

Call for Papers

Editors

John Fitzgerald
John.Fitzgerald@ncl.ac.uk
Newcastle University, UK

Peter Gorm Larsen
pgl@eng.au.dk
Aarhus University, Denmark

Fuyuki Ishikawa
f-ishikawa@nii.ac.jp
National Institute of Informatics,
Japan

Editors-in-Chief

[Jeff Gray](#)
University of Alabama

[Bernhard Rumpe](#)
RWTH Aachen University

Important Dates

Intent to submit	31 May 2018
Paper submission	30 Sept 2018
Notification	1 Dec 2018



Theme Issue: **Model-Based Design for Smart Products and Systems**

A new generation of products and services is being enabled by, and is dependent on, networked computing technology. Such “smart” systems (and systems of systems) may link diverse and independent devices and systems using Internet of Things (IoT) technology, coupled with data analytics, machine learning and increased autonomy. Some of the most fundamental challenges relate to the ways in which model-based methods can enable engineers to work across traditional boundaries between disciplines and organizations to deliver analysis of and confidence in holistic global performance at the system or system-of-systems level.

Significant advances are being made in the foundations, methods and tools of collaborative model-based systems engineering, and are beginning to reach technology readiness levels that enable industry deployment. However, the integration of such diverse elements as autonomy, IoT and data analytics within heterogeneous multi-models and tool chains remains an open topic. The aim of this theme issue is to provide a resource that describes the state of knowledge and practice in model-based engineering for smart systems, and to outline a guide to the key challenges in this area.

The *Journal of Software and Systems Modeling* (SoSyM) invites original, high-quality submissions for its theme issue on “Model-Based Engineering of Smart Systems” focusing on topics related to the challenges in this field, including:

- **Collaborative model development:** semantic foundations, methods and tools for development of models across diverse groups, formalisms and organizations.
- **Analysis and Co-simulation:** approaches to multi-paradigm model construction and analysis, including design space exploration.
- **Integration of Data Analytics into MBSE:** approaches incorporating data analytics into a modelling context.
- **Experience reports:** project organization; methodologies and guidelines for model-based engineering of smart systems.

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 [SoSyM author information for submitting papers](#).
- Each paper will be reviewed by at least three reviewers.

Making a submission

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- 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:
 - Word (.doc, without macros)
 - Rich Text Format (.rtf)
 - PostScript (.ps, special fonts must be embedded)
 - PDF (saved as readable in version 5.0 or earlier)
 - Submit your work using the online submission system [manuscript central](#):
 - In step 1, select “Theme Section Paper” as the manuscript type.
 - In step 4, select “John Fitzgerald, Peter Larsen, and Fuyuki Ishikawa” (ti-smart-systems@sosym.org) as editor and press “Add Selected Editor(s)”.
 - In step 5, make sure field “Cover Letter” includes the line: “Submission for Theme Issue on MBD for Smart Products and Systems”.

Further information

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