eSReL

European Safety and Reliability Conference

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CALL FOR ABSTRACTS

Special session on
Model Based Safety Assessment

Description

Model Based Safety Assessment (MBSA) is an alternative to fault-tree analysis or stochastic analysis. It proposes languages to develop component based failure propagation models, closer to the system architecture. It proposes tools to simulate such models and assess multiple safety goals with one model. Such principles are currently implemented in frameworks such as Hip-Hop, Figaro, AltaRica, FSAP, SAM and others...The special session aims at bringing together researchers interested by theoretical and practical aspects of MBSA.

Motivation

Participants to this special session will gain knowledge about the innovations in the MBSA domain and the lessons learnt about the practical use of existing MBSA frameworks.

MBSA was introduced in the late nineties to handle the safety analysis of complex systems that are using reconfigurable architectures and/or hosting numerous functions on shared components. It promised also to ease the dialogue between safety specialists and system designers as well as the model validation and maintenance. MBSA is currently applied with different maturity levels in industries. Report on industrial application will be presented to argue the benefits and limits of the MBSA.

MBSA innovations aim at easing its deployment in the safety process and at extending its scalability. Innovations also cover the development of new languages and tools for MBSA.

Objective

Contributions on the following topics are welcome:

- innovations in MBSA languages,
- innovations in MBSA safety assessment tools,
- new industrial applications of MBSA

Organizers

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The validation of the special sessions will be done under the responsibility of the technical and scientific committee. Organizers are invited to provide a list of reviewers that may be supplemented by TC members to ensure consistency in the evaluation process.

List of reviewers

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