



Call for Papers - LITES: Leibniz Transactions on Embedded Systems www.dagstuhl.de/en/publications/lites

Special Issue on Quantitative Evaluation of Systems

This special issue is organized in conjuncture with the *International Conference on Quantitative Evaluation of Systems (QEST)* (www.qest.org).

Scope and Topics

For 12 years now, QEST has been the leading forum on quantitative evaluation and verification of computer systems and networks, through stochastic models and measurements. QEST supports a broad range of topics - the common thread is that the evaluation be quantitative. The range of performance metrics of interest classical spans measures involving performance, energy and reliability, as well as quantification of properties that are classically qualitative, such as safety, correctness, and security. QEST welcomes diversity in the model formalisms and methodologies employed (including measurement), as development of new formalisms and well as methodologies. QEST is keenly interested in case studies highlighting the role of quantitative evaluation in the design of systems, where the notion of system is broad. Systems of interest include computer hardware and software architectures, communication systems, embedded systems, infrastructural systems, and biological systems. Moreover, tools for supporting the practical application of research results in all of the above areas are of special interest, and therefore tool papers are sought.

This is an *open call for papers* related to the themes of the QEST conference series. We welcome extended versions (at least 30% new material) of recent QEST conference publications, but also welcome new submissions related to the QEST themes, for publication in an upcoming special issue of LITES, the Leibniz Transactions on Embedded System, a relatively new open-access journal.

Evaluation of Papers

All submitted papers will be evaluated by at least three reviewers on the basis of originality, technical quality, scientific or practical contribution to the state of the art, methodology, clarity, and adequacy of references. We welcome submissions in the following categories:

- 1. **Theoretical**: aim to advance our understanding of quantitative evaluation, apply to non-trivial problems and be mathematically rigorous.
- 2. **Methodological and technical**: describe situations that require the development and proposal of new analysis processes and techniques. Process structure and the individual steps should be clearly described. If the methodology has already been

evaluated with applications, a brief description of the lessons learned would be very helpful.

- 3. **Application**: describe and evaluate a novel application (field or system), and compare with previous results (if any).
- 4. **Tools**: should motivate the development of the new tools and the formalisms they support. Tool papers need neither discuss their theoretical underpinnings nor their algorithms. Instead, they should focus on the software architecture and discuss its practical capabilities with particular reference to the size and type of model it can handle within reasonable time and space limits.

Important Dates

Full paper submission: December 1, 2015 First editorial notice: March 15, 2016 Revised submission: April 15, 2016 Final decision: June 15, 2016

Instruction for Submissions

Submissions are not limited to papers previously published at QEST. All authors are encouraged to submit their papers written in English, following the LITES guidelines

(http://ojs.dagstuhl.de/index.php/lites/about/submissions).

Authors must submit their papers electronically using the online manuscript submission system located at <u>http://ojs.dagstuhl.de/index.php/lites</u>. It is important to select the option of submitting to the "Special Issue on Quantitative Evaluation of Systems".

Since LITES is an open access journal, a moderate article-processing charge applies (http://www.dagstuhl.de/publikationen/lites/article-processing-charge/).

Guest Editors

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