

Christoph Redl

Curriculum Vitae (01/2018)



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Personal Information

Date and Place of Birth

3rd of July, 1986 in St. Pölten, Austria

Nationality

Austrian

Languages

German (native), English (fluent)

Academic Degrees

Dr. techn. (\cong Ph.D.) in *Computer Science*
Dipl.-Ing. (\cong M.Sc.) in *Medical Informatics*
Dipl.-Ing. (\cong M.Sc.) in *Computational Intelligence*
B.Sc. in *Software and Information Engineering*

Current Position

Assistant Professor (fixed-term)

Current Affiliation

Knowledge-Based Systems Group, Institute of Logic and Computation
Technische Universität Wien (TU Vienna), Vienna, Austria

Current Responsibilities

research • software development • reviewing • teaching (lectures, exercise lessons, theses) • coordinating student assistants and tutors • server administration • administrative tasks

Current Research Interests

knowledge representation and reasoning • computational logic • reasoner design • nonmonotonic logic programming and databases • logic-oriented programming • answer set programming and extensions (e.g. for the Semantic Web) • algorithms

Education

2010–2014

Ph.D. student of *Computer Science* at TU Vienna
Graduation with distinction as a Dr. techn. (\cong Ph.D.)

Program: *Mathematical Logic in Computer Science*
Thesis: *Answer Set Programming with External Sources:
Algorithms and Efficient Evaluation*
Supervisor: O. Univ.-Prof. Dipl.-Ing. Dr. techn. Thomas Eiter
Second supervisor: Univ.-Prof. Dipl.-Ing. Dr. techn. Stefan Woltran

2009–2010

Master student of *Medical Informatics* at TU Vienna
Graduation with distinction as a Dipl.-Ing. (\cong M.Sc.)

Thesis: *Merging of Biomedical Decision Diagrams*
Supervisor: O. Univ.-Prof. Dipl.-Ing. Dr. techn. Thomas Eiter

2008–2010

Master student of *Computational Intelligence* at TU Vienna
Graduation with distinction as a Dipl.-Ing. (\cong M.Sc.)

Thesis: *Development of a Belief Merging Framework for DLVHEX*
Supervisor: O. Univ.-Prof. Dipl.-Ing. Dr. techn. Thomas Eiter

2005–2008

Bachelor student of *Software and Information Engineering* at TU Vienna
Graduation with distinction as a B.Sc.

Thesis: *Very Large-Scale Neighborhood Search*
Supervisor: Univ.-Ass. Dipl.-Ing. Dr. techn. Bin Hu

2000–2005

Technical upper secondary school in St. Pölten, Austria
Department of *Electronic Data Processing and Business Organization*
Graduation with distinction
Honored as the best student of the department of the year 2004/05

Thesis: *Reengineering von Pre-.NET-Projekten auf die .NET-Plattform*
(semi-automatic translation of Microsoft Access applications
to Visual Basic .NET)

Supervisor: Mag. Dr. Wilhelm Tröstler

Project: *Development of a Change and
Collaboration Management System in .NET*
(using Visual Basic .NET and Active Server Pages .NET)

Project partner: Markus Szpuszta, Microsoft Austria
(<http://www.microsoft.at>)

1992–2000

Elementary and lower secondary school in Krems, Austria

Career History

May 2015–ongoing

Assistant Professor (fixed-term)
at TU Vienna, Institute of Logic and Computation (formerly: Information Systems)

Project participation:

2015–ongoing: *Integrated Evaluation of Answer Set Programs and Extensions*
(FWF P27730)

Responsibilities: research • software development (C++, Java, Python) •
experiments, benchmarking and data analysis (R) •
teaching (lectures, exercise lessons, supervision of theses) •
coordinating student assistants and tutors •
server administration (Web, file and SVN servers) •
administrative tasks

July 2014–April 2015

Postdoctoral Researcher (FWF) and Software Developer
at TU Vienna, Institute of Information Systems

Project: *Evaluation of ASP Programs with External Source Access*
(FWF P24090)

Responsibilities: research • software development (C++, Java, Python, AJAX) •
teaching (lectures, exercise lessons, supervision of theses)

November 2010–June 2014

Predocutorial Research Assistant (FWF) and Software Developer
at TU Vienna, Institute of Information Systems

Project 2013–2014: *Evaluation of ASP Programs with External Source Access*
(FWF P24090)

