

Call for Papers

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Important Dates

Intent to submit 15 Jan 16
Paper submission 15 Mar 16
Notification 01 May 16



Theme Issue:

Model-Driven Engineering for Component- Based Software Systems

The design of modern software systems requires capabilities to properly deal with their ever-increasing complexity. To mitigate this complexity, the whole software engineering process needs to be rethought and the traditional division among development phases to be revisited. Model-Driven Engineering (MDE) and Component-Based Software Engineering (CBSE) are two orthogonal ways of reducing development complexity: MDE by shifting the focus of application development from code to models and CBSE by building the desired functionality from pre-developed components. On the one hand, an effective interplay of CBSE and MDE can help in reducing development costs and risks by: (i) enabling efficient modeling and analysis of functional as well as extra-functional properties, (ii) improving reusability through definition and implementation of components loosely coupled into assemblies, (iii) providing automation where applicable (and favorable) in the development. On the other hand, when exploiting the interplay of MDE and CBSE, clashes arise due to misalignments in their terminology but also, and more importantly, due to differences in some of their basic assumptions and focal points.

The <u>Journal of Software and Systems Modeling</u> (SoSyM) invites original, high-quality submissions for its theme issue on "Model-Driven Engineering for Component-Based Software Systems" (ModComp) focusing on related topics, including:

- Reuse, modularization and composition: model reuse, systematic reuse approaches, model composition, model extraction for componentization of legacy systems, component interoperability, model interdependencies, modular and deep (meta)metamodeling, multi-view (meta)modeling
- Modeling components: model component behaviors, components interactions, component properties
- Automation via model transformations: automated generation of software artifacts, from design-time models to code, to deployment-time and run-time models, verification and validation of model transformations
- Evolution: model and component (co)evolution, enforcement of incrementality
- **Technologies:** use of existing technologies for MDE and CBSE; comparison of technologies; design of new technologies; analysis of current standards; proposals for extensions to standards
- Experience reports and case studies

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 <u>SoSyM Policy</u> <u>Statement on Plagiarism</u> 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 SoSyM author information for submitting papers.
- Each paper will be reviewed by at least three reviewers.
- Communicate your intent to submit a paper by emailing the theme issue editors the following information before the Intent to Submit deadline: Title, Authors, and an Abstract.
- Possible submission formats are:
 - o Word (.doc, without macros)
 - Rich Text Format (.rtf)
 - o 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 central</u>:
 - o In step 1, select "Theme Section Paper" as the manuscript type.
 - o In step 4, add "Federico Ciccozzi" (+ federico.ciccozzi@mdh.se) as an editor and choose "Designate as Preferred Editor".
 - o In step 5, make sure field "Cover Letter" includes the line: "Submission for Theme Issue on ModComp".

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

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