Gergely Varró

Curriculum vitae

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Work experience

2010 – 2012 **Humboldt postdoc research fellow**, *Technical University Darmstadt, Real-Time Systems Lab*, Darmstadt, Germany.

As a personal project, I carried out research on the integration possibilities of orthogonal graph pattern matching algorithms and techniques, and designed and implemented a graph pattern based query framework, which supported incremental evaluation over heterogeneous data sources. Additionally, I was involved in the refactoring of the Moflon tool as an advisor in EMF technology and in model transformation tool architecture.

2007 – 2008 **part-time research assistant**, *Budapest University of Technology and Economics, Department of Measurement and Information Systems*, Budapest, Hungary.

As a senior project member (in a group of 4) I was involved in the development of the Java-based, open source VIATRA2 model transformation tool. I was responsible for the design, implementation, and integration of the (performance critical) graph pattern matching module (and its algorithms).

2006 – 2010 **part-time assistant lecturer**, *Budapest University of Technology and Economics, Department of Computer Science and Information Theory*, Budapest, Hungary.

I was a teaching assistant for several courses in the fields of automata theory, lexical analysis, parsing, databases, and algorithms. Additionally, I was responsible for scheduling and preparing exams and mid-term exams for the Formal Languages course. I gave lectures for foreign students in English for one semester.

2004 – 2005 **visiting researcher**, *Technical University Darmstadt, Real-Time Systems Lab*, Darmstadt, Germany.

As a personal project, I examined the implementation issues of incremental graph pattern matching. Additionally, I designed a benchmarking framework by which the performance of graph transformation tools could be assessed and compared.

Education and training

2003 – 2008 **PhD in Computer Engineering**, *Budapest University of Technology and Economics, Department of Computer Science and Information Theory*, Budapest, Hungary, *Summa cum laude*.

Title: *Advanced Techniques for the Implementation of Model Transformation Systems*

Research areas: model-driven software development, model transformation, graph transformation (GT in relational databases, adaptive and incremental GT engines, GT benchmarks)

2000 – 2001 **Guest student**, *Helsinki University of Technology, Department of Computer Science and Engineering*, Espoo, Finland.

1997 – 2003 **MSc in Technical Informatics**, *Budapest University of Technology and Economics, Faculty of Electric Engineering and Technical Informatics, Specialization in IT infrastructure design*, Budapest, Hungary, *Distinguished degree*.

Master's thesis: Integrated Formal Verification of Dynamic UML Models

1993 – 1997 **GCE**, *Fazekas Mihály Secondary School*, Budapest, Hungary.

Specialization in Mathematics

Teaching experience

2012	Technical University Darmstadt
	Lecturer for Model-based software engineering (in English) in 1 semester
2001 – 2010	Budapest University of Technology and Economics
	Lecturer for Formal languages (in English) in 1 semester
	Invited lecturer for Foundations of model-driven systems engineering in 1 semester
	Teaching assistant for Formal languages in 13 semesters
	Teaching assistant for Algorithm theory in 6 semesters
	Teaching assistant for Databases in 1 semester

Participation in research projects

2010 – 2012	CASED associated member (Center for Advanced Security Research Darmstadt, 2008–2014)
2006 – 2008	SENSORIA (Software Engineering in Service-Oriented Overlay Computers, 2005–2009)
2004 – 2005	SegraVis (European Research Training Network, 2002–2006)

Professional activities

Program committee co-chair

2013	*Tutorial chair* at the 9th European Conference on Modelling Foundations and Applications (ECMFA 2013)
2011	*Co-chair* at the 4th International Symposium on Applications of Graph Transformation with Industrial Relevance (AGTIVE 2011)

Program committee member

2014	*Case committee member* at the 7th Transformation Tool Contest (TTC 2014)
2014	*Program committee member* at the 8th International Workshop on Graph Based Tools (GraBaTs 2014)
2014	*Program committee member* at the 7th International Conference on Model Transformation (ICMT 2014)
2013	*Case committee member* at the 6th Transformation Tool Contest (TTC 2013)
2012	*Program committee member* at the 7th International Workshop on Graph Based Tools (GraBaTs 2012)
2012	*Program committee member* at the 6th International Conference on Graph Transformation (ICGT 2012)
2011	*Case committee member* at the 5th Transformation Tool Contest (TTC 2011)
2010	*Program committee member* at the 5th International Conference on Graph Transformation (ICGT 2010)
2010	*Program committee member* at the 4th International Workshop on Graph Based Tools (GraBaTs 2010)
2010	*Case committee member* at the 4th Transformation Tool Contest (TTC 2010)
2009	*Case committee member* at the Graph Based Tool Contest (GraBaTs 2009)

Occasional reviewer for journals

Software and Systems Modeling (SoSyM, 13 papers)

Science of Computer Programming (SCP, 1 paper)