Project 2010–2012: *Reasoning in Hybrid Knowledge Bases*
(FWF P20840)

Responsibilities: research • software development (C++, Java) •
experiments, benchmarking and data analysis (R) •
teaching (exercise lessons, supervision of theses)

March 2007–June 2010

Tutor for several courses
at various institutes of TU Vienna (see teaching experience)

Responsibilities: teaching (exercise lessons and exercise solution discussions)

July – August 2004

Internship at Cincinnati Extrusion GmbH, Vienna, Austria
Employed in the IT department

Responsibilities: implementation of a database application •
help-desk tasks • hardware assembling

July 2002

Internship at A. Porr AG, Vienna, Austria

Employed in the IT department

Responsibilities: adopting a database application to new requirements •
 Web development • office tasks

Reviewing and Program Committee Membership

Reviewing for Journals

- 2017: KI, TPLP
- 2015: JAR, TPLP
- 2014: AIJ, SWJ

Reviewing for Conferences and Workshops

- 2017: AAI, LPNMR, PADL
- 2016: AAI, ICLP, KR, ONTOLP
- 2015: LPAR, LPNMR
- 2014: ECAI, JELIA, PADL, RCRA, RuleML
- 2013: ICLP, LICS, LPAR, LPNMR
- 2012: ICAART, ICLP, IJCAR, NMR, RR

Program Committee Membership

- 2018: AAI
- 2017: AAI, LPNMR, PAoASP
- 2016: AAI
- 2015: LPNMR

Organization Committee Membership

Workshop on Trends and Applications of Answer Set Programming 2016

Klagenfurt, Austria

Member of the organization committee

Vienna Summer of Logic 2014

Vienna, Austria

Participation in the local organization

Fourth Answer Set Programming Competition 2013

Member of the organization committee

Vienna Logic Weeks 2012

Vienna, Austria

Participation in the local organization

Teaching Experience

Co-Supervised Master Theses

- “*Answer Set Programming with Epistemic Negation*” (working title)
Anton Strasser
September 2016–ongoing
(supervised together with Thomas Eiter)
- *Development of a Build System for Cross-Platform Open-Source Projects*
Alexander Leutgöb
January 2015–January 2017
(supervised together with Thomas Eiter)
- *Integrating Constraint Programming into Answer Set Programming*
Oleksandr Stashuk
November 2012–September 2013
(supervised together with Thomas Eiter and Thomas Krennwallner)

Co-Supervised Bachelor Theses

- “*Preprocessing Answer Set Programs with Epistemic Negation*”
Stefan Zimmermann
July 2017–ongoing
(supervised together with Thomas Eiter)
- *aspguid: A Declarative GUI Specification Language for ASP Programs*
Niklas Natter
March 2017–September 2017
(supervised together with Thomas Eiter)
- *Integrating Answer Set Programming with Object-oriented Languages*
Jakob Rath
March 2016–November 2016
(supervised together with Thomas Eiter)
- *Inconsistency Analysis of Answer Set Programs*
Markus Bretterbauer
March 2016–September 2016
(supervised together with Thomas Eiter)
- *Evaluation Algorithms for Weak Constraints in HEX-Programs*
Mathias Hofer
August 2015–October 2016
(supervised together with Thomas Eiter and Antonius Weinzierl)
- *ACTHEX: Implementing HEX-Programs with Action Atoms*
Stefano Germano
July 2012–October 2012
(supervised together with Michael Fink and Peter Schüller)

(Co-)Supervised Student Projects

- *Technical Writing in the Area of Logic-oriented Programming*
Mustafa Mehuljic
June 2015–August 2015

- *Constraint Answer Set Programming Based on HEX-Programs*
Alessandro De Rosis
February 2015–June 2015
(supervised together with Francesco Ricca)
- *Theory Propagation in Constraint ASP*
Davide Gatto
June 2014–August 2014
(supervised together with Francesco Ricca)
- *Integrating Constraint Programming into Answer Set Programming*
Oleksandr Stashuk
November 2012–September 2013
(supervised together with Thomas Krennwallner)

Courses at TU Vienna as Assistant Professor

Sole responsibility:

- *Systems and Solving Techniques for Knowledge Representation* (WS 16/17–17/18)

Joint:

