

## CALL FOR PAPERS: SASSUR 2015

### 4<sup>th</sup> International Workshop on Next Generation of System Assurance Approaches for Safety-Critical Systems – SASSUR-2015

Delft, the Netherlands, September 22<sup>th</sup>, 2015

In conjunction with the International Conference on Computer Safety, Reliability and Security, **SAFECOMP** <http://safecomp2015.tudelft.nl/>

Safety assurance and certification are amongst the most expensive and time-consuming tasks in the development of safety-critical systems. The increasing complexity and size of these systems combined with their growing market demand requires the industry to implement a coherent reuse strategy. A key difficulty appears when trying to reuse products from one application domain in another, because different domains are subject to different safety regulations. Subsequently, for a reused product, the full safety assurance and certification processes have to be applied, just as for a new product. This reduces the return on investment of such reuse. Further, market trends strongly suggest that many future safety-critical systems will be comprised of heterogeneous, dynamic coalitions of systems of systems. For this type of systems, it is crucial to develop sound strategies that would allow safety assurance and certification to be done compositionally.

The SASSUR workshop is intended to explore new ideas on compositional and evolutionary safety assurance and certification. In particular, SASSUR will provide a platform for thematic presentations and in-depth discussions about reuse and composition of safety arguments, safety evidence and contextual information about system components, in a way that makes assurance and certification more cost-effective, precise, and scalable. SASSUR aims at bringing together experts, researchers, and practitioners from diverse communities, such as safety and security engineering, certification processes, model-based technologies, software and hardware design, safety-critical systems and application communities (railway, aerospace, automotive, health, industrial manufacturing, etc.).

### **TOPICS**

Contributions are sought in (but are not limited to) the following topics:

- Industrial challenges for cost-effective safety assurance and certification
- Cross-domain product certification
- Integration of process-centric and product-centric assurance
- Compliance management of standards and regulations
- Evidence traceability
- Transparency of the safety assurance and certification processes: metrics and business cases
- Evolutionary approaches for safety and security assurance
- Case-based assurance approaches
- Tools for supporting safety assurance
- Seamless development tool chain for safety-critical systems
- Evolution of standards and trends on transport regulation
- The next challenges in industry for safety-critical system development
- Human factors in safety assurance and certification
- COTS or external sourcing management of evidence in safety-critical system
- Mixed-criticality system assurance
- Safety assurance on adaptive systems

# SAFECOMP 2015

international conference on computer safety, reliability & security 22-25 September | Delft | the Netherlands

## **INFORMATION FOR AUTHORS**

Attendees are invited to submit position papers (max. 8 pages) or full technical contributions (max. 12 pages) written in English in PDF format using EasyChair System:

<https://easychair.org/conferences/?conf=safecomp2015>

and select 4<sup>th</sup> Workshop on Next Generation of System Assurance Approaches for Safety-Critical Systems.

Submissions must conform to the Springer LNCS formatting guidelines. Papers will be peer-reviewed by at least three members of the steering and programme committees. If accepted for presentation, they will also be published as workshop proceedings articles (printed by the organizers and available electronically as well).

The authors will be notified about acceptance before the SAFECOMP 2015 early registration deadline.

## **DEADLINES**

Paper submissions: May 22<sup>nd</sup>, 2015

Notification of authors: June 15<sup>th</sup>, 2015

Camera ready paper: June 28<sup>th</sup>, 2015

Workshop: September 22<sup>th</sup>, 2015

## **Workshop Committees**

### Organizers

- Alejandra Ruiz, TECNALIA, Spain
- Tim Kelly, University of York, UK
- Jose Luis de la Vara, Universidad Carlos III de Madrid, Spain

### Steering Committee

- John Favaro, Intecs, Italy
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