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Message from the Chairs

This volume contains the papers presented at SLE 2017: the 10th ACM SIGPLAN International Conference on Software Language Engineering held on October 23 - 24, 2017 in Vancouver, Canada as part of SPLASH 2017 (ACM SIGPLAN conference on Systems, Programming, Languages and Applications: Software for Humanity). SLE is the premier forum for researchers and practitioners devoted to the principles of software languages: their design, their implementation, and their evolution.

Software Language Engineering (SLE) is a young engineering discipline with the aim of establishing a systematic and rigorous approach to the development, use, and maintenance of software languages, which comprises specification, modeling and programming languages, whether general-purpose or domain-specific. Key topics of interest for SLE include approaches, methodologies and tools for language design and implementation with focus on techniques for static and behavioral semantics, generative or interpretative approaches (including transformation languages and code generation) as well as meta-languages and tools (including language workbenches). Techniques enabling the testing, simulation or formal verification for language validation purposes are also of utmost interest. SLE always welcomes empirical evaluation and experience reports of language engineering tools, such as user studies evaluating usability, performance benchmarks or industrial applications.

This year, we received a total of 57 submissions. Each paper was reviewed by at least three members of the international Program Committee, which has finally selected 21 research papers, one industrial paper, one tool demonstration paper, and one vision paper. Peter D. Mosses (Swansea University, UK) provided the SLE 2017 keynote, titled “Engineering meta-languages for specifying software languages.”

For the second year, SLE used an evaluation process for assessing the quality of artifacts on which papers are based. The aim of this evaluation process is to foster a culture of experimental reproducibility as well as a higher quality in the research area as a whole. Authors of accepted papers could voluntarily submit their research artifacts for evaluation carried out by an independent committee. We received 12 artifacts and after rigorous assessment accepted all of them - the corresponding papers have received the ACM badge "Artifact Evaluated - Functional".

We are deeply indebted to the hard work of many people who contributed to the success of SLE 2017. We would like to acknowledge the work of all program committee members, the artifact evaluation committee members, and external reviewers for the timely delivery of reviews and open minded discussions which resulted in a rich scientific program. Special thanks goes to Arvid Butting helping us in the paper selection process. Finally, authors of all submitted papers represent the core of the SLE conference, and we believe that the accepted papers lead to significant steps ahead in software language engineering.

We hope that you enjoy reading the proceedings.

Benoît Combemale (General Chair)
Marjan Mernik and Bernhard Rumpe (Program Committee Chairs)
Tanja Mayerhofer and Laurence Tratt (Artifact Evaluation Chairs)
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Contents

Frontmatter

Message from the Chairs . . . iii

Keynotes

Engineering Meta-languages for Specifying Software Languages (Keynote)
Peter D. Mosses — *Swansea University, UK* . . . 1

Parsing

Type-Safe Modular Parsing
Haoyuan Zhang, Huang Li, and Bruno C. d. S. Oliveira — *University of Hong Kong, China* . . . 2

Incremental Packrat Parsing
Patrick Dubroy and Alessandro Warth — *Y Combinator Research, USA* . . . 14

A Symbol-Based Extension of Parsing Expression Grammars and Context-Sensitive Packrat Parsing
Kimio Kuramitsu — *Yokohama National University, Japan* . . . 26

Red Shift: Procedural Shift-Reduce Parsing (Vision Paper)
Nicolas Laurent — *Université Catholique de Louvain, Belgium* . . . 38

Textual Models

Towards a Taxonomy of Grammar Smells
Mats Stijlaart and Vadim Zaytsev — *University of Amsterdam, Netherlands; Raincode Labs, Belgium* . . . 43

Deep Priority Conflicts in the Wild: A Pilot Study
Luís Eduardo de Souza Amorim, Michael J. Steindorfer, and Eelco Visser — *Delft University of Technology, Netherlands* . . . 55

Virtual Textual Model Composition for Supporting Versioning and Aspect-Orientation
Robert Bill, Patrick Neubauer, and Manuel Wimmer — *Vienna University of Technology, Austria; University of York, UK* . . . 67