- *Knowledge-Based Systems for Business Informatics* (WS 15/16–17/18)
- *Introduction to Knowledge-Based Systems* (WS 15/16–17/18)
- *Knowledge-Based Systems* (SS 15–17)
- *Introduction to Artificial Intelligence* (SS 15–17)
- *Declarative Problem Solving* (SS 15–17)
- *Project in Computer Science 1+2* (SS 15–17)

Exercise Part of Courses at TU Vienna as Project Assistant

- *Knowledge-Based Systems for Business Informatics* (WS 14/15)
- *Introduction to Artificial Intelligence* (SS 12–14)
- *Knowledge-Based Systems* (SS 12)

Exercise Part of the Following Courses at TU Vienna as Tutor

- *Logic-oriented Programming* (SS 10)
Institute of Information Systems
- *Introduction to Knowledge-Based Systems* (WS 09/10)
Institute of Information Systems
- *Distributed Systems* (WS 08/09–09/10)
Institute of Information Systems
- *Database Systems* (WS 08/09–09/10)
Institute of Information Systems
- *Data Modeling* (SS 09–10)
Institute of Information Systems
- *Algorithms and Data Structures* (SS 09–10)
Institute of Computer Graphics and Algorithms
- *Theoretical Computer Science and Logics* (SS 07–10)
Institute of Computer Languages

Computer & IT Skills

Operating Systems (Software Development and Administration)

Linux systems • OS X • Microsoft Windows

Server Administration

experience in the administration of file, Web, SVN and benchmark servers (NFS, Apache, HTCondor), with virtualization (VirtualBox) and with remote access (SSH)

Procedural and Object-Oriented Programming Languages

C • C++ (including STL and Boost libraries) • Java (certified programmer) • C# • Visual Basic (VBA, 6 and .NET) • Python • JavaScript • PHP • Perl

Libraries and Frameworks

Boost libraries • .NET Framework • Java Servlets

Declarative Languages and Knowledge Representation Formalisms

Datalog • answer set programming • HEX-programs • Prolog • XML • multi-context systems • description logics • ontologies • Semantic Web • Haskell • Lambda expressions

Text Processing

\LaTeX • HTML • WML • OpenOffice • LibreOffice • Microsoft Office

Version Control Systems

Git • Subversion • CVS

Development Tools

GNU compiler collection • GNU build system (makefiles and autotools) • Valgrind (profiler) • clang • Visual Studio • Eclipse • NetBeans

Relational Databases

SQL • PL/SQL • trigger • interfaces to procedural languages (e.g. JDBC) • MS SQL Server • Oracle Database • MySQL • PostgreSQL

Miscellaneous

- strong background in algorithms and data structures
- Linux/Unix shell scripting
- experience with software design patterns
- experience in programming language design, parser and compiler generators (Lex, Yacc, Bison, Boost Spirit)
- experience in real-time 3D rendering using OpenGL and Microsoft Direct3D (including shader languages Cg, GLSL, HLSL)
- statistics system R
- HTCondor load balancing system
- experience in test case design including unit tests
- experience in benchmarking, data analysis and presentation of the results
- experience in agile software development and test-driven development

Participation in Software Development Projects

GitHub profile: <https://github.com/credl>

Professional:

2015: Online Demo for Reasoner Software

Allows for using reasoner software via Web interfaces (demonstration purposes)

Implementation based on AJAX and a virtualized server

<http://www.kr.tuwien.ac.at/research/systems/dlvhex/demo.php>

2015: mytheorem

L^AT_EX package for flexible proof positioning

2014 – ongoing: ABC Benchmarking System

Scriptsystem for automated benchmarking based on HTCondor

(supports automated benchmark execution, formatting of the results in L^AT_EX, e-mail notification, and statistical comparisons of several runs)

Implemented as set of shell and R scripts

2012 – ongoing: AngryHEX

An AI agent for the *AngryBirds* computer game (<https://www.angrybirds.com>)

Implemented in Java and C++

13 core team members

2010 – ongoing: DLVHEX

Reasoner for HEX-programs (extension of answer set programs)

Implemented in C, C++ and Python

Extensive use of the Boost libraries and the GNU tools

Includes a rich unit test and benchmark suite

<http://www.kr.tuwien.ac.at/research/systems/dlvhex>

11 core team members (plus short-term members), lead developer since 2012

2009 – 2011: Belief Merging System MELD

Allows for integration of multiple knowledge-bases on top of HEX-programs

Use of Lex, Yacc and Boost Spirit

2009 – 2011: Decision Diagram Plugin for DLVHEX

Allows for easy processing of decision diagrams in logic programs

Plugin to the DLVHEX system

Demonstrated with various medical applications

2009 – ongoing: dsync

Utility for two-way synchronization of possibly distributed directories

Implemented in Java

2004: Internship

Development of a database application for administration tasks in the IT department

