Call for Papers

The 26th International Symposium on Stabilization, Safety, and Security of Distributed Systems (SSS 2024)

October 20-22, 2024, Nagoya International Center, Aichi, Japan

https://sss2024.github.io/

Important Dates

1st Paper Submission Deadline: April 7, 2024 (11:59 PM AoE)

1st Acceptance Notification: May 13, 2024

1st Camera-Ready Copy Due: May 23, 2024

2nd Paper Submission Deadline: July 4, 2024 (11:59 PM AoE)

2nd Acceptance Notification: August 16, 2024

2nd Camera-Ready Copy Due: August 26, 2024

SSS is an international forum for researchers and practitioners in the design and development of distributed systems with a focus on systems that are able to provide guarantees on their structure, performance, and/or security in the face of an adverse operational environment. The symposium encourages submissions of original contributions on fundamental research and practical applications concerning topics in the four symposium tracks:

Track A. Self-Stabilizing and/or Dynamic Systems: Theory and Practice

- Self-stabilizing systems
- Self-stabilizing protocols and algorithms
- Practically-stabilizing systems
- Variants of self-stabilization
- Topological stabilization
- Autonomic Computing
- Stabilization and self-* properties in hardware, software, and middleware design
- Self-stabilizing software-defined infrastructure
- Dynamic networks, time-varying graphs, evolving graphs

Track B. Distributed and Concurrent Computing: Foundations, Fault-Tolerance and

Scalability
- Distributed, concurrent, and fault-tolerant algorithms
- Synchronization protocols
- Shared and transactional memory
- Graph-theoretic concepts for communication networks
- Formal methods, validation, verification, and synthesis
- Social networks
- Game-theory and economical aspects of distributed computing
- Randomization in distributed computing
- High-performance, cluster, cloud and grid computing
- Network security and privacy
- Blockchain technologies and cryptocurrencies
- Applied cryptography

Track C. Cryptography and Security
- Cryptographic designs, implementation analysis, and construction methods
- Secure multi-party computation and cryptographic distributed protocols
- Privacy-enhancing technologies and anonymity
- Post-quantum and information theoretic cryptography and security
- Secure software and secure programming methodologies
- Formal methods, semantics and verification of secure systems
- Fault tolerance, reliability, availability of distributed secure systems
- Game-theoretic approaches to secure computing
- Communication and internet: security, authentication and identification
- Cybersecurity for hardware components, mobile, cyber-physical systems, and internet of things
- Cybersecurity of corporations (applications, end points, and cloud)
- Security and privacy for web applications
- Security of edge and fog computing
- Cryptocurrency and Blockchains

Track D. Moving and Computing
- Mobile agents
- Autonomous mobile robots

- Mobile sensor networks
- Mobile ad-hoc networks
- Population protocols
- Nature-inspired computing
- Programmable particles, nanoscale robots, biological systems, and related new models

New Conference Model

We experiment with a new conference model. There will be TWO deadlines. The review process for these two deadlines will not overlap to allow papers rejected during the first review phase to be reworked, corrected, and enhanced before being resubmitted on the second review round, if wished by the authors. Papers may be submitted at only one deadline. Of course, accepted papers of the first review round are definitely accepted and should not be submitted to the second round. In case of resubmission, reviews from the first phase will be transmitted to the reviewers of the second phase.

Paper Submission

Papers are to be submitted electronically through EasyChair:

> https://easychair.org/conferences/?conf=sss2024

All submissions must conform to the formatting instructions of Springer LNCS series (see https://www.springer.com/gp/computer-science/lncs/conference-proceedings-guidelines). Each submission must be an original work written in English, in PDF format.

Double-blind Review

All submissions must be anonymous. We use a somewhat relaxed implementation of double-blind peer review: you are free to disseminate your work through arXiv and other online repositories and give presentations on your work as usual. However, please make sure you do not mention your own name or affiliation in the submission, and please do not include obvious references in the text that reveal your identity. A reviewer who has not previously seen the paper should be able to read it without accidentally learning the identities of the authors. Please feel free to ask the general co-chairs if you have any questions about the double-blind policy of SSS 2024.

Submissions

There are two types of submissions: regular papers and brief announcements.

- A regular submission must not exceed 15 pages (including the title, abstract, figures, and references).
- A brief announcement submission must not exceed 5 pages and should not include any appendix.

Additional necessary details for an expert to verify the main claims of the submission may be included in a clearly marked appendix if extra space is needed.

Any submission deviating from these guidelines will be rejected without consideration of its merits. It is recommended that a regular submission begins with a succinct statement of the problem being addressed, a summary of the main results or conclusions, a brief explanation of their significance, a brief statement of the key ideas, and a comparison with related work, all tailored to a non-specialist. Technical development of the work, directed to the specialist, should follow. Papers outside of the conference scope will be rejected without review. For the second round only, if requested by the authors on the cover page, a regular submission that is not selected for a regular presentation will also be considered for the brief announcement format. This will not affect consideration of the paper for a regular presentation.

Publication

Regular papers and brief announcements will be included in the conference proceedings. Conference proceedings will be published by Springer in the LNCS conference series.

Special Issue

Extended and revised versions of selected papers will be considered for a special issue of an international journal (under negotiation).

Paper Award

Prizes will be given to the best regular paper and best student regular paper. A regular paper is eligible for the best student paper if at least one of its authors is a full-time student at submission time. Authors should clearly indicate whether their submission is eligible to be considered for the best student paper award (e.g., using a ¥thanks in the title). The PC may decline to confer awards or may split awards.

For the latest information, please visit the website: https://sss2024.github.io/

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