schaffert, editors, *4th International Reasoning Web Summer School (RW 2008), Venice, Italy, September 7–11, 2008*, volume 5224 of *LNCS*, pages 1–53. Springer, September 2008.

Edited Books

Thomas Eiter, Adil El Ghali, Sergio Fernández, Stijn Heymans, Thomas Krennwallner, and François Lèvy, editors. **BuRO 2010: 1st International Workshop on Business Models, Business Rules and Ontologies, Brixen, Italy, 21 September 2010**. Ontorule Project, September 2010.

Conferences, Symposia, and Workshops

Thomas Eiter, Thomas Krennwallner, Patrik Schneider, and Guohui Xiao. **Uniform Evaluation of Non-monotonic DL-Programs**. In Thomas Lukasiewicz and Attila Sali, editors, *7th International Symposium on Foundations of Information and Knowledge Systems (FoIKS 2012)*, volume 7153 of *LNCS*, pages 1–22. Springer, March 2012.

Thomas Eiter, Thomas Krennwallner, and Christoph Redl. **Nested HEX-Programs**. In Hans Tompits, editor, *19th International Conference on Applications of Declarative Programming and Knowledge Management (INAP 2011), Vienna, Austria, September 28–30, 2011*, number arXiv:1108.5626v1 in arXiv. Computing Research Repository (CoRR), September 2011.

Thomas Eiter, Thomas Krennwallner, and Christoph Redl. **Declarative merging of and reasoning about decision diagrams**. In Alessandro Dal Palù, Agostino Dovier, and Andrea Formisano, editors, *Workshop on Constraint Based Methods for Bioinformatics (WCB 2011), Perugia, Italy, September 12, 2011*, pages 3–15. Dipartimento di Matematica e Informatica, Università degli Studi di Perugia, September 2011.

Thomas Krennwallner. **Promoting Modular Nonmonotonic Logic Programs**. In John Gallagher and Michael Gelfond, editors, *Technical Communications of the 27th International Conference on Logic Programming (ICLP 2011), Lexington, Kentucky, U.S.A., July 6–10, 2011*, volume 11 of *Leibniz International Proceedings in Informatics (LIPIcs)*, pages 274–279. Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, July 2011.

Minh Dao-Tran, Thomas Eiter, Michael Fink, and Thomas Krennwallner. **Model Streaming for Distributed Multi-Context Systems**. In Alessandra Mileo and Michael Fink, editors, *2nd International Workshop on Logic-based Interpretation of Context: Modeling and Applications (Log-IC 2011), Vancouver, British Columbia, Canada, May 16, 2011*, volume 738 of *CEUR Workshop Proceedings*, pages 11–22. CEUR-WS.org, May 2011.

Thomas Eiter, Michael Fink, Giovambattista Ianni, Thomas Krennwallner, and Peter Schüller. **Pushing Efficient Evaluation of HEX Programs by Modular Decomposition**. In James Delgrande and Wolfgang Faber, editors, *11th International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR 2011), Vancouver, British Columbia, Canada, May 16–19, 2011*, volume 6645 of *LNAI*, pages 93–106. Springer, May 2011. **Best Paper** http://ijcai-11.iiia.csic.es/program/best_paper_track.

Christian Drescher, Thomas Eiter, Michael Fink, Thomas Krennwallner, and Toby Walsh. **Symmetry Breaking for Distributed Multi-Context Systems**. In James Delgrande and Wolfgang Faber, editors, *11th International*

Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR 2011), Vancouver, British Columbia, Canada, May 16-19, 2011, volume 6645 of *LNAI*, pages 26–39. Springer, May 2011.

Minh Dao-Tran, Thomas Eiter, Michael Fink, and Thomas Krennwallner. **First-Order Encodings of Modular Nonmonotonic Logic Programs**. In Oege de Moor, Georg Gottlob, Tim Furche, and Andrew Sellers, editors, *Datalog Reloaded, 1st International Workshop on Datalog 2010*, Oxford, UK, March 16–19, 2010, volume 6702 of *LNCS*, pages 59–77. Springer, December 2011.

Christoph Redl, Thomas Eiter, and Thomas Krennwallner. **Declarative Belief Set Merging using Merging Plans**. In Ricardo Rocha and John Launchbury, editors, *13th International Symposium on Practical Aspects of Declarative Languages (PADL 2011)*, Austin, Texas, U.S.A., January 24-25, 2011, volume 6539 of *LNCS*, pages 99–114. Springer, January 2011.