Implemented in Visual Basic .NET and Microsoft Access

Part of the internship at Cincinnati Extrusion GmbH

2002: Internship

Extension of custom database application for the management of construction projects

Implemented in Visual Basic 6 and Microsoft Access
Part of the internship at A. Porr AG

Educational:

2004 – 2005: Development of a Change and Collaboration Management System

School project for Microsoft Austria

(contact person: Markus Szpuszta)

Demonstration project to be used in Microsoft talks for presenting the .NET technology
Implemented in Visual Basic .NET, ADO .NET and Active Server Pages .NET

2000 – 2010: Various Hobby and Student Projects

including

end-user applications (e.g. HTML and image editors, compression and encryption software) • compilers and interpreters • 3D rendering frameworks and computer games
• information retrieval software • algorithm visualization tools • mini operating and file systems

Other Scientific Activities

July 5, 2017: Participant at the ASP Modeling Competition at LPNMR

Member of the *LIW* team

(Stefan Ellmauthaler, Christoph Redl, Peter Schüller)

Winner of the competition

July 3, 2017: Invited Talk at IULP

Second International Workshop on User-Oriented Logic Paradigms (IULP 2017)

DLVHEX: A User-Oriented Integration of Answer Set Programming with External Sources

2014

Significant participation in the preparation of the FWF project proposal:

Integrated Evaluation of Answer Set Programs and Extensions (FWF P27730)

Principal investigator: Thomas Eiter

Approved in November 2014, Grant: 349k Euro

2013–ongoing: Participant at Angry Birds AI competition

<http://www.aibirds.org>

Member of the *AngryHEX* team

(TU Vienna, University of Calabria, Marmara University, Max Planck Institute for Informatics)

Semi-finalist of the 6th competition (August 24–25, 2017, Melbourne, Australia)

Quarter-finalist of the 5th competition (July 14–15, 2016, New York, NY, USA)

Finalist of the 4th competition (July 29–31, 2015, Buenos Aires, Argentina)

Quarter-finalist of the 3rd competition (August 18–22, 2014, Prague, Czech Republic)

Semi-finalist of the 2nd competition (August 6–9, 2013, Beijing, China)

January 30–February 8, 2012

Research visit at Potsdam, Germany

University of Potsdam, group of Prof. Dr. Torsten Schaub

June 12–June 17, 2011

SAT/SMT summer school

Massachusetts Institute of Technology, Cambridge, Massachusetts, USA

2011

Significant participation in the preparation of the FWF project proposal:

Evaluation of ASP Programs with External Source Access (FWF P24090)

Principal investigator: Thomas Eiter

Approved in October 2011, Grant: 336k Euro

Grants and Awards

July 5, 2017

Winner of the ASP Modeling Competition at LPNMR
as member of the *LIW* team (Stefan Ellmauthaler, Christoph Redl, Peter Schüller)

December 5, 2013

Best paper award
from the *National Workshop and Prize on Popularize Artificial Intelligence* for:

Francesco Calimeri, Michael Fink, Stefano Germano, Giovambattista Ianni, Christoph Redl, Anton Wimmer
AngryHEX: An Artificial Player for Angry Birds Based on Declarative Knowledge Bases

September 4, 2012

Participation at the doctoral consortium at ICLP 2012
Honored with the best student presentation award

October 2010

Scholarship from the Vienna PhD School of Informatics

October 2009 – July 2010

Research grant for my master theses funded by FWF and WWTF

2008, 2009, 2010, 2011

Merit scholarship for excellent academic achievements
from the Faculty of Informatics, TU Vienna

November 16, 2005

Technical upper secondary school in St. Pölten, Austria
Department of *Electronic Data Processing and Business Organization*
Honored as the best student of the department of the year 2004/05

