Giorgio Stefanoni

Dr.

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Background

○ Born in 1987 in Bolzano, Italy

○ Nationality: Italian

○ Foreign languages: fluency in speaking and writing in English, intermediate knowledge of German

Education

2011–2015 **PhD in Computer Science**, *Knowledge Representation and Reasoninig Group*, Department of Computer Science, University of Oxford (UK).
During my PhD studies, I worked on the theoretical and practical aspects of combining knowledge representation formalisms with databases.
Thesis: *Evaluating Conjunctive and Graph Queries over the EL Profile of OWL 2*
Supervisors: Prof. Boris Motik and Prof. Ian Horrocks

2009–2011 **European Master in Computational Logic**, *Free University of Bolzano (IT) and Technische Universität Wien (AT)*, *Graduated with Distinction: 110 cum laude/110.*
Thesis: *Explaining Query Answers in Lightweight Ontologies*
Supervisors: Prof. Thomas Eiter, Dr. Magdalena Ortiz, and Dr. Mantas Šimkus

2006–2009 **Bachelor in Applied Computer Science**, *Free University of Bolzano (IT)*, *Graduated with Distinction: 110 cum laude/110.*
Thesis: *Web Ontology Mediated Extraction of Relational Data*
Supervisors: Prof. Werner Nutt and Dr. Maria Keet

2001–2006 **Scientific high school degree**, *Scientific high school Galileo Galilei*, Bolzano (IT), *Graduated with 95/100.*

Awards

○ **Best Thesis Award (2011)** I was presented with the best thesis award of the European Master in Computational Logic for my thesis on *Explaining Query Answers in Lightweight Ontologies*

○ **Case Studentship (2011-2015)** My doctoral studies were funded by a CASE Studentship jointly provided by EPSRC and Alcatel-Lucent Labs

○ **EMCL Scholarship for EU students (2009-2011)**: The scholarship includes tuition fee waivers and financial support of 200 EUR per month

○ **Bolzano Excellent Student's Scholarship (2007-2008, 2009-2010, 2010-2011)**: For three years during my bachelor and master studies, I was presented with a one-off stipend given by the province of Bolzano to outstanding students

Experience

Vocational

04/2015 onwards — **Research Assistant**, *Knowledge Representation and Reasoninig Group*, Department of Computer Science, University of Oxford (UK).

Prof. Boris Motik and I are working on a novel approach to query optimisation over RDF data. I play an important part in setting the research agenda; in addition, I am responsible for investigating new research ideas and developing prototype software.

October 2009 to December 2009 — **Researcher with Fixed-Term Contract**, *KRDB Research Centre*, Free University of Bolzano (IT).

In this project I was responsible for designing and implementing a prototype for visually querying databases through ontologies over a Web interface. This project required theoretical knowledge of description logics as well as practical knowledge of JavaScript, JavaEE, and SVG. This work was jointly supervised by Prof. Werner Nutt and Prof. Diego Calvanese.

November 2008 to July 2009 — **Intern**, *KRDB Research Centre at Free University of Bolzano (IT)*.

In this project I was responsible for designing and implementing a visual interface for extracting life science data. This work was jointly supervised by Prof. Werner Nutt and Dr. Maria Keet.

January 2008 to July 2008 — **Collaborator**, *Library of the Free University of Bolzano (IT)*.

I helped in the implementation of a chatterbot for the library at Free University of Bolzano. I was responsible for translating regular expressions in English, Italian, and German.

July 2005 to August 2005 — **Intern**, *Südtiroler Informatik AG*, Bolzano (IT).

I was responsible for developing a web-based interface to monitor the network's traffic across the various firewalls in SIAG's infrastructure.

Miscellaneous

April 2011 to March 2012 — **MCR Treasurer**, *St Catherine's College*, University of Oxford (UK).

I was the treasurer of the Middle Common Room of St Catherine's College, University of Oxford. In my role, I was responsible for the accounts of the association and for budgeting the activities running throughout the academic year. The MCR counts more than 300 members and it has a budget of around £10000 per academic year. During my term as MCR treasurer, we introduced electronic tills to the MCR bar.

October 2011 to March 2011 — **MCR IT and Publicity Officer**, *St Catherine's College*, University of Oxford (UK).

I was responsible for updating the MCR website and for advertising the various events organised by the MCR.

Summer 2006 — **Pizza delivery-man**, *Pizzeria Paradise*, Bolzano (IT).

