

ALEXANDRA ROATIȘ

EDUCATION

- 2011 – 2014 **Doctoral Degree in Computer Science**
Efficient Querying and Analytics of
Semantic Web Data
Université Paris-Sud, France
OAK project-team, Inria, France
- 2009 – 2011 **Master's Degree in Computer Science**
Artificial Intelligence and
Distributed Computing
GRADE 9.66 (OUT OF 10) – TOP 10%
Universitatea de Vest Timișoara, Romania
Faculty of Mathematics and Computer Science
- 2006 – 2009 **Bachelor's Degree in Computer Science**
GRADE 9.58 (OUT OF 10) – TOP 3%
Universitatea de Vest Timișoara, Romania
Faculty of Mathematics and Computer Science
- 2006 **Baccalaureate Degree**
GRADE 9.90 (OUT OF 10) – TOP 1%

Address :	University of Waterloo 200 University Ave. West Waterloo, Ontario, Canada N2L 3G1
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Website :	https://cs.uwaterloo.ca/~aroatis/

LANGUAGES

- | | |
|----------|---|
| ROMANIAN | Native language |
| ENGLISH | Fluent – CAE (C2-level)
<i>University of Cambridge ESOL Examinations</i> |
| FRENCH | Good knowledge |

COMPUTER AND PROGRAMMING SKILLS

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|-------------------|--|
| Good Knowledge : | C, JAVA, Q, HTML
POSTGRESQL, KDB+, VIRTUOSO
LINUX, MAC OS, MS WINDOWS
LATEX |
| Basic Knowledge : | C#, C++, LISP, PROLOG, XSLT |

WORK EXPERIENCE

Research Assistant/Engineer at Université Paris-Sud & Inria, France

OCTOBER 2014 – DECEMBER 2014
PostDoctoral Research

Extend the RDF analytics framework proposed during my PhD with :

- automatic analytical schema design, and
- optimized analytical query evaluation.

Implement the framework over POSTGRESQL.

Programming languages : JAVA and Q

SEPTEMBER 2011 – SEPTEMBER 2014
Doctoral Studies

Research Assistant/Engineer at Université Paris-Sud & Inria, France

Extending database methods for RDF, to the domain of data warehouses, focusing on data analysis.

Developed a novel model for representing and querying RDF data, enabling warehouse-style analytics.

Implemented this model in the KDB+ database for real-time and historic data.

Publications :

- International audience : WWW 2014; ERCIM 2014; EDBT 2013; RR 2013; WWW 2012;
- French audience : ISI 2014; BDA 2013 (1); BDA 2013 (2); RFIA 2012.

Teaching assistant for courses :

- Master level : *Internet Programming; Semantic Web;*
- Undergraduate level : *Artificial Intelligence; Databases.*

Programming languages : JAVA and Q

OCTOBER 2011 – AUGUST 2012
Part-time

Software Developer at Université Paris-Sud, France

Worked with the *Autoportrait* team on the development and deployment of interactive software presented within an exhibition at *Musée des arts et métiers, Paris*. Mainly focused on an interface for receiving data from a Kinect sensor.

Publications – International audience : CHI 2014.

Programming languages : JAVA and C++

MARCH 2011 – AUGUST 2011
Internship

Software Developer at Inria, France

Compared saturation and reformulation-based query answering techniques for RDF databases. Developed an algorithm for maintaining the saturation of a database upon updates.

Programming language : JAVA

MARCH 2010 – JULY 2010
Internship

Software Developer at Inria, France

Developed a query optimization module over the ViP2P framework (a platform for scalable management of XML documents in structured peer-to-peer networks) and query cardinality estimations using dataguides.

Publications :

- International audience : CIKM 2010 ;
- French audience : BDA 2010.

Programming language : JAVA

JULY 2008 – DECEMBER 2008
Internship/Part-time

Software Developer at Continental Automotive, Romania

Developed an internal log parsing tool. Implemented software for car radios.

Programming languages : C# and C

SELECTED PUBLICATIONS

- WWW 2014 **RDF Analytics : Lenses over Semantic Graphs.**
Dario Colazzo, François Goasdoué, Ioana Manolescu, Alexandra Roatis
Research Paper at the 23rd International World Wide Web Conference, April 2014, Seoul, South Korea.
- CHI 2014 **A three-dimensional mirror augmented by medical imaging.**
Tom Giraud, Matthieu Courgeon, Marion Tardieu, Alexandra Roatis, Xavier Maître
Research Paper at CHI Conference on Human Factors in Computing Systems, Extended Abstracts, April 2014, Toronto, Canada.
- ERCIM 2014 **Analysing RDF Data : A Realm of New Possibilities.**
Alexandra Roatis
Article in ERCIM News, ERCIM, 2014, Linked Open Data.
- EDBT 2013 **Efficient Query Answering against Dynamic RDF Databases**
François Goasdoué, Ioana Manolescu, Alexandra Roatis
Research Paper at the 16th International Conference on Extending Database Technology, March 2013, Genoa, Italy.
- CIKM 2010 **LiquidXML : Adaptive XML Content Redistribution**
Jesús Camacho-Rodríguez, Asterios Katsifodimos, Ioana Manolescu, Alexandra Roatis
Demonstration at the 19th ACM International Conference on Information and Knowledge Management, August 2010, Toronto, Canada.