

The 8th IEEE International Conference on Dependability in Sensor, Cloud & Big Data Systems & Applications (DependSys-2022)

Dec. 18-20, 2022, Chengdu, China

Call for Papers

IEEE DependSys 2022 conference is the 8th 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.

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
- Blockchain-based systems

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

Paper Submission

The materials presented in the papers should not be published or under submission elsewhere. Each paper is limited to 8 pages (or 10 pages with over length charge) including figures and references using IEEE Computer Society Proceedings Manuscripts style (two columns, single-spaced, 10 fonts). All papers need to be submitted electronically through the conference submission website with PDF: [Coming soon](#)

Paper Publication

Accepted conference papers will be published by IEEE (IEEE-DL and EI indexed). At least one author of each accepted paper is required to register and present their work at the conference; Otherwise, the paper will not be included in the proceedings. Selected papers, after further extensions and revisions, will be recommended to special issues.

Co-located with Five Other Conferences

- o The 2022 IEEE Int'l Conf. on Embedded Software and Systems (ICSS-2022)
- o The 2022 IEEE Int'l Conf. on Smart City (SmartCity-2022)
- o The 2022 IEEE Int'l Conf. on Data Science and Systems (DSS-2022)
- o The 2022 IEEE Int'l Conf. on Data, Information, Knowledge and Wisdom (DIKW-2022)
- o The 2022 IEEE Int'l Conf. on High Performance Computing and Communications (HPCC-2022)

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Special Session
Jun. 30, 2022

Submission Deadline
Sep. 01, 2022

Author Notification
Oct. 15, 2022

Final Manuscript Due
Nov. 10, 2022