

Call for Contributions

1. Inform the Chair: with the Title of your Contribution

2. Submission URL:

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ICONS+2021+Special>

Please select Track Preference as **AI4SysSoS**

3. Note: *For 2021, 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

AI4SysSoS: Challenges for Artificial Intelligence-Machine Learning in Complex Systems and Systems of Systems

Chair

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Coordinator

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along with

ICONS 2021, The Sixteenth International Conference on Systems

<https://www.iaria.org/conferences2021/ICONS21.html>

April 18, 2021 to April 22, 2021 - Porto, Portugal

Complex systems and System-of-Systems (SoS) are now being increasingly inculcated with significant footprint of intelligence in functionality and inter-connectivity. Artificial Intelligence-Machine Learning (AI-ML) and other advanced technologies are being leveraged to inculcate differentiated intelligence in modern systems and system-of-systems.

These complex systems are envisioned to emulate comparable and beyond human intelligence to achieve the desired goals and perform better than their “traditional” predecessors. However, engineering these advanced technologies into complex systems and SoS demand different approaches, and pose different challenges as compared to their predecessors.

This special track focuses on various systems engineering challenges pertaining to engineering Artificial Intelligence (specifically *Machine Learning* - including supervised learning, unsupervised learning and reinforcement learning) in complex systems and SoS.

Topics include, but not limited to:

- AI implications on Emergence & Emergent Behavior in complex systems & SoS
- System architecture & design challenges pertaining to AI enabled complex systems & SoS
- Human-centered intelligent design and AI-ML to facilitate Human-Machine interaction for complex systems and SoS
- Verification & Validation approaches for AI enabled complex systems & SoS
- Challenges (e.g. explainability) in inculcating AI-ML in safety critical complex systems & SoS

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.iaria.org]
- Presentations: slide only [slide-deck posted on www.iaria.org]
- Demos: two pages [posted on www.iaria.org]

Important Datelines

Inform the Chair or Coordinator: As soon as you decide to contribute

Submission: March 4, 2021

Notification: March 20, 2021

Registration: April 1, 2021

Camera ready: April 1, 2021

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

Paper Format

- See: <http://www.iaria.org/format.html>

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

Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iariajournals.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.iariasubmit.org/conferences/submit/newcontribution.php?event=ICONS+2021+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.iaria.org/registration.html>

Contact

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