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Curriculum Vitae

Background

- Born on October 16, 1972 in Zagreb, Croatia
- Marital status: single
- Nationality: Croatian
- Foreign languages: fluency in speaking and writing in English and German, reasonable knowledge of Spanish

Education

March 2002 – January 2006. PhD degree in the group of Prof. Rudi Studer at the University of Karlsruhe, Germany, completed with honors.

February 1996 – December 1999. Master's degree in computer science at the Faculty of Electrical Engineering and Computing at University of Zagreb, Croatia, GPA 5.00/5.00.

October 1991 – February 1996. Bachelor's degree in electrical engineering at the Faculty of Electrical Engineering and Computing at University of Zagreb, Croatia, GPA 4.97/5.00. In the first, second, and third year I was presented with the faculty award “Josip Lončar” for being the best student of the year. After completing my studies I was granted the faculty award for overall record during all four years of undergraduate studies.

Awards

- Selected as one of “AI's Ten to Watch” by IEEE Intelligent Systems, May/June 2008, pp. 16
- The Cor Baayen 2007 prize awarded by the European Research Consortium for Informatics and Mathematics (ERCIM) for “a most promising young researcher in computer science and applied mathematics”
- Best paper award for the paper “On the Properties of Metamodeling in OWL” at ISWC 2005 [41]
- Faculty award “Josip Lončar” for overall record during all four years of undergraduate studies

Employment History

September 2008 – Present. University Lecturer at the Oxford University Computing Laboratory, Oxford, UK. I am working on various problems related to the theory and practice of knowledge representation and databases.

September 2007 – August 2008. Research Assistant at the Oxford University Computing Laboratory, Oxford, UK; funded by the REOL project, UK EPSRC EP/C537211/1. I was working on various extensions of OWL and related description logic formalisms.

February 2006 – August 2007. Research Fellow at the Computer Science Department of the University of Manchester, Manchester, UK; funded by the REOL project, UK EPSRC EP/C537211/1. I was working on a number of problems related to the integration of knowledge representation formalisms (such as description logics) with conventional data management systems (such as relational databases).

March 2002 – January 2006. Research staff at the Forschungszentrum Information (Research Center for Information Technologies), Karlsruhe, Germany. I worked on my PhD thesis [99], as well as on the following research projects:

- January 2004 – January 2006: DIP, EU IST 507483. I developed the KAON2 ontology management tool, which I also used in my PhD thesis.
- September 2003 – December 2003: Semantic Web-enabled Web Services (SWWS), EU IST 2001-37134. I worked on the discovery of Web services.
- March 2002 – December 2003: Ontologging, EU IST 2000-28293. I developed the open-source KAON¹ ontology management suite. This was the precursor to the KAON2 tool that I developed as part of my PhD research.

April 2001 – December 2001. Senior Developer/Team Leader, Vision GmbH, Munich, Germany (working in a subsidiary in Zagreb, Croatia). I was a leader of a team of five developers working in the Croatian subsidiary of Vision. We were responsible for numerous modules in the Vision's product suite, such as a Web application for management of newspaper advertisements and tools for management of the publishing process. I advised the others on the issues of object-oriented design and was myself mainly working on a client application for Vision's Production Server—the system for the management of the publication process. The projects required knowledge of Java, Swing, XML, and Web application development.

March 2000 – March 2001. Software Developer, Trilogy, Austin, Texas, USA.

- I worked in a team of two developers on the requirements gathering and design of an automated build system. We applied the PSP/TSP project management methodology.
- I worked in a team of four developers on a client application for the management of corporate data. I developed a generic GUI framework and applied it to a pricing information maintenance subsystem, and I also took part in HCI design. The project required knowledge of Java and Swing.
- I worked alone on reengineering the C++ version of the pricing engine and implementing it in Java. The product was integrated into Trilogy's product suite and successfully deployed at several customers. The project required knowledge of database technologies (SQL, JDBC) and profiling techniques (OptimizeIt).

¹<http://kaon.semanticweb.org/>

February 1996 – February 2000. I worked as a teaching assistant at the Polytechnic School of Zagreb, Croatia, where I participated in lecturing the following subjects: Electronic Components, Electronic Circuits, and Fundamentals of Electrical Engineering.

June 1989 – February 2000. During high school and undergraduate studies, I worked for a small company developing accounting database applications in Clipper/DBASE. After graduating from university, I started my own small company called “Infimum” that further developed and maintained these applications. My programs were installed in numerous small and medium-sized companies in Croatia, such as The Plitvice Lakes National Park.² The work required extensive interaction with clients and strong organization skills. I shut down the company before I had left for USA.

Freelance Software Projects

Parallel to my regular employment, I worked on several software projects on a freelance basis.

January 2002 – February 2002. Croatian Mine Action Center, Zagreb, Croatia; funded by the EU-sponsored project “Airborne Minefield Area Reduction (ARC)”, EU-IST-2000-25300. I developed a real-time image acquisition system for high-resolution cameras. The work required careful code optimization and knowledge of C++, MFC, and Windows 98/2000. I was the only designer and programmer.

September 1998 – February 2000. Vision GmbH, Munich, Germany. I was the only software designer and developer on several projects.

- Process manager for Fast-CGI (FCGI) protocol and FCGI client extensions for IIS and Apache Web servers. The project required knowledge of C++, Windows NT, Solaris, Linux, TCP/IP, and network programming.
- Validating XML Editor. The project required knowledge of Windows NT, MFC, C++, and XML.
- An XML-to-PDF converter that reads XML and renders it into a PDF file. The project required knowledge of advanced 2D computer graphics, C++, and Windows NT.

May 1998 – February 1999. VideoCon GmbH, Munich, Germany. I worked in a team of several developers on the following components of a remote surveillance system:

- Windows 9x/NT based user interface (C++, MFC),
- optimization and reengineering of image decoder,
- reengineering of communication module for ISDN and TCP/IP, and
- COM library allowing access to various components from Visual Basic.

²<http://www.np-plitvicka-jezera.hr/>

This was a technically demanding project (especially the communication module) because of the multiplatform development (servers on Linux and clients on Windows9x/NT), requiring a detailed knowledge of networking. Apart from the image decoder, I was the primary architect and author of the mentioned modules.

June 1998 – August 1998. Cromerica (a USA-based company with a subsidiary in Zagreb, Croatia). I designed and implemented a COM interface for a fax server. I worked alone and have used C++ and ATL.

January 1998 – May 1998. I worked in a team of two developers on a program for designing stamps. The project required intimate knowledge of 2D computer graphics, MFC, C++, and Windows 95.