Journal Publications

- [J7] Christoph Redl. The DLVHEX system for knowledge representation: Recent advances (system description). *Theory and Practice of Logic Programming*, 16(4-5):866–883, 2016.
- [J6] Giovambattista Ianni, Francesco Calimeri, Stefano Germano, Andreas Humenberger, Christoph Redl, Daria Stepanova, Andrea Tucci, and Anton Wimmer. Angry-HEX: an artificial player for angry birds based on declarative knowledge bases. *IEEE Transactions on Computational Intelligence and AI in Games*, 8(2):128–139, 2016.
- [J5] Thomas Eiter, Michael Fink, Giovambattista Ianni, Thomas Krennwallner, Christoph Redl, and Peter Schüller. A model building framework for answer set programming with external computations. *Theory and Practice of Logic Programming*, 16(4):418–464, 2016.
- [J4] Thomas Eiter, Michael Fink, Thomas Krennwallner, and Christoph Redl. Domain expansion for ASP-programs with external sources. *Artificial Intelligence*, 233:84–121, 2016.
- [J3] Yi-Dong Shen, Kewen Wang, Jun Deng, Christoph Redl, Thomas Krennwallner, Thomas Eiter, and Michael Fink. FLP answer set semantics without circular justifications for general logic programs. *Artificial Intelligence*, 213:1–41, May 2014.
- [J2] Thomas Eiter, Michael Fink, Thomas Krennwallner, Christoph Redl, and Peter Schüller. Efficient HEX-program evaluation based on unfounded sets. *Journal of Artificial Intelligence Research*, 49:269–321, February 2014.
- [J1] Thomas Eiter, Michael Fink, Thomas Krennwallner, and Christoph Redl. Conflict-driven ASP solving with external sources. *Theory and Practice of Logic Programming*, 12(4–5):659–679, 2012.

Conference Publications

- [C21] Christoph Redl. Conflict-driven ASP solving with external sources and program splits. In *Proceedings of the Twenty-Sixth International Joint Conference on Artificial Intelligence (IJCAI 2017), August 19–25, 2017, Melbourne, Australia*, pages 1239–1246. AAAI Press, August 2017.
- [C20] Thomas Eiter, Tobias Kaminski, Christoph Redl, Peter Schüller, and Antonius Weinzierl. Answer set programming with external source access. In *Reasoning Web. Semantic Interoperability on the Web - 13th International Summer School 2017, London, UK, July 7-11, 2017, Tutorial Lectures*, pages 204–275, 2017.
- [C19] Christoph Redl. Explaining inconsistency in answer set programs and extensions. In *Proceedings of the Fourteenth International Conference on Logic Programming and Nonmonotonic Reasoning*, pages 176–190. Springer, July 2017.
- [C18] Christoph Redl. Answer set programs with queries over subprograms. In *Proceedings of the Fourteenth International Conference on Logic Programming and Nonmonotonic Reasoning*, pages 160–175. Springer, July 2017.

- [C17] Christoph Redl. On equivalence and inconsistency of answer set programs with external sources. In *Proceedings of the Thirty-First AAAI Conference (AAAI 2017), February 4–9, 2017, San Francisco, California, USA*, pages 1222–1228. AAAI Press, February 2017.
- [C16] Christoph Redl. Efficient evaluation of answer set programs with external sources based on external source inlining. In *Proceedings of the Thirty-First AAAI Conference (AAAI 2017), February 4–9, 2017, San Francisco, California, USA*, pages 1229–1235. AAAI Press, February 2017.
- [C15] Christoph Redl. Extending answer set programs with interpreted functions as first-class citizens. In Yuliya Lierler and Walid Taha, editors, *Proceedings of the Nineteenth International Symposium on Practical Aspects of Declarative Languages (PADL 2017), Paris, France, January 16-17, 2017*, LNCS, pages 68–85. Springer, January 2017.
- [C14] Jakob Rath and Christoph Redl. Integrating answer set programming with procedural languages. In Yuliya Lierler and Walid Taha, editors, *Proceedings of the Nineteenth International Symposium on Practical Aspects of Declarative Languages (PADL 2017), Paris, France, January 16-17, 2017*, LNCS, pages 50–67. Springer, January 2017.
- [C13] Thomas Eiter, Tobias Kaminski, Christoph Redl, and Antonius Weinzierl. Exploiting partial assignments for efficient evaluation of answer set programs with external source access. In *Proceedings of the Twenty-Fifth International Joint Conference on Artificial Intelligence (IJCAI 2016), July 9–15, 2016, New York, New York, USA*. AAAI Press, July 2016.
- [C12] Thomas Eiter, Christoph Redl, and Peter Schüller. Problem solving using the HEX family. In *Computational Models of Rationality*, pages 150–174. College Publications, 2016.
- [C11] Thomas Eiter, Michael Fink, Christoph Redl, and Daria Stepanova. Exploiting support sets for answer set programs with external evaluations. In *Proceedings of the Twenty-Eighth AAAI Conference (AAAI 2014), July 27–31, 2014, Québec City, Québec, Canada*. AAAI Press, July 2014.
- [C10] Thomas Eiter, Michael Fink, Thomas Krennwallner, and Christoph Redl. HEX-programs with existential quantification. In Ricardo Rocha, editor, *Proceedings of the Twentieth International Conference on Applications of Declarative Programming and Knowledge Management (INAP 2013), Kiel, Germany, September 11-13, 2013*, September 2014. Post proceedings.
- [C9] Thomas Eiter, Thomas Krennwallner, and Christoph Redl. HEX-programs with nested program calls. In Hans Tompits, editor, *Proceedings of the Nineteenth International Conference on Applications of Declarative Programming and Knowledge Management (INAP 2011)*, volume 7773 of *LNAI*, pages 1–10. Springer, October 2013.
- [C8] Thomas Eiter, Michael Fink, Thomas Krennwallner, and Christoph Redl. HEX-programs with existential quantification. In Ricardo Rocha, editor, *Proceedings of the Twentieth International Conference on Applications of Declarative Programming and Knowledge Management (INAP 2013), Kiel, Germany, September 11-13, 2013*, September 2013.

