
Proposal of ADSN 2020 for IEEE DASC 2020

* Title of the workshop.

The Nineteenth International Workshop on Assurance in Distributed Systems and Networks (ADSN 2020)

* A brief technical description of the workshop, identification of specific technical issues, focus, and justification of its timeliness.

ADSN 2020 is the Nineteenth International Workshop, which demonstrates a long-term continuity in comparison to other workshop proposals. The objective of the Workshop is to provide an effective forum for original scientific and engineering advances in Assurance in Distributed Systems and Networks. Along with recent rapid growth of the Internet and ubiquitous networks, autonomous decentralized systems are connected with each other. In these distributed systems and networks, heterogeneous requirements are independently generated and the requirements themselves are frequently changing. Assurance in these distributed systems and networks is defined as capability of guaranteeing functional and nonfunctional system properties such as dependability, security, timeliness and adaptability to heterogeneous and changing requirements. The workshop theme is critical in meeting ever more demanding requirements for assurance in systems and networks, especially in the future Internet and ubiquitous networks. Technologies supporting assurance including integration of various technologies such as real time, fault tolerance, autonomy, mobility and intelligence will have to be incorporated in complex distributed systems and networks.

* A brief description of the review process.

Each submitted paper will be reviewed by three PC members or reviewers recommended by PC members and the final acceptance of papers will be decided at the virtual PC meeting.

* The names, postal addresses, phone numbers and e-mail addresses of the proposed workshop organizing committee. This committee should consist of at least two persons knowledgeable in the technical issues to be addressed by the workshop. EasyChair is used to handle submission and review of papers.

General Co-Chairs

Tomohiro Otani, KDDI Research, Inc., Japan

E-mail: otani@kddi-research.jp

Yoshiaki Kakuda, Hiroshima City University, Japan

E-mail: kakuda@hiroshima-cu.ac.jp

Program Chair

Junichi Funasaka, Hiroshima City University, Japan

E-mail: funa@hiroshima-cu.ac.jp

Vice Program Chairs

Three vice program chairs are selected from Asia, Americas and Europe.

Program Committee Members

About 24 Program Committee members will be chosen.

* Primary contact of the organizing committee.

Junichi Funasaka, Hiroshima City University, Japan

E-mail: funa@hiroshima-cu.ac.jp

* Estimated number of participants, length, and timetable of the workshop.

About thirty participants and one day or half day workshop. In case of one day workshop, there are a special session for a keynote speech and invited speeches in the morning and regular sessions in the afternoon.

* Resources required, such as one day or half day workshop, expected number of attendees (room size), whether a panel setup is needed, etc.

The room size for about thirty participants with capability to hold the special session and the regular sessions.

* Important dates

Paper Submission Deadline: March 1, 2020

Acceptance Notification Date: April 1, 2020

Camera-ready deadline: May 10, 2020

* Information about the previous edition of the workshop (if any):

Please see the ADSN 2019 web page at <http://adsn.net.info.hiroshima-cu.ac.jp/>.

The following is our tentative call for papers.

Preliminary Call for Papers

General Co-Chairs

Tomohiro Otani, KDDI
Research, Inc., Japan

Yoshiaki Kakuda,
Hiroshima City University,
Japan

Program Chair

Junichi Funasaka,
Hiroshima City University,
Japan

Vice Program Chairs

TBD

Program Committee

TBD

The Nineteenth International Workshop on Assurance in Distributed Systems and Networks (ADSN 2020)

Calgary, Canada, June 22 - 26, 2020

ADSN 2020 will be held in conjunction with the 18th IEEE International Conference on Dependable, Autonomic and Secure Computing (DASC 2020), Calgary, Canada, June 22 – 26, 2020. (see for details <http://cyber-science.org/2020/dasc/>).

ADSN 2020 is the nineteenth edition of this International Workshop demonstrating its long-term continuity and continuously received recognition. The objective of the Workshop is to provide an effective forum for original scientific and engineering advances in Assurance in Distributed Systems and Networks. Along with recent rapid growth of the Internet and ubiquitous networks, applications for autonomous decentralized systems are emerging in many important areas like transportation, automotive systems, smart energy grids and the Internet of Things (IoT) to name a few. In these distributed systems and networks, heterogeneous requirements are independently generated and the requirements themselves are frequently changing. Assurance in these distributed systems and networks is defined as capability of guaranteeing functional and non-functional system properties such as dependability, security, timeliness and adaptability in heterogeneous and changing environments. The workshop theme is critical in meeting ever more demanding requirements for assurance in systems and networks. Technologies supporting assurance including integration of various fields such as real time, fault tolerance, autonomy, mobility and intelligence will have to be incorporated in complex distributed systems and networks.

Topics of interest for this workshop include, but are not limited to:

- Assurance technologies for new generation networks
- Assurance in cooperative embedded, grid, and cloud computing systems
- Assurance in service-oriented and web-service based computing systems
- Critical infrastructure protection
- Heterogeneous systems coexistence and consistency technologies
- Network control (QoS, QoE, CoS, etc) technologies for assurance
- Self-stabilization and sensor networks assurance
- Agents technologies for assurance
- Assurance in safety-critical automotive and avionic systems
- Software and hardware technologies for assurance in intelligent transportation systems, train control, and space computers
- System life-cycle assurance in specification, design, implementation, testing, verification, and validation
- Assurance in IoT systems
- Security technologies for assurance
- System management and proactive fault management technologies for assurance
- Technologies for achieving high assurance in complex systems

Papers and Submissions

Papers must be written in English, and they have to be Postscript, PDF, or Word format. The complete manuscript should be no more than 6 pages [following IEEE conference proceedings style and guidelines](#). The following information must be provided on a cover sheet:

- (1) paper title, full name, affiliation of the author(s)
- (2) full name, affiliation, complete address, phone and fax numbers and email address of the author to be contacted, as well as
- (3) an abstract (up to 150 words).

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