Professional Expertise

Programming languages: C/C++, Java, SQL/OQL, Pascal, Clipper, Fortran, JavaScript
Operating systems: Windows 9x/NT/XP (with excellent knowledge of Win32 API),
Unix (Linux and Solaris) with reasonable knowledge of
Unix APIs
Technologies: MFC, COM, TCP/IP, ATL, CORBA, JDBC, Servlets, JSP,
ISAPI, XML, databases, Swing, UML
Methodologies: Rational Unified Process, Personal Software Process,
Team Software Process, Design Patterns

In 1997, with Julijan Šribar as a coauthor, I published in Croatia a book called *C++ Demystified* [98]. The book presents the ins and outs of the C++ language, and it also provides a brief introduction to object-oriented design and methodology. It was voted the best software engineering book published in Croatia in 1997 by the Croatian IT magazine Bug.³ Ever since the first edition was published, the book has been used at several Croatian universities as a textbook for courses on C++ and programming.

Research-Related Information

Research Interests

My research interests are in description and nonmonotonic logics, automated theorem proving, languages for conceptual modeling, relational and deductive databases, semi-structured and RDF data management, and the Semantic Web.

Research Funding

- ExODA: Integrating Description Logics and Database Technologies for Expressive Ontology-Based Data Access; Engineering and Physical Sciences Research Council (EPSRC) EP/H051511/1; £704,521; co-investigator. The project is funding three research assistants. I wrote a significant part of the proposal.

³<http://www.bug.hr/>

- HermiT: Reasoning with Large Ontologies; Engineering and Physical Sciences Research Council (EPSRC) EP/F065841/1; £480,412; named researcher. The project is funding two research assistants. I wrote the bulk of the proposal and am managing the project on a day-to-day basis.
- ConDOR: Consequence-Driven Ontology Reasoning; Engineering and Physical Sciences Research Council (EPSRC) EP/G02085X/1; £359,707; co-investigator. The project is funding a research assistant and a PhD student.
- ReaSem: Practical Reasoning Support for Semantic Technologies; Deutsche Forschungsgemeinschaft (DFG); coauthor of the proposal. The project is funding one research assistant.

Work on International Standards

I have made numerous key technical contributions to the Web Ontology Language (OWL) 2 published by the World Wide Web Consortium,⁴ and am one of the editors on five main technical documents.

- [1] Boris Motik, Bernardo Cuenca Grau, Ian Horrocks, Zhe Wu, Achille Fokoue, and Carsten Lutz. OWL 2 Web Ontology Language: Profiles, 27 October 2009. W3C Recommendation.
- [2] Boris Motik, Bijan Parsia, and Peter F. Patel-Schneider. OWL 2 Web Ontology Language: XML Serialization, 27 October 2009. W3C Recommendation.
- [3] Boris Motik, Peter F. Patel-Schneider, and Bernardo Cuenca Grau. OWL 2 Web Ontology Language: Direct Semantics, 27 October 2009. W3C Recommendation.
- [4] Boris Motik, Peter F. Patel-Schneider, and Bijan Parsia. OWL 2 Web Ontology Language: Structural Specification and Functional-Style Syntax, 27 October 2009. W3C Recommendation.
- [5] Peter F. Patel-Schneider and Boris Motik. OWL 2 Web Ontology Language: Mapping to RDF Graphs, 27 October 2009. W3C Recommendation.

Patents

- *Representing and Querying Validity Time in an Ontology Language*. Boris Motik. Patent pending, application no. 028464-000100US
- *Method and apparatus for efficient delta pricing*. Thomas J. Carter III, Meetesh M. Karia, August R. Buerkle, Boris Motik, Ramanathan Ramadass, Reuben Swartz. US Patent 7,584,155 B1

⁴<http://www.w3.org/TR/owl-overview/>

Invited Presentations

- *Combining Description Logics, Description Graphs, and Rules*. Invited talk at the 18th Int. Conference on Conceptual Structures (ICCS 2010), July 26–30, 2010, Kuching, Malaysia
- *Combining Description Logics, Description Graphs, and Rules*. Invited talk at the 7th Int. Symposium on Frontiers of Combining Systems (FroCoS 2009), September 16–18, 2009, Trento, Italy
- *Semantics and Reasoning Algorithms for a Faithful Integration of Description Logics and Rules*. Keynote speech at the 2008 Int. Conf. on Web Reasoning and Rule Systems (RR 2008), October 31–November 2, 2008, Karlsruhe, Germany
- *SPARQL, Rules and OWL?* Panel at the OWL: Experiences and Directions 2007 (OWLED 2007), June 6–7, 2007, Innsbruck, Austria
- *Adding Constraints to OWL*. Invited talk at the 2nd Int. Workshop on Scalable Semantic Web Knowledge Base Systems (SSWS 2006), November 5, 2006, Athens, GA, USA
- *My Top Ten Things To Do for more Empirically Successful Computerized Reasoning*. Panel at the Workshop on Empirically Successful Computerized Reasoning, August 21, 2006, Seattle, WA, USA
- *Integrating DLs with Logic Programming*. Invited talk at the Workshop on Model Checking and Semantic Web Rule Languages, October 27–28, 2006, Freiburg, Germany
- *Description Logics and Disjunctive Datalog—More Than just a Fleeting Resemblance?* Invited talk at 4th Workshop on Methods for Modalities (M4M-4), December 1–2, 2005, Berlin, Germany

Reviewing Activities

I was a program committee member at the following conferences and workshops:

- External Committee Member for The 31st ACM SIGACT-SIGMOD-SIGART Symposium on Principles of Database Systems (PODS 2012), May 20–25, 2012, Scottsdale, AZ, USA
- The 21st Int. World Wide Web conference (WWW 2012), April 16–20, 2012, Lyon, France
- The 10th Int. Semantic Web Conference (ISWC 2011), October 23–27, 2011, Bonn, Germany
- The 19th Int. Conference on Conceptual Structures (ICCS 2011), July 25–29, 2011, Derby, UK
- The 5th Int. Conference on Web Reasoning and Rule Systems (RR 2011), August 29–30, 2011, Galway, Ireland

