

The 7th IEEE International Conference on Dependability in Sensor, Cloud, and Big Data Systems and Applications (DependSys 2021)

17-19 December 2021, Haikou, China

Important Dates

Workshop Proposal:	Aug. 1, 2021
Submission Deadline:	Sept. 1, 2021
Authors Notification:	Oct. 1, 2021
Final Manuscript Due:	Nov. 1, 2021
Conference Date:	Dec. 17-19, 2021

Organizing Committee

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DependSys

IEEE DependSys 2021 conference is the 7th event in the series of conferences which offers a timely venue for bringing together new ideas, techniques, and solutions for dependability and its issues in sensor, cloud, and big data systems and applications. As we are deep into the Information Age, huge amounts of data are generated every day from sensors, individual archives, social networks, Internet of Things, enterprises and Internet in various scales and format which will pose a major challenge to the dependability of our designed systems. As these systems often tend to become inert, fragile, and vulnerable after a period of running. Effectively improving the dependability of sensor, cloud, big data systems and applications has become increasingly critical.

This conference provides a forum for individuals, academics, practitioners, and organizations who are developing or procuring sophisticated computer systems on whose dependability of services they need to place great confidence. Future systems need to close the dependability gap in face of challenges in different circumstances. The emphasis will be on differing properties of such services, e.g., continuity, effective performance, real-time responsiveness, corruption, anomaly, ability to avoid catastrophic failures, prevention of deliberate privacy intrusions, reliability, availability, sustainability, adaptability, heterogeneity, security, safety, and so on.

Tracks and Topics

Track 1: Dependability and Security Fundamentals and Technologies

- ✧ Concepts, theory, and methodologies
- ✧ Dependability of sensor, networks
- ✧ Dependability issues in cloud/fog/edge
- ✧ Security and privacy
- ✧ Security/privacy in cloud/fog/edge
- ✧ Artificial intelligence
- ✧ Big data foundation and management
- ✧ Dependable IoT supporting technologies

Track 3: Dependable and Secure Applications

- ✧ Sensor and robot applications
- ✧ Big data applications
- ✧ Cloud/fog/edge applications
- ✧ Safety care, medical care and services
- ✧ Aerospace, transportation applications
- ✧ Energy, smart city, smart grid
- ✧ IoT, CPS and industrial application

Track 2: Dependable and Secure Systems

- ✧ Dependable sensor systems
- ✧ Dependability issues in distributed systems
- ✧ Cyber-physical systems
- ✧ Database and transaction processing systems
- ✧ Safety and security in distributed systems
- ✧ Dependability in automotive systems
- ✧ Dependability in big data systems
- ✧ Software system security

Track 4: Dependability and Security Measures and Assessments

- ✧ Metrics and measures for safety, trust, faith
- ✧ Levels and assessment criteria and authority
- ✧ Dependability measurement, modeling
- ✧ Dependability evaluation
- ✧ Software reliability and verification
- ✧ Hardware reliability and verification
- ✧ Evaluations and tools

Sponsors



Special Issues

1. IEEE Transactions on Intelligent Transportation Systems
SI: Graph-based Machine Learning for Intelligent Transportation Systems
2. IEEE Transactions on Intelligent Transportation Systems
SI: Data Science for Cooperative Intelligent Transportation Systems
3. IEEE Transactions on Network Science and Engineering
SI: The Nexus Between Edge Computing and AI for 6G Networks
4. IET Communications
SI: Intelligent Metasurfaces for Smart Connectivity
5. Security and Communication Networks
SI: Protocols, Technologies, and Infrastructures for Secure Mobile Video Communications
6. MDPI Sensors
SI: Recent Advances in Algorithm and Distributed Computing for the Internet of Things

PAPER SUBMISSION

All papers need to be submitted electronically through the conference submission website (<http://www.ieee-cybermatics.org/2021/dependsys/>) with PDF format. Each paper is limited to 8 pages (or 10 pages with over length charge).