# Call for Papers

**Software and Systems Modeling**

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## Important Dates

Intent to submit     20 July 2020
Paper submission     20 October 2020
Notification         20 January 2020

## *Theme Issue:*
## Model-Driven Engineering for the Internet of Things (MDE4IoT)

A recent forecast from the International Data Corporation (IDC) envisions that 41 billion Internet-of-Things (IoT) endpoints will be in use by 2025, representing great business opportunities. However, to unleash the full potential of IoT in various application domains such as eHealth or smart city, it is critical to facilitate the creation and operation of IoT systems. IoT systems are typically complex, large scale, distributed, and running in open context. Coordinated behavior across IoT, edge, fog, and cloud infrastructures need to be managed. Besides, the trustworthiness of such systems is a must ranging from business critical to safety critical. The ability to continuously evolve and adapt these systems is also of paramount importance to ensure and increase their trustworthiness, quality, and user experience.

Model-Driven Engineering (MDE) techniques can support the development and operation of IoT systems. For instance, to manage abstractions in IoT systems and to provide means to automate development and operation activities of IoT systems, domain-specific modeling languages (DSMLs) provide a way to represent different aspects of systems leveraging a heterogeneous software and hardware IoT infrastructure. However, the application of MDE techniques in the IoT domain poses new challenges for the MDE community such as reasoning on open context models or providing appropriate abstractions for IoT systems which allow to unify different technologies but at the same time exploit their individual strengths.

The *Journal of Software and Systems Modeling* (SoSyM) invites original, high-quality submissions for its theme issue on "Model-Driven Engineering for the Internet of Things (MDE4IoT)" focusing on topics related to MDE4IoT, including:

- Runtime models and operation of IoT systems
- Model-based deployment and orchestration for IoT
- Model-based Testing for IoT
- Relationships between physical models and virtual models
- Multi-view modeling for IoT
- DSMLs for IoT
- Model-based analysis, V&V techniques for IoT
- Trustworthiness of IoT systems
- Integration of IoT, Fog, and Cloud computing spaces
- Model-based security and privacy for IoT
- Automatic code generation for things behavior and integration
- Operation and management of large scale IoT 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.
- At least three reviewers will review each paper.

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**Making a submission**

- 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, add "Federico Ciccozzi, Nicolas Ferry, Anor Solberg, and Manuel Wimmer" as editor. Please make sure that the "Recommended" radio button is checked and that you enter "Special Section Editors" into the "Reason" text box before pressing "Add Selected Editor(s)".
    - In step 5, make sure field "Cover Letter" includes the line: "Submission for Theme Issue on MDE4IoT".

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**Further information**

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