Software: Practice and Experience (SPE, 1 paper)

Software Tools for Technology Transfer (STTT, 1 paper)

Periodica Polytechnica (PP, 1 paper)

Occasional reviewer for conferences

2014 29th IEEE/ACM International Conference on Automated Software Engineering (ASE 2014)

2014 17th International Conference on Fundamental Approaches to Software Engineering (FASE'14)

2013 ACM/IEEE 16th International Conference on Model Driven Engineering Languages and Systems (MODELS 2013)

2013 6th International Conference on Model Transformation (ICMT 2013)

2013 16th International Conference on Fundamental Approaches to Software Engineering (FASE'13)

2012 IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC 2012)

2012 5th International Conference on Model Transformation (ICMT 2012)

2012 15th International Conference on Fundamental Approaches to Software Engineering (FASE'12)

2011 26th IEEE/ACM International Conference on Automated Software Engineering (ASE 2011)

2011 ACM/IEEE 14th International Conference on Model Driven Engineering Languages and Systems (MODELS 2011)

2011 4th International Conference on Model Transformation (ICMT 2011)

2011 7th European Conference on Modelling Foundations and Applications (ECMFA 2011)

2011 14th International Conference on Fundamental Approaches to Software Engineering (FASE'11)

2010 3rd International Conference on Model Transformation (ICMT 2010)

2010 13th International Conference on Fundamental Approaches to Software Engineering (FASE'10)

2009 ACM/IEEE 12th International Conference on Model Driven Engineering Languages and Systems (MODELS'09)

2009 2nd International Conference on Model Transformation (ICMT 2009)

2009 12th International Conference on Fundamental Approaches to Software Engineering (FASE'09)

2008 4th International Conference on Graph Transformation (ICGT 2008)

2008 ACM/IEEE 11th International Conference on Model Driven Engineering Languages and Systems (MODELS'08)

2008 11th International Conference on Fundamental Approaches to Software Engineering (FASE'08)

2007 3rd International Workshop and Symposium on Applications of Graph Transformation with Industrial Relevance (AGTIVE 2007)

2007 6th International Workshop on Graph Transformation and Visual Modeling Techniques (GT-VMT 2007)

2006 9th International Conference on Fundamental Approaches to Software Engineering (FASE'06)

2006 3rd International Conference on Graph Transformation (ICGT 2006)

2006 3rd International Workshop on Graph Based Tools (GraBaTs'06)

| 2006 | 5th International Workshop on Graph Transformation and Visual Modeling Techniques (GT-VMT 2006) |

Scholarships, prizes and awards

2010	Alexander von Humboldt Foundation, Postdoc Research Fellowship
2009	Springer Best Paper Award and ACM Distinguished Paper Award at MODELS 2009
2007	Dimitris N. Chorafas Award
2005	Best PhD Student Award of the Foundation for Higher Education in Telecommunication and Telematics
2004 – 2005	Segravis Scholarship
2002 – 2003	Hewlett Packard Scholarship
2000 – 2001	Erasmus Scholarship
2000	Scholarship of the Hungarian Republic
1999	Budapest University of Technology and Economics, Scientific Student Conference, 1st prize Title: Designing the Automatic Transformation of Visual Languages

Personal skills and competences

Language skills

Hungarian	**Mother tongue**
English, German	**Advanced (C1)**
French	**Intermediate (B1)**

Social skills

| Team work | Experience gained while (i) being involved in the open source Moflon and VIATRA projects, (ii) doing sport in teams (soccer) or with pair (ice dancing) |
| Intercultural skills | Living in multicultural environment for 4 years (research stay, Erasmus programme) |

Organizational skills

Program Committee co-chair at the 4th International Symposium on Applications of Graph Transformation with Industrial Relevance (AGTIVE 2011)

I had a *course organizer* role at the Department of Computer Science and Information Theory for the Formal languages course for 14 semesters being responsible for scheduling and preparing exams and mid-term exams. (Parameters: 3 exams, 2 mid-term exams, 10–15 lecturers and assistants, 450 students)

Voluntary organizer at one of the largest European software science conferences (ETAPS 2008, appr. 650 participants)

Computer skills

Programming languages: Java (Velocity, Hibernate, EJB3, EJB-QL, servlets (Tomcat), JSP, Ant, Spring), LaTeX, Prolog, PHP, C, C++, XSLT

Modeling and markup languages: EMF, QVT, UML, HTML, XML

Databases: MySQL, Oracle, PostgreSQL

Other (uncategorized): Eclipse (including plugin development and XText), Emacs, Linux, SVN, CVS, ANTLR

Other skills

– Good analytical skills (including refactoring and system integration tasks)
– Precise, self-motivated, autonomous, fast learner

Personal interests

Personal interests   Soccer (playing as a defender), skiing, ice dancing

Darmstadt, August 13, 2014.

Varró Gergely