- The 24th Int. Workshop on Description Logics (DL 2011), July 13–16, 2011, Barcelona, Spain
- The 22nd Int. Joint Conference on Artificial Intelligence (IJCAI 2011), July 16–22, 2011, Barcelona, Spain
- The 4th Int. Conference on Web Reasoning and Rule Systems (RR 2010), September 22–24, 2010, Brixen–Bressanone, Italy
- The 23rd Int. Workshop on Description Logics (DL 2010), May 4–7, 2010, Waterloo, ON, Canada
- The 19th European Conference on Artificial Intelligence (ECAI 2010), August 16–20, 2010, Lisbon, Portugal
- The 7th Extended Semantic Web Conference (ESWC 2010), May 30–June 3, 2010, Heraklion, Greece
- The 24th AAAI Conference on Artificial Intelligence (AAAI 2010), July 11–15, 2010, Atlanta, GA, USA
- The 19th Int. World Wide Web Conference (WWW 2010), April 26–30, 2009, Raleigh, NC, USA
- The 5th Int. Workshop on Scalable Semantic Web Knowledge Base Systems (SSWS 2009) at ISWC 2009, October 25–29, 2009, Washington DC, USA
- The 8th Int. Semantic Web Conference (ISWC 2009), October 25–29, 2009, Washington DC, USA
- The 21st Int. Joint Conference on Artificial Intelligence (IJCAI 2009), July 11–17, 2009, Pasadena, CA, USA
- The 18th Int. World Wide Web conference (WWW 2009), April 20–24, 2009, Madrid, Spain
- OWL: Experiences and Directions (OWLED 2008 EU), Workshop at ISWC 2008, October 26–27, 2008, Karlsruhe, Germany
- The 7th Int. Semantic Web Conference (ISWC 2008), October 26–30, 2008, Karlsruhe, Germany
- The 4th Int. Workshop on Scalable Semantic Web Knowledge Base Systems (SSWS 2008) at ISWC 2008, October 26–30, 2008, Karlsruhe, Germany
- Workshop on Practical Aspects of Automated Reasoning (PAAR 2008), August 10, 2008, Sydney, Australia
- The 2nd Int. Conference on Web Reasoning and Rule Systems (RR 2008), October 31–November 2, 2008, Karlsruhe, Germany

- The 18th European Conference on Artificial Intelligence (ECAI 2008), July 21–25, 2008, Patras, Greece
- The 23rd AAAI Conference on Artificial Intelligence (AAAI 2008), July 13–17, 2008, Chicago, IL, USA
- The 5th Int. European Semantic Web Conference (ESWC 2008), June 1–5, 2008, Tenerife, Spain
- The 3rd Int. Workshop on Scalable Semantic Web Knowledge Base Systems (SSWS 2007) at the OTM conferences, Portugal, November 25–30, 2007, Vilamoura, Algarve
- The 6th Int. Semantic Web Conference (ISWC 2007), November 11–15, 2007, Busan, Korea
- Workshop on Building and Applying Ontologies for the Semantic Web (BAOSW 2007) at the 13th Portuguese Conference on Artificial Intelligence (EPIA 2007), December 3–3, Guimarães, Portugal
- IEEE/WIC/ACM Int. Joint Conf. on Web Intelligence (WI 2007), November 2–5, 2007, Silicon Valley, USA
- OWL: Experiences and Directions (OWLED 2007), Workshop at ESWC 2007, June 6–7, 2007, Innsbruck, Austria
- The 6th Int. Conf. on Ontologies, DataBases, and Applications of Semantics (ODBASE 2007), October 28–November 2, 2007, Spain
- The 4th Int. European Semantic Web Conference (ESWC 2007), June 3–7, 2007, Innsbruck, Austria
- Reviewer for 20th Int. Joint Conference on Artificial Intelligence (IJCAI 2007), January 6–12, 2007, Hyderabad, India
- The 2nd Int. Workshop on Scalable Semantic Web Knowledge Base Systems (SSWS 2006), November 5, 2006, Athens, GA, USA
- The 2nd Int. Workshop on Meta-modelling and Ontologies (WoMM 2006), October 12–13, 2006, Karlsruhe, Germany
- The 2nd Int. Conference on Rules and Rule Markup Languages for the semantic Web (RuleML 2006), November 9–10, 2006, Athens, GA, USA
- OWL: Experiences and Directions (OWLED 2006), Workshop at ISWC 2006, November 10–11, 2006, Athens, GA, USA
- The 5th Int. Semantic Web Conference (ISWC 2006), November 5–9, 2006, Athens, GA, USA
- The 12th Int. Conf. on Artificial Intelligence: Methodology, Systems, Applications (AIMSA 2006), September 13–15, 2006, Varna, Bulgaria

- Workshop on Reasoning on the Web (RoW2006) at 15th International World Wide Web Conference (WWW 2006), May 22, 2006, Edinburgh, UK
- The 3rd Int. European Semantic Web Conference (ESWC 2006), June 11–14, 2006, Budva, Serbia and Montenegro
- OWL: Experiences and Directions (OWLED 2005), Workshop at ISWC 2005, November 11–12, 2005, Galway, Ireland
- The 4th Int. Semantic Web Conference (ISWC 2005), November 6–10, 2005, Galway, Ireland
- The 4th Int. Conf. on Ontologies, DataBases, and Applications of Semantics (ODBASE 2005), October 31–November 4, 2005, Agia Napa, Cyprus
- Workshop on Building and Applying Ontologies for the Semantic Web (BAOSW 2005) at the 12th Portuguese Conference on Artificial Intelligence (EPIA 2005), December 5–8, Covilhã, Portugal
- Workshop on Protégé with Rules at 8th Int. Protégé Conference, July 18–21, 2005, Madrid, Spain
- IEEE/WIC/ACM Int. Joint Conf. on Web Intelligence (WI 2005), September 19–22, 2005, in Compiègne University of Technology, France
- IADIS Int. Conf. on WWW/Internet (ICWI 2005), October 19–22, 2004, Lisbon, Portugal
- IEEE/WIC/ACM Int. Joint Conf. on Web Intelligence (WI 2004), September 20–24, 2004, Beijing, China
- IADIS Int. Conf. on WWW/Internet (ICWI 2004), October 6–9, 2004, Madrid, Spain
- The 11th Int. Conf. on Artificial Intelligence: Methodology, Systems, Applications (AIMSA 2004), September 2–4, 2004, Varna, Bulgaria
- Workshop on Ontologies and their Applications, September 28, 2004, São Luís, Maranhão, Brazil

I was also a reviewer for the following journals:

- Communications of the ACM
- Journal of Artificial Intelligence Research
- AI Communications
- Information Sciences
- Knowledge and Information Systems
- Annals of Mathematics and Artificial Intelligence

- IEEE Internet Computing
- International Journal of Semantic Computing
- Journal of Logic and Computation
- Journal of Universal Computer Science
- Artificial Intelligence
- Journal of Applied Logic
- IEEE Intelligent Systems
- IEEE Transactions on Knowledge and Data Engineering
- Elsevier's Journal of Web Semantics
- Springer's Journal of Automated Reasoning
- Journal of Applied Non-Classical Logics
- Journal of Brazilian Computer Society, Special Issue on Ontology Issues and Applications

Organizational Activities

- Program chair of the 22nd Int. Workshop on Description Logics (DL 2009), July 27–29, 2009, Oxford, UK
- Member of the organizational committee of the IJCAI-09 Workshop on Graph Structures for Knowledge Representation and Reasoning (GKR 2009), July 11–13, 2009, Pasadena, CA, USA
- Program chair of the 20th Int. Workshop on Description Logics (DL 2007), June 8–10, 2007, Brixen–Bressanone, Italy