Professional Expertise

DBMS Experience	MySQL (experience in commercial and university projects), PostgreSQL (experience in commercial and university projects), Oracle (basic experience)	**Web Technologies**	XHTML, JavaScript, CSS, J2EE, SVG, XML, OWL, XSLT, AJAX, RDF(S), and SPARQL
Programming Languages	Java (advanced user), SQL (advanced user), C (basic level), C++ (basic level), PHP (intermediate level) SmallTalk (basic level), Haskell (basic level)	**Conceptual Modelling Languages**	UML, ER, and ORM

Reviewing Activity

- **Journals:** I was a reviewer for the following journals.

  - Journal of Artificial Intelligence Research (JAIR)

  - Information Processing Letters (IPL)

- **Conferences:** I was also a reviewer for the following conferences.

  - The 13th International Conference on Principles of Knowledge Representation and Reasoning (KR 2012).

  - The 23rd International Joint Conference on Artificial Intelligence (IJCAI-13).

  - The 12th International Semantic Web Conference (ISWC 2013)

  - The 25th International Joint Conference on Artificial Intelligence (IJCAI-16)

- **Workshops:** I was a reviewer for the following workshops.

  - The OWL Reasoner Evaluation Workshop (ORE 2012)

  - The 2nd International Workshop on Exploiting Large Knowledge Repositories (E-LKR 2012)

  - The 26th International Workshop on Description Logics (DL 2013)

Publications

Papers in Refereed International Journals

Giorgio Stefanoni, Boris Motik, Markus Krötzsch, and Sebastian Rudolph. The Complexity of Answering Conjunctive and Navigational Queries over OWL 2 EL Knowledge Bases. *J. Artif. Intell. Res.*, 51:645–705, 2014.

Diego Calvanese, Magdalena Ortiz, Mantas Simkus, and Giorgio Stefanoni. Reasoning about Explanations for Negative Query Answers in DL-Lite. *J. Artif. Intell. Res.*, 48:635–669, 2013.

Papers in Refereed International Conferences

Giorgio Stefanoni and Boris Motik. Answering conjunctive queries over EL knowledge bases with transitive and reflexive roles. In *Proceeding of the Twenty-Ninth AAAI Conference in Artificial Intelligence*, 2015.

Cristina Feier, David Carral, Giorgio Stefanoni, Bernardo Cuenca Grau, and Ian Horrocks. The combined approach to query answering beyond the OWL 2 profiles. In *Proceedings of the Twenty-Fourth International Joint Conference on Artificial Intelligence, IJCAI 2015*, pages 2971–2977, 2015.

Giorgio Stefanoni, Boris Motik, and Ian Horrocks. Introducing Nominals to the Combined Query Answering Approaches for EL. In *Proceedings of the Twenty-Seventh AAAI Conference in Artificial Intelligence*. AAAI Press, 2013.

Diego Calvanese, Magdalena Ortiz, Mantas Simkus, and Giorgio Stefanoni. The Complexity of Explaining Negative Query Answers in DL-Lite. In *Principles of Knowledge Representation and Reasoning*. AAAI Press, 2012.

Diego Calvanese, Maria Keet, Werner Nutt, and Giorgio Stefanoni. Web-based Graphical Querying of Databases through an Ontology: the WONDER System. In *ACM SAC*, pages 1388–1395, 2010.

Papers in Refereed International Workshops

Giorgio Stefanoni, Boris Motik, and Ian Horrocks. Introducing nominals to the combined query answering approaches for EL. In *Informal Proceedings of the 26th International Workshop on Description Logics*, pages 962–974, 2013.

Giorgio Stefanoni, Boris Motik, and Ian Horrocks. Small datalog query rewritings for EL. In *Proceedings of the 2012 International Workshop on Description Logics*, 2012.

Diego Calvanese, Magdalena Ortiz, Mantas Simkus, and Giorgio Stefanoni. The complexity of conjunctive query abduction in DL-Lite. In *Proceedings of the 24th International Workshop on Description Logics*, 2011.

Theses

Giorgio Stefanoni. *Evaluating conjunctive and graph queries over the EL profile of OWL 2.* PhD thesis, University of Oxford, 2015.

Giorgio Stefanoni. Explaining Query Answers in Lightweight Ontologies: The DL-Lite Case. Master's thesis, Free University of Bozen-Bolzano, 2011.

Giorgio Stefanoni. Web Ontology Mediated Extraction of Relational Data. Bachelor's thesis, Free University of Bozen-Bolzano, 2009.