- [C7] Michael Fink, Stefano Germano, Giovambattista Ianni, Christoph Redl, and Peter Schüller. ActHEX: implementing HEX programs with action atoms. In Pedro Cabalar and TranCao Son, editors, *Proceedings of the Twelfth International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR 2013)*, volume 8148 of *Lecture Notes in Computer Science*, pages 317–322. Springer Berlin Heidelberg, 2013.
- [C6] Mario Alviano, Francesco Calimeri, Günther Charwat, Minh Dao-Tran, Carmine Dodaro, Giovambattista Ianni, Thomas Krennwallner, Martin Kronegger, Johannes Oetsch, Andreas Pfandler, Jörg Pührer, Christoph Redl, Francesco Ricca, Patrik Schneider, Martin Schwengerer, Lara Katharina Spendier, Johannes Peter Wallner, and Guohui Xiao. The fourth answer set programming competition: Preliminary report. In Pedro Cabalar and Tran Cao Son, editors, *Proceedings of the Twelfth International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR 2013)*, Corunna, Spain, September 15-19, 2013, volume 8148 of *LNCS*, pages 42–53. Springer, September 2013.
- [C5] Günther Charwat, Giovambattista Ianni, Thomas Krennwallner, Martin Kronegger, Andreas Pfandler, Christoph Redl, Martin Schwengerer, Lara Spendier, Johannes Peter Wallner, and Guohui Xiao. VCWC: a versioning competition workflow compiler. In Pedro Cabalar and Tran Cao Son, editors, *Proceedings of the Twelfth International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR 2013)*, Corunna, Spain, September 15-19, 2013, volume 8148 of *LNCS*, pages 233–238. Springer, September 2013.
- [C4] Thomas Eiter, Michael Fink, Thomas Krennwallner, and Christoph Redl. Liberal safety for answer set programs with external sources. In Marie desJardins and Michael Littman, editors, *Proceedings of the Twenty-Seventh AAAI Conference (AAAI 2013)*, July 14–18, 2013, Bellevue, Washington, USA, pages 267–275. AAAI Press, July 2013.
- [C3] Thomas Eiter, Michael Fink, Thomas Krennwallner, Christoph Redl, and Peter Schüller. Exploiting unfounded sets for HEX-program evaluation. In *Proceedings of the Thirteenth European Conference on Logics in Artificial Intelligence (JELIA 2012)*, Toulouse, France, September 26-28, 2012, September 2012.
- [C2] Thomas Eiter, Thomas Krennwallner, and Christoph Redl. Nested HEX-programs. In Hans Tompits, editor, *Proceedings of the Nineteenth 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.
- [C1] Christoph Redl, Thomas Eiter, and Thomas Krennwallner. Declarative belief set merging using merging plans. In Ricardo Rocha and John Launchbury, editors, *Proceedings of the Thirteenth International Symposium on Practical Aspects of Declarative Languages (PADL 2011)*, Austin, Texas, USA, January 24-25, 2011, volume 6539 of *LNCS*, pages 99–114. Springer, January 2011.