Supervision of PhD Students

I have co-supervised/am co-supervising the following PhD students:

- Héctor Pérez-Urbina, graduated in 2010
- Rob Shearer, due to graduate in Winter 2011
- Despoina Magka, currently in her 2nd year of study

Publication List

Journal Publications

- [6] Boris Motik and Riccardo Rosati. Reconciling Description Logics and Rules. *Journal of the ACM*, 57(5):1–62, 2010.
- [7] Boris Motik, Rob Shearer, and Ian Horrocks. Hypertableau Reasoning for Description Logics. *Journal of Artificial Intelligence Research*, 36:165–228, 2009.
- [8] Héctor Pérez-Urbina, Boris Motik, and Ian Horrocks. Tractable Query Answering and Rewriting under Description Logic Constraints. *Journal of Applied Logic*, 8(2):151–232, 2009.
- [9] Boris Motik, Bernardo Cuenca Grau, Ian Horrocks, and Ulrike Sattler. Representing Ontologies Using Description Logics, Description Graphs, and Rules. *Artificial Intelligence*, 173(14):1275–1309, 2009.
- [10] Boris Motik, Ian Horrocks, and Ulrike Sattler. Bridging the Gap Between OWL and Relational Databases. *Journal of Web Semantics: Science, Services and Agents on the World Wide Web*, 7(2):74–89, 2009.
- [11] Bernardo Cuenca Grau, Ian Horrocks, Boris Motik, Bijan Parsia, Peter Patel-Schneider, and Ulrike Sattler. OWL 2: The next step for OWL. *Journal of Web Semantics: Science, Services and Agents on the World Wide Web*, 6(4):309–322, 2008.
- [12] Ullrich Hustadt, Boris Motik, and Ulrike Sattler. Deciding Expressive Description Logics in the Framework of Resolution. *Information & Computation*, 206(5):579–601, 2008.
- [13] Yevgeny Kazakov and Boris Motik. A Resolution-Based Decision Procedure for *SHOIQ*. *Journal of Automated Reasoning*, 40(2–3):89–116, 2008.
- [14] Boris Motik. On the Properties of Metamodeling in OWL. *Journal of Logic and Computation*, 17(4):617–637, 2007.
- [15] Ullrich Hustadt, Boris Motik, and Ulrike Sattler. Reasoning in Description Logics by a Reduction to Disjunctive Datalog. *Journal of Automated Reasoning*, 39(3):351–384, 2007.
- [16] Boris Motik, Ulrike Sattler, and Rudi Studer. Query Answering for OWL-DL with Rules. *Journal of Web Semantics: Science, Services and Agents on the World Wide Web*, 3(1):41–60, 2005.
- [17] Raphael Volz, Steffen Staab, and Boris Motik. Incrementally Maintaining Materializations of Ontologies Stored in Logic Databases. *Journal of Data Semantics II*, 3360:1–34, 2005. LNCS, Springer.
- [18] Alexander Maedche, Boris Motik, and Ljiljana Stojanovic. Managing multiple and distributed ontologies on the Semantic Web. *VLDB Journal*, 12(4):286–302, 2003.

- [19] Alexander Maedche, Boris Motik, Ljiljana Stojanovic, Rudi Studer, and Raphael Volz. Ontologies for Enterprise Knowledge Management. *IEEE Intelligent Systems*, 18(2):26–33, 2003.
- [20] Alexander Maedche and Boris Motik. Repräsentations- und Anfragesprachen für Ontologien—eine Übersicht. *Datenbank-Spektrum*, 6:43–53, 2003. In German.

Conference Publications

- [21] Giorgos Stoilos, Bernardo Cuenca Grau, Boris Motik, and Ian Horrocks. Repairing Ontologies for Incomplete Reasoners. In *Proc. of the 10th Int. Semantic Web Conf. (ISWC 2011)*, LNCS, Bonn, Germany, October 23–27 2011. Springer. To appear.
- [22] Boris Motik. Representing and Querying Validity Time in RDF and OWL: A Logic-Based Approach. In Peter F. Patel-Schneider, Yue Pan, Pascal Hitzler, Peter Mika, Lei Zhang, Jeff Z. Pan, Ian Horrocks, and Birte Glimm, editors, *Proc. of the 9th Int. Semantic Web Conf. (ISWC 2010)*, volume 6496 of LNCS, pages 550–565, Shanghai, China, November 7–11 2010. Springer.
- [23] Optimising Ontology Classification. Birte Glimm and Ian Horrocks and Boris Motik and Giorgos Stoilos. In Peter F. Patel-Schneider, Yue Pan, Pascal Hitzler, Peter Mika, Lei Zhang, Jeff Z. Pan, Ian Horrocks, and Birte Glimm, editors, *Proc. of the 9th Int. Semantic Web Conf. (ISWC 2010)*, volume 6496 of LNCS, pages 225–240, Shanghai, China, November 7–11 2010. Springer.
- [24] Birte Glimm, Ian Horrocks, and Boris Motik. Optimized Description Logic Reasoning via Core Blocking. In Jürgen Giesl and Reiner Hähnle, editors, *Proc. of the 5th Int. Joint Conf. on Automated Reasoning (IJCAR 2010)*, volume 6173 of LNCS, pages 457–471, Edinburgh, UK, July 16–19 2010. Springer.
- [25] Bernardo Cuenca Grau and Boris Motik. Pushing the Limits of Reasoning over Ontologies with Hidden Content. In Fangzhen Lin, Ulrike Sattler, and Miroslaw Truszczyński, editors, *Proc. of the 12th Int. Conference on Principles of Knowledge Representation and Reasoning (KR 2010)*, pages 200–210, Toronto, ON, Canada, May 9–13 2010. AAAI Press.
- [26] Héctor Pérez-Urbina, Ian Horrocks, and Boris Motik. Efficient Query Answering for OWL 2. In Abraham Bernstein, David R. Karger, Tom Heath, Lee Feigenbaum, Diana Maynard, Enrico Motta, and Krishnaprasad Thirunarayan, editors, *Proc. of the 8th Int. Semantic Web Conference (ISWC 2009)*, volume 5823 of LNCS, pages 489–504, Chantilly, VA, USA, October 25–29 2009. Springer.
- [27] Bernardo Cuenca Grau, Boris Motik, and Yevgeny Kazakov. Import-by-Query: Ontology Reasoning under Access Limitations. In Craig Boutilier, editor, *Proc. of the 21st Int. Joint Conf. on Artificial Intelligence (IJCAI 2009)*, pages 727–733, Pasadena, CA, USA, July 11–17 2009.
- [28] Boris Motik and Ian Horrocks. OWL Datatypes: Design and Implementation. In Amit P. Sheth, Steffen Staab, Mike Dean, Massimo Paolucci, Diana Maynard, Timothy Finin,

