

# Daria Stepanova

(Dr. techn.)

## Curriculum Vitae

Favoritenstraße 9-11  
Vienna, Austria

+43 680 5040619

+43 (1) 58801184801

✉ [daria.stepanova@kr.tuwien.ac.at](mailto:daria.stepanova@kr.tuwien.ac.at)

🌐 <http://www.kr.tuwien.ac.at/staff/dasha/>



### Personal Information

**Born** May 7, 1988 in St. Petersburg, Russia

**Nationality** Russian

**Languages** Russian (native speaker), English (proficient user), German (upper-intermediate)

### Education

07/11–04/15 **PhD student at Vienna University of Technology.**

Faculty Informatics

Program Mathematical Logic in Computer Science

Thesis Inconsistencies in Hybrid Knowledge Bases

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

Co-supervisor Dr. Michael Fink

*graduation with distinction*

09/05–07/10 **Diploma student at St. Petersburg State University.  
equiv. to BSc + MSc**

Faculty Mathematics and Mechanics

Specialization Applied Informatics

Thesis Computer-aided Resolution of Unsatisfiabilities in Ontologies

Supervisor Prof. Dr. techn. Boris Novikov

*graduation with distinction*

### Continuing Education

10/06–07/07 **Student at St. Petersburg State University.**

Department of Linguistics

English for professionals

Level completed: advanced

10/11–12/11, **Student at Vienna University of Technology.**  
10/12–12/12

German as a foreign language  
Levels completed: A 2.1, B 2.2

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## Work Experience

07/11–  
present **Research assistant at Vienna University of Technology, Vienna, Austria.**

Involved in projects:

Reasoning in Hybrid Knowledge Bases (FWF P20840)(2011–2012)

<http://www.kr.tuwien.ac.at/research/projects/hybridkb/index.html>

Evaluation of ASP Programs with External Source Access (FWF P24090)(2014–2015)

<http://www.kr.tuwien.ac.at/research/projects/hexhex/>

10/09–06/11 **Specialist on system integration at “eKassir”, St. Petersburg, Russia.**

Company deals with software for payment systems,  
Team lead in technical support and remote assistance,  
System installation and adjustment on the client's side,  
Business trips: Podgorica (Montenegro), Akkra (Ghana).

09/08–03/09 **Research intern at Newcastle University, Newcastle-upon-Tyne, UK.**

Involved in a project: Trust Economics

<https://wiki.cs.ncl.ac.uk/trusteconomics/TrustEconomics>

Development of a knowledge-based system prototype for information security decision-making

10/07–08/08, **Part-time tutor of English for corporate clients at American Language Masters (ALM), St. Petersburg, Russia.**  
04/09–10/09

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## Computer skills

- **Programming Languages**

JAVA, C, C++, Turbo Pascal 7.0, java script

- **Knowledge Based Systems**

Description Logics ontologies (Protege, owl-api, owlcpp, Fact++), RDF, RDFS, Answer Set Programming, HEX-programs

- **Operating Systems**

Linux (Ubuntu), Microsoft Windows

- **Text Processing**

LaTeX, HTML, Microsoft Office

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## Additional Computer Experience

- Plugin for Repairing Inconsistent DL-programs (C++) within dlhex framework  
<https://github.com/hexhex/dlliteplugin>
- Participant at 3rd Angry Birds AI competition (<http://www.aibirds.org>), Prague, Czech Republic as a member of the AngryHEX team  
Ranked 7th out of 11 participants
- Knowledge Base for Justified Information Security Decision-making based on ISO 27002 (Information Security Standard) and UCISA Information Security Toolkit (<http://www.ucisa.ac.uk/istoolkit>) (OWL Ontology Web Language, JOWL Java Script library for visualizing OWL-RDFS documents)
- Diploma thesis project: Computer-aided Resolution of Unsatisfiabilities in Ontologies (Java)

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## Supervising Bachelor Theses

- Andreas Humenberger (graduated April, 2014): *Implementing Paracoherent Answer Set Semantics* (co-supervised with Dr. Michael Fink)

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## Talks given at Conferences and Workshops

### **Towards Practical Deletion Repair of Inconsistent DL-programs**

*21st European Conference on Artificial Intelligence*

*Prague, Czech Republic, August, 2014*

### **Towards Practical Deletion Repair of Inconsistent DL-programs**

*27th International Workshop on Description Logics*

*Vienna, Austria, July, 2014*

### **Data Repair of Inconsistent DL-programs**

*23rd Joint International Conference on Artificial Intelligence*

*Beijing, China, August, 2013*

### **Semantic Independence in DL-programs**

*6th International Conference on Web Reasoning and Rule Systems*

*Vienna, Austria, September, 2012*

### **A Knowledge Base for Justified Information Security Decision-making**

*4th International Conference on Software and Data Technologies*

*Sofia, Bulgaria, July, 2009*

### **A Knowledge Base for Justified Information Security Decision-making (progress report)**

*Trust Economics Workshop*  
*Newcastle-upon-Tyne, United Kingdom, December, 2008*

## Demos and Posters

### **Inconsistenies in Hybrid Knowledge Bases (PhD Description)**

Poster presentation

*14th International Conference on Principles of Knowledge Representation and Reasoning*

