

Tamás Szabó

PhD Student, Software Technology Group, TU Darmstadt
Software Engineer, itemis AG, Stuttgart
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RESEARCH INTERESTS

Programming Languages, DSLs, Algorithms, Program Analysis

EDUCATION

PhD student in Computer Science, May 2015 - present
Software Technology Group
Technische Universität Darmstadt, Darmstadt, Germany
Topic: *Language support for incremental and parallel computations*
Advisors: Sebastian Erdweg and Markus Völter

M.Sc. in Computer Science, February 2011 - February 2013
Budapest University of Technology and Economics, Hungary
Thesis: *Transitive Reachability for Efficient Event-Driven Model Transformations*
Advisors: István Ráth and Gábor Bergmann

B.Sc. in Computer Science, September 2007 - January 2011
Budapest University of Technology and Economics, Hungary

AWARDS

HUAWEI Innovative Leaders of Tomorrow Scholarship, 2011
Scholarship of the Republic of Hungary, 2011 and 2012
Second prize at the Conference of Students' Scientific Society held by the Faculty of Electrical Engineering and Informatics at BUTE.

CONFERENCE PUBLICATIONS

mbeddr - Extensible Languages For Embedded Software Development
T. Szabó, M. Voelter, B. Kolb, D. Ratiu and B. Schaetz

HILT 2014

Incremental pattern matching for the efficient computation of transitive closure

G. Bergmann, I. Ráth, T. Szabó, P. Torrini and D. Varró

ICGT 2012

Parallel Saturation Based Model Checking

A Vörös, T. Szabó, A. Jámboor, D. Darvas, A. Horváth and T. Bartha

ISPDC 2011

TALKS

mbeddr meets IncQuery - Combining the Best Features of Two Modeling Worlds

T. Szabó and I. Ráth

EclipseCon Europe 2014

Interfaces with Franca - for Web, IoT and Automotive

T. Szabó and K. Birken

EclipseCon Europe 2014

Xcore meets IncQuery - How the New Generation of DSLs are Made

T. Szabó and I. Ráth

EclipseCon Europe 2013

EMPLOYMENT

Software Engineer
Stuttgart, Germany

itemis AG
March 2013 - present

As a member of the Language Engineering team I am working on customer projects based on domain-specific languages and language workbenches. I am also one of the main contributors of the open-source mbeddr project.

Software Engineer
Budapest, Hungary

Healthcare Technologies Knowledge Centre
Budapest University of Technology and Economics
June 2009 - January 2013

I had various software engineering and research tasks in the domain of biomedical systems, including projects based on intelligent home environments, medical devices (like ECG) and sensor networks.

SOFTWARE

mbeddr: an extensible set of integrated languages for embedded software development - <http://www.mbeddr.com>

IncA: providing real-time feedback in IDEs with incremental program analyses - <https://szabta89.github.io/projects/inca.html>

EMF-IncQuery: an efficient incremental query engine for EMF models - <https://www.eclipse.org/incquery>

Franca: a powerful framework for the definition and transformation of software interfaces - <https://code.google.com/a/eclipseorg/p/franca>

REFERENCES

Dr. Sebastian Erdweg, Technical University of Darmstadt

Dr. Markus Völter, independent / itemis AG

Dr. István Ráth, Budapest University of Technology and Economics