Seif El-Din Bairakdar, Minh Dao-Tran, Thomas Eiter, Michael Fink, and Thomas Krennwallner. **Decomposition of Distributed Nonmonotonic Multi-Context Systems**. In Tomi Janhunnen and Ilkka Niemelä, editors, *12th European Conference on Logics in Artificial Intelligence (JELIA 2010)*, Helsinki, Finland, September 13-15, 2010, volume 6341 of *LNAI*, pages 24–37. Springer, September 2010.

Seif El-Din Bairakdar, Minh Dao-Tran, Thomas Eiter, Michael Fink, and Thomas Krennwallner. **The DMCS Solver for Distributed Nonmonotonic Multi-Context Systems**. In Tomi Janhunnen and Ilkka Niemelä, editors, *12th European Conference on Logics in Artificial Intelligence (JELIA 2010)*, Helsinki, Finland, September 13-15, 2010, volume 6341 of *LNAI*, pages 352–355. Springer, September 2010.

Nuno Lopes, Stefan Bischof, Orri Erling, Axel Polleres, Alexandre Passant, Diego Berrueta, Antonio Campos, Jerome Euzenat, Kingsley Idehen, Stefan Decker, Stephane Corlosquet, Jacek Kopecky, Janne Saarela, Thomas Krennwallner, Davide Palmisano, and Michal Zaremba. **RDF and XML: Towards a Unified Query Layer**. In David Wood, Stefan Decker, and Ivan Herman, editors, *W3C Workshop — RDF Next Steps*, Stanford, California, U.S.A., June 26-27, 2010. World Wide Web Consortium, World Wide Web Consortium, June 2010.

Seif El-Din Bairakdar, Minh Dao-Tran, Thomas Eiter, Michael Fink, and Thomas Krennwallner. **Decomposition of Distributed Nonmonotonic Multi-Context Systems**. In Tommie Meyer and Eugenia Ternovska, editors, *13th International Workshop on Non-Monotonic Reasoning (NMR 2010)*, Toronto, Ontario, Canada, May 14-16, 2010, May 2010.

Minh Dao-Tran, Thomas Eiter, Michael Fink, and Thomas Krennwallner. **Distributed Nonmonotonic Multi-Context Systems**. In Fangzhen Lin and Ulrike Sattler, editors, *12th International Conference on the Principles of Knowledge Representation and Reasoning (KR 2010)*, Toronto, Ontario, Canada, May 9-13, 2010, pages 60–70. AAAI Press, May 2010.

Giovambattista Ianni, Thomas Krennwallner, Alessandra Martello, and Axel Polleres. **Dynamic Querying of Mass-Storage RDF Data with Rule-Based Entailment Regime**. In Abraham Bernstein, David R. Karger, Tom Heath, Lee Feigenbaum, Diana Maynard, Enrico Motta, and Krishnaprasad Thirunarayan, editors, *8th International Semantic Web Conference (ISWC 2009)*, Washington D.C., U.S.A., October 25–29, 2009, volume 5823 of *LNCS*, pages 310–327. Springer, October 2009.

Thomas Eiter, Gerhard Brewka, Minh Dao-Tran, Michael Fink, Giovambattista Ianni, and Thomas Krennwallner. **Combining Nonmonotonic Knowledge Bases with External Sources**. In Silvio Ghilardi and Roberto Sebastiani, editors, *7th International Symposium on Frontiers of Combining Systems (FroCos 2009)*, Trento, Italy, September 16–18, 2009, volume 5749 of *LNAI*, pages 18–42. Springer, September 2009.

Minh Dao-Tran, Thomas Eiter, Michael Fink, and Thomas Krennwallner. **Relevance-driven Evaluation of Modular Nonmonotonic Logic Programs**. In Esra Erdem, Fangzhen Lin, and Torsten Schaub, editors, *10th International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR 2009)*, Potsdam, Germany, September 14-18, 2009, volume 5753 of *LNCS*, pages 87–100. Springer, September 2009.

Minh Dao-Tran, Thomas Eiter, Michael Fink, and Thomas Krennwallner. **Modular Nonmonotonic Logic Programming Revisited**. In Patricia M. Hill and David S. Warren, editors, *25th International Conference on Logic Programming (ICLP 2009)*, Pasadena, California, U.S.A., July 14–17, 2009, volume 5649 of LNCS, pages 145–159. Springer, July 2009.