- and Krishnaprasad Thirunarayan, editors, *Proc. of the 7th Int. Semantic Web Conference (ISWC 2008)*, volume 5318 of *LNCS*, pages 307–322, Karlsruhe, Germany, October 26–30 2008. Springer.
- [29] Boris Motik, Bernardo Cuenca Grau, Ian Horrocks, and Ulrike Sattler. Representing Structured Objects using Description Graphs. In Gerhard Brewka and Jérôme Lang, editors, *Proc. of the 11th Int. Joint Conf. on Principles of Knowledge Representation and Reasoning (KR 2008)*, pages 296–306, Sydney, NSW, Australia, August 16–19 2008. AAAI Press.
- [30] Boris Motik and Ian Horrocks. Individual Reuse in Description Logic Reasoning. In Alessandro Armando, Peter Baumgartner, and Gilles Dowek, editors, *Proc. of the 4th Int. Joint Conf. on Automated Reasoning (IJCAR 2008)*, volume 5195 of *LNAI*, pages 242–258, Sydney, NSW, Australia, August 12–15 2008. Springer.
- [31] Thanh Tran Duc, Peter Haase, Boris Motik, Bernardo Cuenca Grau, and Ian Horrocks. Metalevel Information in Ontology-Based Applications. In Dieter Fox and Carla P. Gomes, editors, *Proc. of the 23rd AAAI Conf. on Artificial Intelligence (AAAI 2008)*, pages 1237–1242, Chicago, IL, USA, July 13–17 2008. AAAI Press.
- [32] Boris Motik, Bernardo Cuenca Grau, and Ulrike Sattler. Structured Objects in OWL: Representation and Reasoning. In Jinpeng Huai, Robin Chen, Hsiao-Wuen Hon, Yunhao Liu, Wei-Ying Ma, Andrew Tomkins, and Xiaodong Zhang, editors, *Proc. of the 17th Int. World Wide Web Conference (WWW 2008)*, pages 555–564, Beijing, China, April 21–25 2008. ACM Press.
- [33] Christine Golbreich, Matthew Horridge, Ian Horrocks, Boris Motik, and Rob Shearer. OBO and OWL: Leveraging Semantic Web Technologies for the Life Sciences. In Karl Aberer, Key-Sun Choi, Natasha Fridman Noy, Dean Allemang, Kyung-Il Lee, Lyndon J. B. Nixon, Jennifer Golbeck, Peter Mika, Diana Maynard, Riichiro Mizoguchi, Guus Schreiber, and Philippe Cudré-Mauroux, editors, *Proc. of the 6th Int. Semantic Web Conference (ISWC 2007)*, volume 4825 of *LNCS*, pages 169–182, Busan, Korea, November 11–15 2007. Springer.
- [34] Boris Motik, Rob Shearer, and Ian Horrocks. Optimized Reasoning in Description Logics using Hypertableaux. In Frank Pfenning, editor, *Proc. of the 21st Conference on Automated Deduction (CADE-21)*, volume 4603 of *LNAI*, pages 67–83, Bremen, Germany, July 17–20 2007. Springer.
- [35] Boris Motik, Ian Horrocks, and Ulrike Sattler. Bridging the Gap Between OWL and Relational Databases. In Carey L. Williamson, Mary Ellen Zurko, Peter F. Patel-Schneider, and Prashant J. Shenoy, editors, *Proc. of the 16th International World Wide Web Conference (WWW 2007)*, pages 807–816, Banff, AB, Canada, May 8–12 2007. ACM Press.
- [36] Boris Motik and Riccardo Rosati. A Faithful Integration of Description Logics with Logic Programming. In Manuela M. Veloso, editor, *Proc. of the 20th Int. Joint Conference on Artificial Intelligence (IJCAI 2007)*, pages 477–482, Hyderabad, India, January 6–12 2007. Morgan Kaufmann Publishers.

- [37] Boris Motik, Ian Horrocks, Riccardo Rosati, and Ulrike Sattler. Can OWL and Logic Programming Live Together Happily Ever After? In Isabel F. Cruz, Stefan Decker, Dean Allemang, Chris Preist, Daniel Schwabe, Peter Mika, Michael Uschold, and Lora Aroyo, editors, *Proc. of the 5th Int. Semantic Web Conference (ISWC 2006)*, volume 4273 of *LNCS*, pages 501–514, Athens, GA, USA, November 5–9 2006. Springer.
- [38] Boris Motik and Ulrike Sattler. A Comparison of Reasoning Techniques for Querying Large Description Logic ABoxes. In Miki Hermann and Andrei Voronkov, editors, *Proc. of the 13th Int. Conference on Logic for Programming Artificial Intelligence and Reasoning (LPAR 2006)*, volume 4246 of *LNCS*, pages 227–241, Phnom Penh, Cambodia, November 13–17 2006. Springer.
- [39] Yevgeny Kazakov and Boris Motik. A Resolution-Based Decision Procedure for *SHOIQ*. In Ulrich Furbach, John Harrison, and Natarajan Shankar, editors, *Proc. of the 3rd Int. Joint Conference on Automated Reasoning (IJCAR 2006)*, volume 4130 of *LNAI*, pages 662–667, Seattle, WA, USA, August 17–20 2006. Springer.
- [40] Stephan Grimm, Boris Motik, and Chris Preist. Matching Semantic Service Descriptions with Local Closed-World Reasoning. In York Sure and John Domingue, editors, *Proc. of the 3rd European Semantic Web Conference (ESWC 2006)*, volume 4011 of *LNCS*, pages 575–589, Budva, Montenegro, June 11–14 2006. Springer.
- [41] Boris Motik. On the Properties of Metamodeling in OWL. In Yolanda Gil, Enrico Motta, Richard V. Benjamins, and Mark Musen, editors, *Proc. of the 4th Int. Semantic Web Conference (ISWC 2005)*, volume 3729 of *LNCS*, pages 548–562, Galway, Ireland, November 6–10 2005. Springer.
- [42] Ullrich Hustadt, Boris Motik, and Ulrike Sattler. Data Complexity of Reasoning in Very Expressive Description Logics. In Leslie Pack Kaelbling and Alessandro Saffiotti, editors, *Proc. of the 19th Int. Joint Conference on Artificial Intelligence (IJCAI 2005)*, pages 466–471, Edinburgh, UK, July 30–August 5 2005. Morgan Kaufmann Publishers.
- [43] Ullrich Hustadt, Boris Motik, and Ulrike Sattler. A Decomposition Rule for Decision Procedures by Resolution-based Calculi. In Franz Baader and Andrei Voronkov, editors, *Proc. of the 11th Int. Conference on Logic for Programming Artificial Intelligence and Reasoning (LPAR 2004)*, volume 3452 of *LNAI*, pages 21–35, Montevideo, Uruguay, March 14–18 2005. Springer.
- [44] Ullrich Hustadt, Boris Motik, and Ulrike Sattler. Reducing *SHIQ⁻* Description Logic to Disjunctive Datalog Programs. In Didier Dubois, Christopher A. Welty, and Mary-Anne Williams, editors, *Proc. of the 9th Int. Conference on Principles of Knowledge Representation and Reasoning (KR 2004)*, pages 152–162, Whistler, Canada, June 2–5 2004. AAAI Press.
- [45] Ullrich Hustadt, Boris Motik, and Ulrike Sattler. Reasoning in Description Logics with a Concrete Domain in the Framework of Resolution. In Ramon López de Mántaras and Lorenza Saitta, editors, *Proc. of the 16th European Conference on Artificial Intelligence (ECAI 2004)*, pages 353–357, Valencia, Spain, August 22–27 2004. IOS Press.

