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.

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