

DSA 2019: The 6th International Conference on Dependable Systems and Their Applications

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In 2017, the International Conference on Trustworthy Systems and Their Applications (TSA) and the International Symposium on Dependable Computing and Internet of Things (DCIT) were merged into one large conference and renamed as the International Conference on Dependable Systems and Their Applications (DSA). This year was the third meeting after the merge. In the past, both TSA and DCIT were technically sponsored by the IEEE Reliability Society.

Following the same tradition, DSA 2019 also has the same technical sponsorship from IEEE. It is hosted by the Harbin University of Science and Technology. In addition, the conference receives support from the Beijing Jinghang Research Institute of Computing and Communication; Key Laboratory of Space Utilization, Chinese Academy of Sciences; Shanghai Dizhen Computer Technology Co., LTD; Nanjing Intelligent United Innovation Technology Co., LTD; Harbin Engineering University; and Harbin Institute of Technology.

DSA 2019, held January 3-6, 2020 in Harbin, China, focused on innovative methodologies, techniques, tools, and management to produce dependable and trustworthy systems and their applications in a more cost-effective way. It provided a discussion forum to bring together academic researchers, industry practitioners, and government policy and decision makers to exchange ideas and results, share experiences, and explore possible solutions to overcome current challenges.

The conference provided three tutorials:

- FPGA – Field Programmable Gate Array
- System performance estimation and evaluation at scale
- National contest of software testing

There were three keynote speeches:

- *A Baker's Dozen: 13 Grand Software Engineering Challenges*
Dr. Jeff Voas, IEEE Reliability Society, USA
- *How Far Can We Go for Replaying Multithreaded Executions?*
Professor W. K. Chan, City University of Hong Kong, China
- *Taming Vulnerabilities to Provide Better Software Supply Chain Security*
Professor Yang Liu, Nanyang Technological University, Singapore

We would like to thank all the volunteers, authors, and attendees for their valuable contributions and participations to make this conference more successful every year. We give special thanks to Honorary Chair: Professor Song Huang; General Chairs: Professor Guanglu Sun, Dr. Jun Liu, and Dr. Jinbo Wang; Program Chairs: Professor Franz Wotawa, Professor Yun Lin, and Professor Jian Dong; RS ExCom and AdCom members: Professor Steve Li; Professor Qiang Miao; and Professor Yunwei Dong; and Conference Webmasters: Mr. Siwei Zhou, Mr. Shou-Yu Lee, and Mr. Dongcheng Li.



Opening Remarks by Professor W. Eric Wong (Steering Committee Chair)



Welcome Remarks by Professor Guanglu Sun (General Chair)



Conference Statistics Report by Professor Yun Lin (Program Chair)



Keynote Speech by Dr. Jeff Voas