

Call for Papers

For several years now, a continuous effort to contribute to the body of knowledge in the area of self-adaptive systems has been made by various researchers. Areas, such as domain modelling, configuration, and systematic engineering to anticipate the need for and facilitate the ability of runtime adaptation, have been topics of steadily increasing interest in the research community, but are still lacking viable solutions. Similarly, the research community of cyber physical systems has recognized the increasing number of challenges in this up-and-coming research field resulting from the interactive and heterogeneous nature of cyber physical systems. For both, self-adaptive systems and cyber physical systems, the consideration of holistic engineering approaches with a particular emphasis on the early phases of software engineering (i.e., requirements engineering and conceptual modelling) are needed to guarantee highly qualitative products. In consequence, given the interactive and context-sensitive nature of self-adaptive and cyber physical systems, the list of open research topics in requirements engineering overlaps to a large extent. The mission of the Fourth International Workshop on Requirements Engineering for Self-Adaptive and Cyber Physical Systems is to foster the exchange of ideas and is hence of great interest for both communities.

Scope and Topics

The **Fourth International Workshop on Requirements Engineering for Self-Adaptive, Collaborative, and Cyber Physical Systems (RESACS)** seeks original reports of novel ideas, emerging trends, and elaborations on the current state of practice and state of the art on any topic relevant for requirements engineering or under special consideration of self-adaptation of systems and development processes, collaboration between systems, human-aspects of self-adaptive and collaborative systems, interaction between humans and systems, and cyber physicality of systems. System types include, but are not limited to, Self-Adaptive Systems, Cyber-Physical Systems, Collaborative Systems, and Interaction-Intensive Systems. **We particularly encourage submissions related to the Special Topic “Autonomous Driving.”**

Submission and Publication

We accept original manuscripts in English with strict adherence to the **IEEE formatting instructions** for the following categories:

- **Full Papers (up to 8 pages):** New Methods, Transfer of Existing Approaches, Empirical Validation, Case Studies, Industry & Experience Reports
- **Short Papers (up to 4 pages):** Problem Statements, Vision Papers, Position Papers, New Ideas and Directions, Initial Evaluations
- **Poster Papers (up to 2 pages):** Thought Provoking and Controversial Topics as well as Opinions and Experiences

Manuscripts that do not adhere to the IEEE formatting instructions will be rejected without review. IEEE formatting instructions are available at:

http://www.re18.org/submission/IEEE_formatting_instructions.html

Please submit your original manuscripts using the EasyChair Submission System:

<https://easychair.org/conferences/?conf=resacs2018>

All submitted manuscripts will be peer-reviewed by at least three reviewers. Upon acceptance, papers will be published in the RE workshop proceedings. The official publication date of the workshop proceedings is the date the proceedings are made available. This date may be up to two weeks prior to the first day of RE 2018. The official publication date affects the deadline for any patent filings related to published work.

Special Workshop Theme

In line with the special RE 2018 theme “*Crossing Boundaries and Increasing Impact*,” this year the emphasis of RESACS is especially (but not exclusively) on contributions that fit the Special Topic “Autonomous Driving.” This theme gains increased importance as self-adaptive and cyber-physical systems are increasingly complex and perform runtime adaptation with other systems and humans, which must occur in a safe, reliable, and trustworthy manner.

Special Important Dates

Paper Submission	June 12 th , 2018
Paper Notification	July 6 th , 2018
Camera Ready Submission	July 17 th , 2018
Workshop	August 20th – 21st 2018 (as per RE 2018 program)

Organisers

Marian Daun – *University of Duisburg-Essen, Germany*
Alessia Knauss – *Autoliv Development AB, Research, Sweden*
Cristina Palomares – *Universitat Politècnica de Catalunya, Spain*
Bastian Tenbergen – *Oswego State University, USA*
Frederik Diederichs – *Fraunhofer IAO, Germany*

Programme Committee

Raian Ali – *Bournemouth University, UK*
Ottmar Bender – *Airbus Defence and Space, Germany*
Jennifer Brings – *University of Duisburg-Essen, Germany*
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Matt Primrose – *Intel, USA*
Carme Quer – *Universitat Politècnica de Catalunya, Spain*
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