

To whom it may concern

Linz, Feb 12, 2024

SPLC Most Influential Paper Award Nomination

We the undersigned nominate the paper “**FeatureIDE: An extensible framework for feature-oriented software development**” by **Thüm, T., Kästner, C., Benduhn, F., Meinicke, J., Saake, G., & Leich, T.**, published in the Science of Computer Programming Journal in 2014.

While it might be uncommon to nominate a tool-focused paper for a MIP award, the Feature IDE has been essential to the success of feature-oriented software development and feature modeling in and beyond the software product line research community as well as in industrial practice and in teaching about software product lines alike.

The Feature IDE is a framework, it integrates all phases of feature-oriented software development. It is an open source framework that encapsulates the common ideas of feature-oriented software development and that can be reused and extended. It is available for download together with lots of documentation and is frequently maintained by a growing community.

Also, the paper has been cited about 600 times. It is the key reference to cite for FeatureIDE besides a 2017 textbook and a 2008 ICSE tool demo paper.

It has influenced/motivated many papers/works that are also important for our community, e.g.,

Mendonca, M., Branco, M., & Cowan, D. (2009, October). SPLOT: software product lines online tools. In *Proceedings of the 24th ACM SIGPLAN conference companion on Object oriented programming systems languages and applications* (pp. 761-762).

Berger, T., Steghöfer, J. P., Ziadi, T., Robin, J., & Martinez, J. (2020). The state of adoption and the challenges of systematic variability management in industry. *Empirical Software Engineering*, 25, 1755-1797.

Ananieva, S., Greiner, S., Kehrer, T., Krüger, J., Kühn, T., Linsbauer, L., ... & Reussner, R. (2022). A conceptual model for unifying variability in space and time: Rationale, validation, and illustrative applications. *Empirical Software Engineering*, 27(5), 101.

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The above is a brief summary of our position on this paper. Below we list brief paragraphs that provide individual points of justification of this paper's significance.

- Rick Rabiser — We are using Feature IDE in industry projects as well as in teaching (in courses on product line engineering as well as software engineering courses) for many years. It enables a quick start into feature-oriented software development and feature modeling/product lines, as well as a deep dive. Because it is a framework, it is easy to extend and build on, which we do in our group.
- Maurice ter Beek -- FeatureIDE is the de facto default feature modelling tool, much like Excel for data elaboration. I cite it in practically all the papers I prepare for VaMoS and SPLC as well as in journal papers on software product lines and variability, also because they typically contain a feature model drawn with FeatureIDE.
- Ferruccio Damiani — Over the years FeatureIDE has promptly integrated paradigms at the frontier of research for the implementation of SPLs. Therefore actively contributing to the dissemination and validation of these paradigms by the research community and industrial entities most attentive to innovation. It has played and currently plays available role in facilitating research and innovation.
- Leopoldo Teixeira — Feature IDE is a crucial tool for teaching about variability and software product lines. Besides, due to its extensibility, it is used and extended by many research groups. This reflects on the wide range of citations of the paper, on all major software engineering publication venues.

Individual confirmation on this joint nomination will be sent, by email, from each of us below.

Signed,

Rick Rabiser, Professor, LIT Cyber-physical Systems Lab, Johannes Kepler University Linz, Austria

Maurice ter Beek Professor, ISTI-CNR Pisa, Italy

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Leopoldo Teixeira, Assistant Professor, Informatics Center (CIn), Federal University of Pernambuco, Brazil