



**Call for Papers**  
**SS08 - Adaptive and Reconfigurable Cyber-Physical Systems**

**Organized and Co-Chaired by**  
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❖ **FOCUS.** Adaptive and reconfigurable systems can react to changes in environment, resources or applications by adjusting system parameters and structure. This allows coping with live system updates, dynamic application sets, dynamic requirements/load and variable resources. However, adaptivity and reconfigurability add new requirements and increase complexity. Therefore, all architectural levels must be carefully designed to ensure that overall system requirements are continuously fulfilled. This Special Session focuses on novel ideas and concepts to realize such adaptations and reconfigurations in Cyber Physical Systems (CPS), analyzing tradeoffs between benefits and costs, novel algorithms and experiences with simulation or practical case studies. In this regard, the topics of interest for this special session include, but not limited to the following research topics.

❖ **TOPICS**

- ❖ Adaptive embedded and distributed embedded systems
- ❖ Adaptability and reconfigurability with Software Defined Networking
- ❖ Adaptability via virtualization in networks and computation
- ❖ Reconfiguration in the context of Industrial IoT
- ❖ Wired and wireless networks to support adaptability and reconfigurability
- ❖ Resource allocation/adaptation in cloud and fog computing
- ❖ Middleware for dynamic reconfiguration
- ❖ Probabilistic approaches to reconfigurable systems
- ❖ System architectures for adaptivity and reconfigurability
- ❖ Reconfiguration and self-configuration in Time Sensitive Networks (TSN)
- ❖ Adaptive control in (distributed) embedded systems

❖ **AIM.** The aim of this Special Session is to gather researchers from academia and industries who are working around particular topics related to adaptive and reconfigurable cyber-physical systems to discuss, brainstorm and present novel solutions.

❖ **CONFERENCE FORMAT.** The conference will comprise multi-track sessions for regular papers, to present significant and novel research results with a prospect for a tangible impact on the research area and potential implementations, as well as work-in-progress (WiP) and industry practice sessions.

❖ **AUTHOR'S SCHEDULE (2021)**

❖ **Regular and special sessions papers**

Submission deadline ..... May 7  
 Acceptance notification ..... June 4  
 Deadline for final manuscripts ..... July 14

❖ **Work-in-progress/Industry practice papers**

Submission deadline ..... June 11  
 Acceptance notification ..... July 7  
 Deadline for final manuscripts ..... July 14