Robust Projectional Editing
Friedrich Steimann, Marcus Frenkel, and Markus Voelter — *Fernuniversität in Hagen, Germany; itemis, Germany* . . . 79

DSLs

Debugging with Domain-Specific Events via Macros
Xiangqi Li and Matthew Flatt — *University of Utah, USA* . . . 91

A Chrestomathy of DSL Implementations
Simon Schauss, Ralf Lämmel, Johannes Härtel, Marcel Heinz, Kevin Klein, Lukas Härtel, and Thorsten Berger — *University of Koblenz-Landau, Germany; Chalmers University of Technology, Sweden; University of Gothenburg, Sweden* . . . 103

A Requirements Engineering Approach for Usability-Driven DSL Development
Ankica Barišić, Dominique Blouin, Vasco Amaral, and Miguel Goulão — *NOVA-LINCS, Portugal; Nova University of Lisbon, Portugal; Telecom ParisTech, France* . . . 115

Better Call the Crowd: Using Crowdsourcing to Shape the Notation of Domain-Specific Languages
Marco Brambilla, Jordi Cabot, Javier Luis Cánovas Izquierdo, and Andrea Mauri — *Politecnico di Milano, Italy; ICREA, Spain; Open University of Catalonia, Spain* . . . 129

Grammars

A Formalisation of Parameterised Reference Attribute Grammars
Scott J. H. Buckley and Anthony M. Sloane — *Macquarie University, Australia* . . . 139

Concurrent Circular Reference Attribute Grammars
Jesper Öqvist and Görel Hedin — *Lund University, Sweden* . . . 151

Ensuring Non-interference of Composable Language Extensions
Ted Kaminski and Eric Van Wyk — *University of Minnesota, USA* . . . 163

A Domain-Specific Controlled English Language for Automated Regulatory Compliance (Industrial Paper)
Suman Roychoudhury, Sagar Sunkle, Deepali Kholkar, and Vinay Kulkarni — *Tata Consultancy Services, India* . . . 175

Meta-modelling

Concrete Syntax: A Multi-paradigm Modelling Approach
Yentl Van Tendeloo, Simon Van Mierlo, Bart Meyers, and Hans Vangheluwe — *University of Antwerp, Belgium; Flanders Make, Belgium; McGill University, Canada* . . . 182

Structural Model Subtyping with OCL Constraints
Artur Boronat — *University of Leicester, UK* . . . 194

Comparison of the Expressiveness and Performance of Template-Based Code Generation Tools
Lechanceux Luhunu and Eugene Syriani — *Université de Montréal, Canada* . . . 206

A Development Environment for the Alf Language within the MagicDraw UML Tool (Tool Demo)
Ed Seidewitz — *nMeta, USA* . . . 217

GPL/DSL Implementation

FlowSpec: Declarative Dataflow Analysis Specification
Jeff Smits and Eelco Visser — *Delft University of Technology, Netherlands* . . . 221

Metacasanova: An Optimized Meta-compiler for Domain-Specific Languages
Francesco Di Giacomo, Mohamed Abbadi, Agostino Cortesi, Pieter Spronck, and Giuseppe Maggiore — *Università Ca' Foscari, Italy; Hogeschool Rotterdam, Netherlands; Tilburg University, Netherlands* . . . 232

Robust Programs with Filtered Iterators
Jiasi Shen and Martin Rinard — *Massachusetts Institute of Technology, USA* . . . 244

Energy Efficiency across Programming Languages: How Do Energy, Time, and Memory Relate?
Rui Pereira, Marco Couto, Francisco Ribeiro, Rui Rua, Jácome Cunha, João Paulo Fernandes, and João Saraiva — *INESC TEC, Portugal; University of Minho, Portugal; NOVA-LINCS, Portugal; Nova University of Lisbon, Portugal; LISP, Portugal; CISUC, Portugal; University of Coimbra, Portugal* . . . 256

Author Index . . . 268