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Personal information

- Born: March 22, 1986, Iași, Romania
- Nationality: Romanian

Education

- Jacobs University**, Bremen, Germany 10/2011 - 08/2014 (exp.)
- *Ph.D. Student of Computer Science.*
- Jacobs University**, Bremen, Germany 09/2009 - 08/2011
- *Master of Science in Smart Systems.*
- Jacobs University**, Bremen, Germany 09/2006 - 08/2009
- *Bachelor of Science, double major in Computer Science and Mathematics*
- Al. I. Cuza University**, Iași, Romania 09/2005 - 05/2006
- *Successfully finished first year towards BSc in Computer Science*

Research experience

- Jacobs University**, Bremen, Germany 09/2010 - 08/2011
- Master Thesis Project*
- Supervisors: Prof. Dr. Michael Kohlhase, Dr. Florian Rabe
 - Thesis title: Towards Project-Based Workflows in Twelf
 - Developed the infrastructure for project-based authoring workflows in Twelf, using the Atlas library as a test case.
- Jacobs University**, Bremen, Germany 02/2010 - 05/2010
- Seminar Project*
- Supervisor: Dr. Florian Rabe
 - LATIN (Logic Atlas and Integrator) focuses on developing an interrelated graph of logics and mathematical theories within a foundationally unconstrained framework, built on top of Twelf. In my project, I introduced an URI-based namespace system for theory imports which improves the scalability of the Atlas, reduces name cluttering and paves the way for file-system-independent tools.
- Jacobs University**, Bremen, Germany 09/2009 - 01/2010
- Lab Project*
- Supervisor: Dr. Florian Rabe
 - It is well-known that Higher-Order Logic (HOL) can be developed in terms of only one primitive symbol, equality. In this work I translated the syntax and proof theory of First-Order Logic (FOL) to minimal HOL, and formalized the translation within a modular extension to Twelf.
- Jacobs University**, Bremen, Germany 09/2008 - 05/2009
- Bachelor Thesis in Computer Science and Mathematics*
- Supervisors: Prof. Dr. Michael Kohlhase, Dr. Florian Rabe
 - Thesis title: Reasoning about Theory Morphisms
 - MMT (Module System for Mathematical Theories) is a framework which represents mathematical knowledge as a directed graph, where the nodes are mathematical theories and the arrows encode theory inclusions and theorems. My research introduced two conservative extensions to MMT, where the arrows can depend on other arrows and can be treated as regular objects inside theories.

Industry experience	German Institute for Artificial Intelligence (DFKI) , Bremen, Germany	
	<i>Internship</i>	06/2008 - 08/2008
	<ul style="list-style-type: none"> • Supervisor: Prof. Dr. Lutz Schröder • Implemented a theory package for Kleene Monads in the generic proof assistant Isabelle, formalizing the proofs of their basic properties. 	
	Algorithmica technologies , Bremen, Germany	
	<i>Internship</i>	06/2007 - 08/2007
	<ul style="list-style-type: none"> • Supervisor: Dr. Patrick Bangert • Developed a C++ package for neural networks on top of existing number theory libraries. 	
Teaching experience	Jacobs University , Bremen, Germany	
	<i>Teaching assistant</i>	
	<ul style="list-style-type: none"> • <i>Formal Languages and Logics</i> 	09/2009 - 12/2009
	<ul style="list-style-type: none"> • Supervisor: Prof. Dr. Herbert Jaeger 	
	<ul style="list-style-type: none"> • <i>General Computer Science I and II</i> 	09/2009 - 05/2010
	<ul style="list-style-type: none"> • Supervisor: Prof. Dr. Michael Kohlhase 	
	<ul style="list-style-type: none"> • <i>Algorithms and Data Structures</i> 	09/2008 - 12/2008
	<ul style="list-style-type: none"> • Supervisor: Prof. Dr. Andreas Nüchter 	
Publications, conferences, summer schools	<ul style="list-style-type: none"> • <i>Conference on Intelligent Computer Mathematics (CICM)</i>, Bertinoro (Forli), Italy 	
	<i>Combining Source, Content, Presentation, Narration, and Relational Representation</i> by Fulya Horozal, Alin Iacob, Constantin Jucovschi, Florian Rabe, Michael Kohlhase (in proceedings)	07/2011
	<ul style="list-style-type: none"> • <i>European Summer School in Logic, Language and Information (ESSLLI)</i>, University of Copenhagen, Denmark —participant 	08/2010
	<ul style="list-style-type: none"> • <i>G8–UNESCO World Forum on Education, Research and Innovation</i>, Trieste, Italy —participant 	05/2007
Other programming projects	<i>Picasaweb app</i>	07/2011 - to date
	<ul style="list-style-type: none"> • Developed a Java application for efficiently managing a photo library in Picasaweb. 	
	<i>Better Scala support in jEdit</i>	11/2010
	<ul style="list-style-type: none"> • Extended the jEdit Commando plugin for better management of Scala workflows. 	
	<i>Lab project - JSP</i>	09/2007 - 12/2007
	<ul style="list-style-type: none"> • Implemented a Java servlet search engine which combined information in real-time from two public databases. 	
<i>Lab project - cryptography</i>	02/2006 - 05/2006	
<ul style="list-style-type: none"> • Programmed various algorithms in C++: Mignotte Secret Sharing scheme, Adaptive Huffman compression, Digital Signature Standard. 		
Extracurricular activity	<ul style="list-style-type: none"> • <i>50th International Mathematical Olympiad</i>, Bremen, Germany —team guide for Lithuania 	07/2009
	<ul style="list-style-type: none"> • <i>International Mathematics Competition for University Students (IMO)</i>, Blagoevgrad, Bulgaria —3rd prize 	07/2008
	<ul style="list-style-type: none"> • <i>Mathematics Olympiad of the Ariel University Center of Samaria</i>, Bremen, Germany —local organizer and team participant (Bronze medal) 	03/2008
	<ul style="list-style-type: none"> • <i>MatBoj competition</i>, Bremen, Germany —team participant 	05/2007, 05/2008

Technical skills

- *Programming*: Experienced in Java, Scala, C/C++, theorem proving (Twelf), revision control (SVN), build automation (Ant), documentation generation, debugging, unit testing. Exposure to SML, Prolog, Mathematica, Isabelle, MySQL, authorization protocols (OAuth), XML, OpenMath.
- *Typesetting*: \LaTeX , TikZ
- *Applications/Tools*: jEdit, Eclipse, open source compilers/interpreters, office applications.
- *Operating systems*: Microsoft Windows, Linux

Languages

- Romanian—mother tongue
- English—fluent in written and spoken
- French and German —basic in written and spoken

Hobbies and activities

- playing the piano
- classical music, science fiction, alternative energy, politics, human rights
- cycling, mountain hiking, swimming