Proposal of ADSN 2022 for IEEE DASC 2022

* Title of the workshop.

The Twentieth International Workshop on Assurance in Distributed Systems and Networks (ADSN 2022)

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

ADSN 2022 is the Twentieth 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. EDAS is used to handle submission and review of papers as DASC.

General Co-Chairs

Yukikazu Nakamoto, University of Hyogo, Japan

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Program Chair

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Vice Program Chairs

Eiji Utsunomiya, KDDI Research Inc., Japan

Elisa Bertino, Purdue University, U.S.A.

Marcello Cinque, the University of Naples Federico II, Italy

Program Committee Members

About 15 Program Committee members will be chosen.

* Primary contact of the organizing committee.

Junichi Funasaka, Hiroshima City University, Japan

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* 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: June 1, 2022 Acceptance Notification Date: July 1, 2022 Camera ready deadline: July 15, 2022

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

Please see the ADSN 2021 web page at http://adsn.net.info.hiroshima-cu.ac.jp/.

* 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