

Call for Papers

Editors

Benoit Combemale,

benoit.combemale@irisa.fr University of Rennes 1 & Inria, France

Juan De Lara,

juan.delara@uam.es Universidad Autónoma de Madrid, Spain

Romina Eramo,

romina.eramo@univaq.it University of L'Aquila, Italy

Editors-in-Chief

Jeff Gray

University of Alabama

Bernhard Rumpe

RWTH Aachen University

Important Dates

Intent to submit 31 July 2021 Paper submission 27 Aug 2021 Notification 12 Nov 2021



Theme Section: Modeling Language Engineering

Software intensive systems are becoming more complex, driven by the need to integrate across multiple aspects. Consequently, the development of such systems requires the integration of different concerns and skills. These concerns are usually covered by different domain-specific modeling languages, with specific concepts, technologies and abstraction levels. This multiplication of languages eases the development related to one specific concern but raises language and technology integration problems at the different stages of the software life cycle (e.g., it is necessary to explicitly describe the different kinds of relationships that exist between the different languages used in software development).

To support effective language integration, there is a pressing need to reify and classify these relationships, as well as the language interactions that the relationships enable. Equally, the proliferation of domain-specific modeling languages increases the need for effective and efficient techniques for engineering languages and their support infrastructures (transformations, analysis tools, editors, execution infrastructure, debuggers, etc.). Hence, software developers are faced both with the challenging task of engineering each separate modeling language and associated technologies and with the task of integrating the different languages from different concern spaces.

These issues affect several domains and target areas. For instance, cyber-physical systems require the integration of different concerns and skills belonging to multiple disciplines: even more this industry has evolved towards multidisciplinary engineering from different domains (including software engineering, electrical engineering, safety engineering, and mechanical engineering). Another example is the emerging low-code platforms that enable the development of fully functional applications and raise the level of abstraction by combining visual development techniques (i.e., models) and code generation.

The <u>Journal of Software and Systems Modeling</u> (SoSyM) invites original, high-quality submissions for its theme section on "Modeling Language Engineering (MLE)" focusing on topics MLE including (but are not restricted to):

- Tools and methods for engineering modeling languages
- Composability and interoperability of heterogeneous modeling languages

- Language integration challenges
- Model and metamodel composition
- Language interfaces and viewpoints
- Language-based socio-technical coordination
- Heterogeneous modeling and simulation
- Multi-language and multi-disciplinary environment
- Modeling language engineering for low-code platforms
- Scalability aspects in modeling language design

General Author 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, but should be prepared using font "Times New Roman" with a font size no smaller than 11 pt, and with 1.5 line spacing. Please consult the <u>SoSyM author information for submitting papers</u>.
- Each paper will be reviewed by at least three reviewers.

Making a submission

- 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)
- Submit your work using the online submission system <u>manuscript</u> <u>central</u>:
 - o In step 1, select "Theme Section Paper" as the manuscript type.
 - O In step 5, make sure field "Cover Letter" includes the line: "Submission for Theme Section on Modeling Language Engineering".

Further information

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