Tamás Szabó

PhD Student, Software Engineering Research Group, TU Delft
Software Engineer, itemis AG
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RESEARCH INTERESTS Programming Languages, Program Analysis, Incremental Computations

EDUCATION

PhD student in Computer Science, May 2016 - present
Software Engineering Research Group
TU Delft, The Netherlands
Topic: *Dedicated Support for Analyses and Optimizations in Language Workbenches*
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

PUBLICATIONS

Lessons learned from developing mbeddr: a case study in language engineering with MPS; M. Voelter, B. Kolb, T. Szabó, D. Ratiu, A. van Duersen
SOSYM 2016

Dedicated Support for Analyses and Optimizations in Language Workbenches; T. Szabó
SPLASH 2016 - Doctoral Symposium

Efficient Development of Consistent Projectional Editors using Grammar Cells; M. Voelter, T. Szabó, S. Lisson, B. Kolb, S. Erdweg, T. Berger
SLE 2016

IncA: A DSL for the Definition of Incremental Program Analyses; T. Szabó, S. Erdweg, M. Voelter
ASE 2016

An Extensible Framework for Variable-Precision Data-Flow Analyses in MPS; T. Szabó, S. Alperovich, M. Voelter, S. Erdweg
ASE 2016 - Tools Track

Incremental pattern matching for the efficient computation of transitive closure; G. Bergmann, I. Ráth, T. Szabó, P. Torrini and D. Varró
ICGT 2012

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, 2010

EMPLOYMENT

Software Engineer   *itemis AG*
Stuttgart, Germany   *March 2013 - present*

As a member of the Language Engineering team, I work 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   *Healthcare Technologies Knowledge Centre*
                           Budapest University of Technology and Economics
Budapest, Hungary   *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, and sensor networks.

SOFTWARE

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

IncA: a framework for incremental evaluation of static program analyses - https://szabta89.github.io/projects/inca.html

MPS-DF: an extensible framework for variable-precision data-flow analyses - https://szabta89.github.io/projects/df.html

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

REFERENCES

Dr. Sebastian Erdweg, TU Delft
Dr. Markus Völter, independent / itemis AG
Dr. István Ráth, Budapest University of Technology and Economics