

Seventh International Workshop on Formal Methods and Analysis in Software Product Line Engineering (FMSPLE)

April 3, 2016, Eindhoven, The Netherlands
co-located with ETAPS 2016



In Software Product Line Engineering (SPLE), a portfolio of similar systems is developed from a shared set of software assets. Claimed benefits of SPLE include reductions in the portfolio size, cost of software development and time to production, as well as improvements in the quality of the delivered systems. Yet, despite these benefits, SPLE is still in the early adoption stage. We believe that automated approaches, tools and techniques that provide better support for SPLE activities can further facilitate its adoption in practice and increase its benefits.

To promote work in this area, the FMSPLE'16 workshop focuses on automated analysis and formal methods, which can (1) lead to a further increase in development productivity and reduction in maintenance costs associated with management of the SPLE artifacts, and (2) provide proven guarantees for the correctness and quality of the delivered systems. More specifically, the workshop aims at reviewing the state-of-the-art and the state-of-the-practice of analyses and formal methods for SPLE. It also aims at soliciting examples for successful deployment of such technique and discussing a research agenda for the next steps. To achieve these objectives, the workshop is planned as a highly interactive event initiating and fostering discussion between the participants with different views and backgrounds.

The workshop will start with a **keynote by Prof. Krzysztof Czarnecki** from the University of Waterloo. We will then proceed to presentations of the accepted, peer-reviewed papers and a set of interactive discussions.

Important Dates

Abstract: January 18, 2016

Submission: January 25, 2016

Notification: February 22, 2016

Workshop: April 3, 2016

Program Chairs

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Topics

The workshop focuses on the application of formal methods and automated analyses in all phases of SPLE, including design, development and testing of software products in domain and application engineering. The topics of interest include, but are not limited to:

- Domain analysis and scoping
- Variability modeling
- Specification and verification of functional and non-functional properties in SPLE
- Safety and security aspects in SPLE
- Product-line architectures, design, implementation
- New modeling and programming languages or paradigms
- Static and dynamic analyses of domain artifacts (e.g., model checking, type checking)
- Automated test-case generation and model-based testing in SPLE
- Configuration and product derivation
- Correctness-by-construction techniques in SPLE
- Construction of product lines and mining legacy artifacts
- Evolution of software product lines

Submission

The proceedings of FMSPLE will be published as a volume of the Electronic Proceedings in Theoretical Computer Science (EPTCS). We invite research papers containing novel and previously unpublished results, including experiments, experience reports, reports of industrial case studies, tool descriptions, and short papers describing work in progress or exploratory ideas. All papers have to follow the EPTCS conference proceedings format (Letter) and be 6-12 pages of length.

The papers should be submitted via EasyChair and will be reviewed by at least three members of the program committee. The program committee will select the best papers based on quality, relevance to the workshop, and potential to initiate discussions for presentation.

