

Call for Contributions

1. Inform the Chair

2. Submission URL:

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ADAPTIVE+2023+Special>

Please select Track Preference as **EASCI**

3. Note: *For 2023, all events will be held in a hybrid mode: on site or virtual choices (live, prerecorded videos, voiced presentation slides, and .pdf slides). We hope for better times allowing us to return to the traditional on site scientific events. However, we are ready to adapt any which way the conditions dictate.*

Special track

EASCI: Emergent and Adaptive Semantic Composition in IoT-Ecosystems

Chair

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along with

ADAPTIVE 2023, The Fifteenth International Conference on Adaptive and Self-Adaptive Systems and Applications

<https://www.iaria.org/conferences2023/ADAPTIVE23.html>

June 26 - 30, 2023 - Nice, Saint-Laurent-du-Var, France

IoT ecosystems are complex system networks of autonomous and interacting individual systems, which are adaptive as they show a special ability to adapt. Through the (emergent) combination of several services of this IoT ecosystem, higher-value goals can be achieved by the overall system. The design and realization of such an ecosystem is therefore very challenging.

Similar to their natural counterparts, such IoT ecosystems can only be vital in the long term if a balance of needs and interests is achieved regarding data, services, and processes. The different life cycles of the individual systems, whose behavior and interactions change over time, are also decisive for the balance. These changes (e.g., in data models/domain ontologies) cannot usually be centrally pre-planned but result from independent processes and decisions within and outside the IoT ecosystem. In addition, it is becoming increasingly apparent that industry-wide standardization efforts are too slow and inflexible when it comes to the speed of innovation in IoT components. This poses significant challenges to traditional approaches and technologies for self-adaptive systems, as these systems rely on automated (semantic) interpretation of data and functions in system composition.

Influencing and controlling such dynamical and autonomous changing system landscapes require innovative concepts and research approaches to address these challenges. These innovative concepts and research approaches are the topic of the Special Track EASCI at ADAPTIVE 2023, focusing not only on the integration and composition of new sustainable and resilient services into existing IoT ecosystems, but also on new customer-centric business models and services to increase profitability.

We invite contributions from academia research and industry. We welcome technical papers presenting research and practice results, position papers, review papers addressing key problems and solutions on any of the above topics, and short papers on work in progress.

Topics include, but not limited to

- Semantic integration of services in IoT ecosystems
- Emergent web service composition
- Automated service composition
- Resilience in IoT ecosystems
- Emergence in IoT ecosystems
- Concepts for interaction in an IoT ecosystem
- Runtime behavior and runtime optimization of IoT ecosystems
- Operator models and business models for IoT ecosystems
- Security of IoT ecosystems
- Service interoperability in emergent systems
- Self-organization in decentralized IoT ecosystems
- Case studies and benchmark examples related to the above topics
- Experience reports related to all the above topics
- Tools and methods supporting all the above topics

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaaria.org]
- Presentations: slide only [slide-deck posted on www.iaaria.org]
- Demos: two pages [posted on www.iaaria.org]

Important Datelines

Inform the Chairs: As soon as you decide to contribute

Submission: May 11 (earlier, better)

Notification: May 29

Registration: June 8

Camera-ready: June 8

Note: The submission deadline is somewhat flexible, providing arrangements are made ahead of time with the chair.

Paper Format

- See: <http://www.iaaria.org/format.html>
- Before submission, please check and comply with the editorial rules: <http://www.iaaria.org/editorialrules.html>

Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iaariajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

Paper Submission

<https://www.iaariasubmit.org/conferences/submit/newcontribution.php?event=ADAPTIVE+2023+Special>

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Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at <http://www.iaia.org/registration.html>

Contact

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