*Vienna, Austria, July, 2014*

### **Exploiting Support Sets for Answer Set Programs with External Evaluations**

Poster presentation

*28th Conference on Artificial Intelligence*

*Quebec, Canada, July, 2014*

### **AngryHEX: An Angry Birds-playing Agent based on HEX-Programs**

Poster presentation as a member of AngryHex team

*Angry Birds AI competition* (<http://www.aibirds.org>)

*Prague, Czech Republic, August, 2014*

### **Data Repair of Inconsistent DL-programs**

Poster presentation

*23rd Joint International Conference on Artificial Intelligence*

*Beijing, China, August, 2013*

## Reviewing for Journals

- Journal Data Semantics (JoDS): 2015
- Journal of Web Semantics (JWS): 2014

## Reviewing for Conferences and Workshops

- International Description Logic Workshop (DL): 2015
- International Workshop on Nonmonotonic Reasoning (NMR): 2014
- International Workshop on Reactive Concepts in Knowledge Representation (REACTKNOW): 2014
- International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR): 2013, 2015
- AAI Conference on Artificial Intelligence (AAI): 2013
- International Semantic Web Conference (ISWC): 2013
- International Conference on Scalable Uncertainty Management (SUM): 2013
- International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR): 2013
- Conference on Knowledge Engineering and Semantic Web (KESW): 2013, 2014, 2015

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## Program Committee Member

- Conference on Knowledge Engineering and Semantic Web (KESW): 2013, 2014, 2015

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## Volunteer Work in Organizing Conferences and Public Events

- Vienna Summer of Logic (VSL 2014), Vienna, Austria, July, 2014
- Rhythmic Gymnastics European Championship, Vienna, Austria, May-June, 2013
- 25th International Conference on Computer-aided verification (CAV 2013), St. Petersburg, Russia, July, 2013
- 6th International Conference on Web Reasoning and Rule Systems, Vienna, Austria, September, 2012

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## Publication List

Thomas Eiter, Michael Fink, and Daria Stepanova. Computing repairs for inconsistent DL-programs over EL ontologies. In *Proceedings of the 14th International Conference on Logics in Artificial Intelligence (JELIA 2014)*, 426-441, 2014.

Thomas Eiter, Michael Fink, and Daria Stepanova. Towards practical deletion repair of inconsistent DL-programs. In *Proceedings of 21st European Conference on Artificial Intelligence (ECAI 2014)*, 285-290, 2014.

Thomas Eiter, Michael Fink, , and Daria Stepanova. Towards practical deletion repair of inconsistent DL-programs. In *Proceedings of the 27th International Workshop on Description Logics (DL workshop 2014)*, 169-180, 2014.

Thomas Eiter, Michael Fink, Christoph Redl, and Daria Stepanova. Exploiting support sets for answer set programs with external computations. In *Proceedings of 28th Conference on Artificial Intelligence (AAAI 2014)*, 1041-1048, 2014.

Daria Stepanova. Inconsistencies in hybrid knowledge bases. In *Proceedings of 14th Doctoral Consortium on Knowledge Representation (DC of KR 2014)*, 2014.

Thomas Eiter, Michael Fink, and Daria Stepanova. Data repair of inconsistent DL-programs. In *Proceedings of 23rd International Joint Conference on Artificial Intelligence (IJCAI 2013)*, 2013.

Thomas Eiter, Michael Fink, and Daria Stepanova. Inconsistency management for Description Logic Programs and beyond. In *Proceedings of 6th International Conference on Web Reasoning and Rule Systems (RR 2013)*, 1-3, 2013.

Thomas Eiter, Michael Fink, and Daria Stepanova. Semantic independence in DL-programs. In *Proceedings of 6th International Conference on Web Reasoning and Rule Systems (RR 2012)*, 58-74, 2012.

Daria Stepanova, Simon E. Parkin, and Aad van Moorsel. A knowledge base for justified information security decision-making. In *Proceedings of 4th International Conference on Software and Data Technologies (ICSOFT 2009)*, 326-331, 2009.

## Additional Information

Candidate for Master of Sports (rhythmic gymnastics)  
*According to the Unified Sports Classification System of Russian Federation*  
Certified fitness instructor (specialized in group classes)  
Hobbies: volleyball, table tennis, ultimate Frisbee, biking.

## References

- O. Univ. Prof. Dr. techn. Thomas Eiter  
Vienna University of Technology,  
Head of the Institute of Information Systems  
Favoritenstraße 9-11, 1040 Vienna, Austria  
Personal website: <http://www.kr.tuwien.ac.at/staff/eiter/>  
Phone: +43 1 58801 18460  
Fax: +43 1 58801 18493  
Email: eiter@kr.tuwien.ac.at

- Dr. Michael Fink  
Vienna University of Technology,  
Favoritenstraße 9-11, 1040 Vienna, Austria  
Personal website: <http://www.kr.tuwien.ac.at/staff/fink/>  
Phone: +43 1 58801 18465  
Fax: +43 1 58801 18493  
Email: fink@kr.tuwien.ac.at