Workshop Publications

- [W6] Christoph Redl. Automated benchmarking of KR-systems. In *Proceedings of the Twnty-Third International Workshop on Experimental Evaluation of Algorithms for Solving Problems with Combinatorial Explosion*, November 28, 2016, Genova, Italy, November 2016.

- [W5] Alessandro De Rosis, Thomas Eiter, Christoph Redl, and Francesco Ricca. Constraint answer set programming based on HEX-programs. In *Eighth Workshop on Answer Set Programming and Other Computing Paradigms (ASPOCP 2015), August 31, 2015, Cork, Ireland*, August 2015.
- [W4] Francesco Calimeri, Michael Fink, Stefano Germano, Giovambattista Ianni, Christoph Redl, and Anton Wimmer. AngryHEX: an artificial player for angry birds based on declarative knowledge bases. In Matteo Baldoni, Federico Chesani, Paola Mello, and Marco Montali, editors, *National Workshop and Prize on Popularize Artificial Intelligence, Turin, Italy, December 5, 2013*, pages 29–35, December 2013.
- [W3] Thomas Eiter, Michael Fink, Thomas Krennwallner, and Christoph Redl. Grounding HEX-programs with expanding domains. In David Pearce, Shahab Tasharrofi, Evgenia Ternovska, and Concepción Vidal, editors, *Second Workshop on Grounding and Transformations for Theories with Variables (GTTV 2013), Corunna, Spain, September 15, 2013*, pages 3–15, September 2013.
- [W2] Thomas Eiter, Michael Fink, Thomas Krennwallner, Christoph Redl, and Peter Schüller. Eliminating unfounded set checking for HEX-programs. In Michael Fink and Yuliya Lierler, editors, *Fifth Workshop on Answer Set Programming and Other Computing Paradigms (ASPOCP 2012), September 4, 2012, Budapest, Hungary*, pages 83–97, September 2012.
- [W1] 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.

■ Doctoral Consortia

- [D1] Christoph Redl. Answer set programming with external sources. In *Eighth ICLP Doctoral Consortium, Budapest, Hungary, September 4, 2012*, pages 469–475, 2012.

■ Poster Presentations

- [P2] Francesco Calimeri, Michael Fink, Stefano Germano, Andreas Humenberger, Giovambattista Ianni, Christoph Redl, Daria Stepanova, and Andrea Tucci. AngryHEX: an angry birds-playing agent based on HEX-programs. Angry-Birds Competition 2014, August 20-22, 2014, Prague, Czech Republic, August 2014.
- [P1] Francesco Calimeri, Michael Fink, Stefano Germano, Giovambattista Ianni, Christoph Redl, and Anton Wimmer. AngryHEX: an angry birds-playing agent based on HEX-programs. Angry-Birds Competition 2013, August 6-9, 2013, Beijing, China, August 2013.

Technical Reports

- [R7] Christoph Redl. Inlining external sources in answer set programs. Technical Report LOGCOMP RR-1923-18-01, Vienna University of Technology, Institute of Logic and Computation, January 2018.
- [R6] Christoph Redl. The ABC benchmarking system - user manual. Technical Report INFSYS RR-1843-16-01, Vienna University of Technology, Institute for Information Systems, January 2016.
- [R5] Thomas Eiter, Christoph Redl, and Peter Schüller. Problem solving using the HEX family. Technical Report INFSYS RR-1843-15-07, Institut für Informationssysteme, Technische Universität Wien, A-1040 Vienna, Austria, December 2015.
- [R4] Thomas Eiter, Mustafa Mehuljic, Christoph Redl, and Peter Schüller. User guide: dlvhex 2.x. Technical Report INFSYS RR-1843-15-05, Vienna University of Technology, Institute for Information Systems, September 2015.
- [R3] Thomas Eiter, Michael Fink, Giovambattista Ianni, Thomas Krennwallner, Christoph Redl, and Peter Schüller. A model building framework for answer set programming with external computations. Technical Report INFSYS RR-1843-15-01, Institut für Informationssysteme, Technische Universität Wien, A-1040 Vienna, Austria, January 2015.
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