- [46] Boris Motik, Ulrike Sattler, and Rudi Studer. Query Answering for OWL-DL with Rules. In Sheila A. McIlraith, Dimitris Plexousakis, and Frank van Harmelen, editors, *Proc. of the 3rd Int. Semantic Web Conference (ISWC 2004)*, volume 3298 of *LNCS*, pages 549–563, Hiroshima, Japan, November 7–11 2004. Springer.
- [47] Gábor Nagypál and Boris Motik. A Fuzzy Model for Representing Uncertain, Subjective, and Vague Temporal Knowledge in Ontologies. In Robert Meersman, Zahir Tari, and Douglas C. Schmidt, editors, *Proc. of the 2003 Int. Conference on Ontologies, Databases and Applications of SEMantics (ODBASE 2003)*, volume 2888 of *LNCS*, pages 906–923, Catania, Italy, November 3–7 2003. Springer.
- [48] Raphael Volz, Steffen Staab, and Boris Motik. Incremental Maintenance of Materialized Ontologies. In Robert Meersman, Zahir Tari, and Douglas C. Schmidt, editors, *Proc. of the 2003 Int. Conference on Ontologies, Databases and Applications of SEMantics (ODBASE 2003)*, volume 2888 of *LNCS*, pages 707–724, Catania, Italy, November 3–7 2003. Springer.
- [49] Alexander Maedche, Boris Motik, Ljiljana Stojanovic, Rudi Studer, and Raphael Volz. An infrastructure for searching, reusing and evolving distributed ontologies. In *Proc. of the 12th International World Wide Web Conference (WWW 2003)*, pages 439–448, Budapest, Hungary, May 20–24 2003.
- [50] Raphael Volz, Daniel Oberle, Steffen Staab, and Boris Motik. KAON SERVER — A Semantic Web Management System. In *Alternate Track Proc. of the 12th International World Wide Web Conference (WWW 2003)*, Budapest, Hungary, May 20–24 2003.
- [51] Boris Motik, Alexander Maedche, and Raphael Volz. A Conceptual Modeling Approach for Semantics-Driven Enterprise Applications. In Robert Meersman and Zahir Tari, editors, *Proc. of the 2002 Int. Conference on Ontologies, Databases and Applications of SEMantics (ODBASE 2002)*, volume 2519 of *LNCS*, pages 1082–1099, Irvine, CA, USA, 2002. Springer.
- [52] Erol Bozsak, Marc Ehrig, Siegfried Handschuh, Andreas Hotho, Alexander Maedche, Boris Motik, Daniel Oberle, Christoph Schmitz, Steffen Staab, Ljiljana Stojanovic, Nenad Stojanovic, Rudi Studer, Gerd Stumme, York Sure, Julien Tane, Raphael Volz, and Valentin Zacharias. KAON — Towards a Large Scale Semantic Web. In Kurt Bauknecht, A. Min Tjoa, and Gerald Quirchmayr, editors, *Proc. of the 3rd Int. Conference on E-Commerce and Web Technologies (EC-Web 2002)*, volume 2455 of *LNCS*, pages 304–313, Aix-en-Provence, France, September 2–6 2002. Springer.
- [53] Alexander Maedche, Boris Motik, Nuno Silva, and Raphael Volz. MAFRA — A Mapping FRamework for Distributed Ontologies. In Asunción Gómez-Pérez and Richard V. Benjamins, editors, *Proc. of the 13th Int. Conference on Knowledge Engineering and Knowledge Management (EKAW 2002)*, volume 2473 of *LNAI*, pages 235–250, Sigüenza, Spain, October 1–4 2002. Springer.
- [54] Ljiljana Stojanovic, Alexander Maedche, Boris Motik, and Nenad Stojanovic. User-Driven Ontology Evolution Management. In Asunción Gómez-Pérez and Richard V. Benjamins, editors, *Proc. of the 13th Int. Conference on Knowledge Engineering and*

Knowledge Management (EKAW 2002), volume 2473 of *LNAI*, pages 285–300, Siguenza, Spain, October 1–4 2002. Springer.

- [55] Alexander Maedche, Boris Motik, Ljiljana Stojanovic, Rudi Studer, and Raphael Volz. Managing Multiple Ontologies and Ontology Evolution in Ontologging. In Mark A. Musen, Bernd Neumann, and Rudi Studer, editors, *Proc. of the 17th Int. Federation for Information Processing Congress (IFIP 2002)*, volume 221 of *IFIP Conference Proceedings*, pages 51–63, Montréal, Québec, Canada, August 25–30 2002. Kluwer.
- [56] Boris Motik and Vlado Glavinić. Enabling Agent Architecture through an RDF Query and Inference Engine. In *Proc. of the 10th Mediterranean Electrotechnical Conference (MELECON 2000)*, volume II, pages 762–765, Lemesos, Cyprus, May 29–31 2000.
- [57] Vlado Glavinić and Boris Motik. Agent-Oriented Information Retrieval and Processing. In Damir Kalpić and Vesna Hljuz-Dobrić, editors, *Proc. 20th Int. Conference on Information Technology Interfaces (ITI '98)*, pages 163–168, Pula, Croatia, June 16–19 1998.
- [58] Vlado Glavinić and Boris Motik. Object-Oriented Interface to MMS Services. In *Proc. of the 9th Mediterranean Electrotechnical Conference (MELECON '98)*, volume II, pages 1375–1379, Tel-Aviv, Israel, May 18–20 1998.
- [59] Vlado Glavinić and Boris Motik. On PC-Based MMS Implementations. In *Proc. of the 20th Int'l Convention Managing for Efficiency and Innovation (MIPRO '97)*, pages 193–196, Opatija, Croatia, May 19–23 1997.
- [60] Vlado Glavinić and Boris Motik. G-LOTOS Visual Development Environment. In *Proc. of the 8th Mediterranean Electrotechnical Conference (MELECON '96)*, volume I, pages 136–139, Bari, Italy, May 13–16 1996.
- [61] Boris Motik and Vlado Glavinić. On Semantic Representation of LOTOS Programs. In Damir Kalpić and Vesna Hljuz-Dobrić, editors, *Proc. 17th Int. Conference on Information Technology Interfaces (ITI '95)*, pages 217–224, Pula, Croatia, June 13–16 1995.

