

Call for Papers

Editors

Miguel Rodríguez Luaces <u>miguel.luaces@udc.es</u> Universidade da Coruña, Spain

Sandra Greiner
greiner@imada.sdu.dk
University of Southern
Denmark, Denmark

José Galindo <u>jagalindo@us.es</u> University of Sevilla, Spain

Editors-in-Chief

Benoit Combemale
University of Rennes

<u>Jeff Gray</u> University of Alabama

Bernhard Rumpe RWTH Aachen University

Important Dates

Intent to submit 10-Dec-2025 Paper submission 15-Jan-2026 Notification 31-Mar-2026



Theme Section: Data-intensive software product lines

The rise of data-intensive applications is pushing software engineering toward product lines that must manage not only configurable features but also complex, large-scale data. Modern systems operate on heterogeneous datasets while remaining highly variable, creating new challenges at the intersection of data management and variability engineering. This theme section invites contributions on modeling methods, languages, frameworks, and architectures to develop, evolve and maintain highly configurable software systems. Particularly, methods and tools that treat data modeling and management as a first-class citizen in product line engineering are welcome.

We seek visionary work that elevates data from a passive resource to an active driver of variability management. Contributions may explore data-oriented modeling and analysis techniques to enhance automation, decision-making, and system evolution. We are equally interested in the reverse perspective: addressing variability within data management itself, including challenges like multi-tenancy, schema evolution, heterogeneous storage, or configurable retention and governance across product variants.

The <u>Iournal of Software and Systems Modeling</u> (SoSyM) invites original, high-quality submissions for its theme section on "Data-intensive software product lines" focusing on related topics, including:

- Data-aware variability modeling, management and configuration
- DevOps, evolution, and continuous integration for (model-based) dataintensive product lines
- Modeling dynamic, adaptive, and self-reconfigurable systems
- Runtime analytics, monitoring, and feedback for product line optimization
- AI and machine learning techniques for model-based or data-driven configuration, evolution, and decision-making
- Formal verification, testing, and quality assurance in data-rich variability spaces
- Model-driven engineering and architectural approaches for data-intensive SPLs
- Modeling multi-tenancy, schema evolution, and heterogeneous storage strategies across product variants
- Performance, energy, and resource optimization in data-heavy configurations
- Methods and tools for the management, analysis, and assurance of highly configurable software systems

General Author Information

Making a submission

Further information

- Papers must be written in a scientifically rigorous manner with adequate references to related work.
- Submitted papers must not be simultaneously submitted in an extended form or in a shortened form to other journals or conferences. It is however possible to submit extended versions of previously published work if less than 75% of the content already appeared in a non-journal publication, or less than 40% in a journal publication. Please see the SoSyM Policy Statement on Plagiarism for further conditions.
- Submitted papers do not need to adhere to a particular format or page limit.
 Please consult the <u>SoSyM author information for submitting papers</u> for more details.
- Each paper will be reviewed by at least three reviewers.
- Communicate your intent to submit a paper by emailing the theme section editors the following information before the Intent to Submit deadline: Title, Authors, and an Abstract.
- Possible submission formats are:
 - o Word (.doc, without macros)
 - o Rich Text Format (.rtf)
 - PostScript (.ps, special fonts must be embedded)
 - o PDF (saved as readable in version 5.0 or earlier)
- Due to a change of the online submission system of SoSyM, details on how to submit your work will follow after the intent to submit deadline.

If you have any questions or require additional information about this theme section, please contact the editors.