Thomas Eiter, Michael Fink, and Thomas Krennwallner. **Decomposition of Declarative Knowledge Bases with External Functions**. In Craig Boutilier, editor, *Twenty-first International Joint Conference on Artificial Intelligence (IJCAI 2009)*, Pasadena, California, U.S.A., July 11–17, 2009, pages 752–758. AAAI Press, July 2009.

Minh Dao-Tran, Thomas Eiter, and Thomas Krennwallner. **Realizing Default Logic over Description Logic Knowledge Bases**. In Claudio Sossai and Gaetano Chemello, editors, *10th European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty (ECSQARU 2009)*, Verona, Italy, July 1–3, 2009, volume 5590 of LNAI, pages 602–613. Springer, July 2009.

Giovambattista Ianni, Thomas Krennwallner, Alessandra Martello, and Axel Polleres. **A Rule System for Querying Persistent RDFS Data**. In Lora Arroyo, Paolo Traverso, Fabio Ciravegna, Philipp Cimiano, Tom Heath, Eero Hyvönen, Riichiro Mizoguchi, Eyal Oren, Marta Sabou, and Elena Simperl, editors, *6th European Semantic Web Conference (ESWC 2009)*, Heraklion, Greece, May 31–June 4, 2009, volume 5554 of LNCS, pages 857–862. Springer, June 2009.

Thomas Krennwallner, Thomas Eiter, and Michael Fink. **Decomposing HEX-Programs: Preliminary Results**. In Hans Kaiser and Raimund Kirner, editors, *Junior Scientist Conference (JSC 2008)*, Vienna, Austria, November 16–18, 2008, pages 29–30. Vienna University of Technology, November 2008.

Waseem Akhtar, Jacek Kopecký, Thomas Krennwallner, and Axel Polleres. **XSPARQL: Traveling between the XML and RDF Worlds - and Avoiding the XSLT Pilgrimage**. In Sean Bechhofer, Manfred Hauswirth, Jörg Hoffmann, and Manolis Koubarakis, editors, *5th European Semantic Web Conference (ESWC 2008)*, Tenerife, Canary Islands, Spain, June 1–5, 2008, volume 5021 of LNCS, pages 432–447. Springer, June 2008.

Thomas Eiter, Giovambattista Ianni, Thomas Krennwallner, and Roman Schindlauer. **Exploiting Conjunctive Queries in Description Logic Programs**. In *10th International Symposium on Artificial Intelligence and Mathematics (ISAIM 2008): Logic in Artificial Intelligence: Special Session in Honor of the 65th Birthday of Victor W. Marek*, Fort Lauderdale, Florida, U.S.A., January 2–4, 2008, ISAIM Online Proceedings, January 2008.

Thomas Eiter, Giovambattista Ianni, Thomas Krennwallner, and Roman Schindlauer. **Exploiting Conjunctive Queries in Description Logic Programs**. In Diego Calvanese, Enrico Franconi, Volker Haarslev, Domenico Lembo, Boris Motik, Anni-Yasmin Turhan, and Sergio Tessaris, editors, *20th International Workshop on Description Logics (DL 2007)*, Brixen/Bressanone, Italy, June 8–10, 2007, volume 250 of CEUR Workshop Proceedings, pages 259–266. CEUR-WS.org, June 2007.

W3C Member Submissions

Thomas Krennwallner, Nuno Lopes, and Axel Polleres. **XSPARQL: Semantics**, January 2009. W3C member submission.

Nuno Lopes, Thomas Krennwallner, Axel Polleres, Waseem Akhtar, and Stéphane Corlosquet. **XSPARQL: Implementation and Test-cases**, January 2009. W3C member submission.

Axel Polleres, Thomas Krennwallner, Nuno Lopes, Jacek Kopecký, and Stefan Decker. **XSPARQL Language Specification**, January 2009. W3C member submission.

Software

Waseem Akhtar, Thomas Krennwallner, and Nuno Lopes. XSPARQL System. <http://xsparql.deri.org/>.

Seif El-Din Bairakdar, Minh Dao-Tran, and Thomas Krennwallner. DMCS: Distributed Nonmonotonic Multi-Context Systems. <http://www.kr.tuwien.ac.at/research/systems/dmcs/>.

Giovambattista Ianni, Thomas Krennwallner, Alessandra Martello, and Axel Polleres. GiaBATA: Dynamic SPARQL Reasoning. <http://www.sourceforge.net/projects/dlvhex-semweb/>.

Thomas Krennwallner, Roman Schindlauer, and Peter Schüller. DLVHEX: A Solver for HEX-Programs. <http://www.kr.tuwien.ac.at/research/systems/dlvhex/>.

Technical Reports

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