Workshop Publications

- [62] František Simančík, Boris Motik, and Markus Krötzsch. Fixed Parameter Tractable Reasoning in DLs via Decomposition. In Riccardo Rosati, Sebastian Rudolph, and Michael Zakharyashev, editors, *Proc. of the 24rd Int. Workshop on Description Logics (DL 2011)*, volume 745 of *CEUR Workshop Proceedings*, Barcelona, Spain, July 13–16 2011.
- [63] Birte Glimm, Ian Horrocks, and Boris Motik. Optimized DL Reasoning via Core Blocking. In Volker Haarslev, David Toman, and Grant Weddell, editors, *Proc. of the 23rd Int. Workshop on Description Logics (DL 2010)*, volume 573 of *CEUR Workshop Proceedings*, Waterloo, ON, Canada, May 4–7 2010.

- [64] Héctor Pérez-Urbina, Ian Horrocks, and Boris Motik. Practical Aspects of Query Rewriting for OWL 2. In Rinke Hoekstra and Peter Patel-Schneider, editors, *Proc. of the 5th Int. Workshop on OWL: Experiences and Directions (OWLED 2009)*, Chantilly, VA, USA, October 23–24 2009.
- [65] Bernardo Cuenca Grau and Boris Motik. Importing Ontologies with Hidden Content. In Bernardo Cuenca Grau, Ian Horrocks, Boris Motik, and Ulrike Sattler, editors, *Proc. of the 22nd Int. Workshop on Description Logics (DL 2009)*, volume 477 of *CEUR Workshop Proceedings*, Oxford, UK, July 27–30 2009.
- [66] Rob Shearer, Ian Horrocks, and Boris Motik. Exploiting Partial Information in Taxonomy Construction. In Bernardo Cuenca Grau, Ian Horrocks, Boris Motik, and Ulrike Sattler, editors, *Proc. of the 22nd Int. Workshop on Description Logics (DL 2009)*, volume 477 of *CEUR Workshop Proceedings*, Oxford, UK, July 27–30 2009.
- [67] Héctor Pérez-Urbina, Boris Motik, and Ian Horrocks. A Comparison of Query Rewriting Techniques for DL-lite. In Bernardo Cuenca Grau, Ian Horrocks, Boris Motik, and Ulrike Sattler, editors, *Proc. of the 22nd Int. Workshop on Description Logics (DL 2009)*, volume 477 of *CEUR Workshop Proceedings*, Oxford, UK, July 27–30 2009.
- [68] Boris Motik, Bernardo Cuenca Grau, Ian Horrocks, and Ulrike Sattler. Modeling Ontologies Using OWL, Description Graphs, and Rules. In Alan Ruttenberg, Ulrike Sattler, and Cathy Dolbear, editors, *Proc. of the 5th Int. Workshop on OWL: Experiences and Directions (OWLED 2008 EU)*, Karlsruhe, Germany, October 26–27 2008.
- [69] Rob Shearer, Boris Motik, and Ian Horrocks. HerMiT: A Highly-Efficient OWL Reasoner. In Alan Ruttenberg, Ulrike Sattler, and Cathy Dolbear, editors, *Proc. of the 5th Int. Workshop on OWL: Experiences and Directions (OWLED 2008 EU)*, Karlsruhe, Germany, October 26–27 2008.
- [70] Boris Motik, Rob Shearer, and Ian Horrocks. Optimizing the Nominal Introduction Rule in (Hyper)Tableau Calculi. In Franz Baader, Carsten Lutz, and Boris Motik, editors, *Proc. of the 21st Int. Workshop on Description Logics (DL 2008)*, volume 353 of *CEUR Workshop Proceedings*, Dresden, Germany, May 13–16 2008.
- [71] Boris Motik, Bernardo Cuenca Grau, and Ulrike Sattler. The Representation of Structured Objects in DLs using Description Graphs. In Franz Baader, Carsten Lutz, and Boris Motik, editors, *Proc. of the 21st Int. Workshop on Description Logics (DL 2008)*, volume 353 of *CEUR Workshop Proceedings*, Dresden, Germany, May 13–16 2008.
- [72] Héctor Pérez-Urbina, Boris Motik, and Ian Horrocks. Rewriting Conjunctive Queries under Description Logic Constraints. In Andrea Cali, Georg Gottlob, Laks V.S. Lakshmanan, and Davide Martinenghi, editors, *Proc. of the Int. Workshop on Logic in Databases (LID 2008)*, Rome, Italy, May 19–20 2008.
- [73] Héctor Pérez-Urbina, Boris Motik, and Ian Horrocks. Rewriting Conjunctive Queries over Description Logic Knowledge Bases. In Klaus-Dieter Schewe and Bernhard Thalheim, editors, *Proc. of the Int. Workshop on Semantics in Data and Knowledge Bases (SDKB 2008)*, volume 4925 of *LNCS*, pages 199–214, Nantes, France, March 29 2008. Springer.

