

DeIS 2023: The 5th International Workshop on Dependable Intelligent Systems

Co-located with DSA 2023, August 10-11, Tokyo, Japan



Call for Papers

The **International Workshop on Dependable Intelligent Systems (DeIS 2023)** seeks to bring together researchers and practitioners to exchange and discuss the **most recent dependability techniques and their applications on intelligence systems**, such as driverless cars, unmanned aerial vehicle, mobile phone and so on. With the recent tremendous success of artificial intelligence in many software systems and hardware systems, increased research and efforts are incorporating artificial intelligence into the systems.

However, the quality assurance of intelligent systems is still at a very early stage. This year's DeIS centers around three key scopes to bring researchers of diverse background (e.g., SRE, AI) with in-depth discussion and solutions for both dependability and intelligent systems: (1) **how to define the dependability of intelligent systems**; (2) **how to increase the dependability of intelligent systems**; and (3) **how to better test and analyze the dependability of intelligent systems**. Artificial intelligence has already significantly contributed to dependability communities. On the other hand, dependability for intelligent systems is still at a very early stage.

DeIS 2023 will be a workshop that seeks to develop a cross-domain community that systematically looks into both areas from the new perspective. The workshop will not only explore how we can apply the emerging dependability techniques to intelligent systems, but also the tools for assessing, predicting, and improving the dependability of intelligent systems. We hope DeIS can facilitate the process of creating intelligent systems with high quality, as well as accelerate the process of development and quality assurance with intelligence.

TOPICS OF INTEREST

The list of topics includes, but is not limited to:

- ◆ Machine learning techniques for dependability techniques
- ◆ Bug analyzing in intelligent systems
- ◆ Fault avoidance techniques in intelligent systems
- ◆ Fault removal techniques in intelligent systems
- ◆ Fault tolerance techniques in intelligent systems
- ◆ Fault prediction techniques in intelligent systems
- ◆ Design of robot intelligent systems
- ◆ Design of mobile intelligent systems
- ◆ Software dependability techniques

IMPORTANT DATES

The important dates for the workshop will be aligned with the important dates of the main conference. The indicative periods for the deadlines are:

- ◆ Paper submission due: **June 10, 2023**
- ◆ Author notification: **July 10, 2023**
- ◆ Camera-ready & copyright due: **July 20, 2023**
- ◆ Author registration due: **July 20, 2023**
- ◆ Workshop dates: **August 10-11, 2023**

SUBMISSION

Authors are invited to submit original unpublished research papers as well as industrial practice papers. Simultaneous submissions to other conferences are not permitted.

Papers should be written in English and submitted in PDF format. The length of a camera-ready paper will be limited to **ten pages**,

including the title of the paper, the name and affiliation of each author, a 150-word abstract, and up to 6 keywords. Shorter version papers (up to **four pages**) are also allowed.

Authors must follow the DSA conference proceedings format (PDF | Word DOCX | Latex) to prepare their papers. Each submission will be reviewed by at least three program committee members. Paper selection is based on originality, technical contribution, presentation quality, and relevance to the workshop.

At least one of the authors of each accepted paper is required to pay a full registration fee and present the paper at the workshop. Arrangements are being made to publish selected accepted papers in reputable journals.



CONFERENCE PROCEEDINGS & SCI JOURNAL PUBLICATION

The conference proceedings will be published by the IEEE Conference Publishing Services (CPS). Papers presented at the workshop will also be submitted for inclusion into the IEEE Xplore and to all of the A&I (abstracting and indexing) partners (such as the Ei Compendex and DBLP). **Authors of top quality papers will be invited to submit their extended versions to a special issue of a selected SCI journal, such as the Knowledge-Based Systems journal (Q1, IF: 8.139).**

ORGANIZING COMMITTEE

◆ General Chair	Zheng Zheng	Beihang University, China
◆ Program Chair	Junjun Zheng	Osaka University, Japan
◆ Program Chair	Xiaoyi Zhang	University of Science and Technology Beijing, China
◆ Program Committee	Siqian Gong	Beijing Jiaotong University, China
	Bo Jiang	Beihang University, China
	Fangyun Qin	Capital Normal University, China
	Yulei Sui	University of Technology, Sydney, Australia
	Guanping Xiao	Nanjing University of Aeronautics and Astronautics, China
	Xiaoyi Zhang	University of Science and Technology Beijing, China
	Zhenya Zhang	Kyushu University, Japan

GENERAL INQUIRIES

For more detailed and updated information, please refer to <https://dsa23.techconf.org/track/deis> or send emails to [DSA Secretariat](#).