- [74] Boris Motik, Rob Shearer, and Ian Horrocks. A Hypertableau Calculus for *SHIQ*. In Diego Calvanese, Enriso Franconi, Volker Haarslev, Domenico Lembo, Boris Motik, Sergio Tessaris, and Anny-Yasmin Turhan, editors, *Proc. of the 20th Int. Workshop on Description Logics (DL 2007)*, pages 419–426, Brixen/Bressanone, Italy, June 8–10 2007. Bozen/Bolzano University Press.
- [75] Boris Motik, Ian Horrocks, and Ulrike Sattler. Adding Integrity Constraints to OWL. In Christine Golbreich, Aditya Kalyanpur, and Bijan Parsia, editors, *OWL: Experiences and Directions 2007 (OWLED 2007)*, Innsbruck, Austria, June 6–7 2007.
- [76] Boris Motik and Ian Horrocks. Problems with OWL Syntax. In Bernardo Cuenca Grau, Pascal Hitzler, Connor Shankey, and Evan Wallace, editors, *OWL: Experiences and Directions 2006 (OWLED 2006)*, Athens, GA, USA, November 10–11 2006.
- [77] Boris Motik. Description Logics and Disjunctive Datalog—More Than just a Fleeting Resemblance? In Holger Schlingloff, editor, *Proc. of the 4th Workshop on Methods for Modalities (M4M-4)*, volume 194 of *Informatik-Berichte der Humboldt-Universität zu Berlin*, pages 246–265, Berlin, Germany, December 1–2 2005.
- [78] Stephan Grimm and Boris Motik. Closed World Reasoning in the Semantic Web through Epistemic Operators. In Bernardo Cuenca Grau, Ian Horrocks, Bijan Parsia, and Peter Patel-Schneider, editors, *Proc. of the Workshop on OWL: Experiences and Directions (OWLED 2005)*, Galway, Ireland, November 11–12 2005.
- [79] Peter Haase and Boris Motik. A Mapping System for the Integration of OWL-DL Ontologies. In Axel Hahn, Sven Abels, and Liane Haak, editors, *Proc. of the 1st Int. ACM Workshop on Interoperability of Heterogeneous Information Systems (IHIS'05)*, pages 9–16, Bremen, Germany, November 4 2005. ACM Press.
- [80] Ullrich Hustadt and Boris Motik. Description Logics and Disjunctive Datalog—The Story so Far. In Ian Horrocks, Ulrike Sattler, and Frank Wolter, editors, *Proc. of the 2005 Int. Workshop on Description Logics (DL 2005)*, volume 147 of *CEUR Workshop Proceedings*, Edinburgh, UK, July 26–28 2005.
- [81] Pascal Hitzler, Jürgen Angele, Boris Motik, and Rudi Studer. Bridging the Paradigm Gap with Rules for OWL. In *Proc. of the W3C Workshop on Rule Languages for Interoperability*, Washington, DC, USA, April 27–28 2005.
- [82] Stephan Grimm, Boris Motik, and Chris Preist. Variance in e-Business Service Discovery. In David Martin, Rubén Lara, and Takahira Yamaguchi, editors, *Proc. of the ISWC 2004 Workshop on Semantic Web Services: Preparing to Meet the World of Business Applications*, volume 119 of *CEUR Workshop Proceedings*, Hiroshima, Japan, November 8 2004.
- [83] Boris Motik, Alexander Maedche, and Raphael Volz. Optimizing Query Answering in Description Logics using Disjunctive Deductive Databases. In François Bry, Carsten Lutz, Ulrike Sattler, and Mareike Schoop, editors, *Proc. of the 10th Int. Workshop on Knowledge Representation meets Databases (KRDB 2003)*, volume 79 of *CEUR Workshop Proceedings*, Hamburg, Germany, September 15–16 2003.

- [84] Raphael Volz, Steffen Staab, and Boris Motik. Incremental Maintenance of Dynamic Datalog Programs. In Raphael Volz, Stefan Decker, and Isabel F. Cruz, editors, *Proc. of the 1st Int. Workshop on Practical and Scalable Semantic Systems (PSSS1)*, volume 89 of *CEUR Workshop Proceedings*, Sanibel Island, FL, USA, October 20 2003.
- [85] Alexander Maedche, Boris Motik, Nuno Silva, and Raphael Volz. MAFRA — An Ontology MAPPING FRamework in the context of the Semantic Web. In *Proc. of the ECAI 2002 Workshop on Knowledge Transformation for the Semantic Web (KTSW)*, Lyon, France, July 23 2002.

Book Contributions

- [86] Boris Motik. Resolution-Based Reasoning for Ontologies, 2nd edition. In Steffen Staab and Rudi Studer, editors, *Handbook on Ontologies*, International Handbooks on Information Systems, pages 529–550. Springer, 2009.
- [87] Boris Motik, Alexander Maedche, and Raphael Volz. Ontology Representation and Querying for Realizing Semantics-Driven Applications. In Giorgos Samou and Stefanos Kollias, editors, *Multimedia Content and the Semantic Web: Methods, Standards and Tools*, pages 45–73. John Wiley & Sons, 2005.
- [88] Daniel Oberle, Raphael Volz, Steffen Staab, and Boris Motik. An Extensible Ontology Software Environment. In Steffen Staab and Rudi Studer, editors, *Handbook on Ontologies*, International Handbooks on Information Systems, pages 299–320. Springer, 2004.

Technical Reports

- [89] Boris Motik, Bernardo Cuenca Grau, and Ulrike Sattler. Structured Objects in OWL: Representation and Reasoning. Technical report, University of Oxford, UK, 2007.
- [90] Boris Motik, Ian Horrocks, and Ulrike Sattler. Integrating Description Logics and Relational Databases. Technical report, University of Manchester, UK, 2006.
- [91] Boris Motik and Riccardo Rosati. Closing Semantic Web Ontologies. Technical report, University of Manchester, UK, 2006.
- [92] Ullrich Hustadt, Boris Motik, and Ulrike Sattler. Reasoning for Description Logics around *SHIQ* in a Resolution Framework. Technical Report 3-8-04/04, FZI, Germany, 2004.
- [93] Ullrich Hustadt, Boris Motik, and Ulrike Sattler. Reducing *SHIQ*⁻ Description Logics to Disjunctive Datalog Programs. Technical Report 1-8-11/03, FZI, Germany, 2004.

Edited Proceedings

- [94] Bernardo Cuenca Grau, Ian Horrocks, Boris Motik, and Ulrike Sattler, editors. *Proceedings of the 22nd International Workshop on Description Logics (DL 2009)*, Oxford, UK, July 27–30 2009. CEUR Workshop Proceedings. Vol. 477.

- [95] Franz Baader, Carsten Lutz, and Boris Motik, editors. *Proceedings of the 21st International Workshop on Description Logics (DL 2008)*, Dresden, Germany, May 13–16 2008. CEUR Workshop Proceedings. Vol. 353.
- [96] Diego Calvanese, Enrico Franconi, Volker Haarslev, Domenico Lembo, Boris Motik, Sergio Tessaris, and Anni-Yasmin Turhan, editors. *Proceedings of the 20th International Workshop on Description Logics (DL 2007)*, Brixen/Bressanone, Italy, June 8–10 2007. CEUR Workshop Proceedings. Vol. 250.

Books

- [97] Boris Motik and Julijan Šribar. *C++ Demystified*. Element, Zagreb, Croatia, 2nd edition, 2001. In Croatian.
- [98] Boris Motik and Julijan Šribar. *C++ Demystified*. Element, Zagreb, Croatia, 1997. In Croatian.

Theses

- [99] Boris Motik. *Reasoning in Description Logics using Resolution and Deductive Databases*. PhD thesis, Univesität Karlsruhe (TH), Karlsruhe, Germany, January 2006.
- [100] Boris Motik. Improving Interaction with the Information Infrastructure Using Intelligent Agents. Master's thesis, Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia, December 1999. In Croatian.
- [101] Boris Motik. Integrated Development Environment for Specifying Distributed Systems. Diploma thesis, Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia, February 1996. In Croatian.