

# SSS 2017

## 19th Annual International Symposium on Stabilization, Safety, and Security of Distributed Systems

November 5-8, 2017, Boston Massachusetts, USA

[bitly.com/SSS-2017](http://bitly.com/SSS-2017)

### General Chairs

Shlomi Dolev *Ben-Gurion Univ., Israel*  
Jorge A. Cobb *Univ. of Texas at Dallas, USA*

### Program Chairs

Paul Spirakis *U. Liverpool, UK & CTI, Greece*  
Philippas Tsigas *Chalmers Univ. of Technology, Sweden*

### Track Chairs

#### Stabilizing Systems: Theory and Practice

Chryssis Georgiou *University of Cyprus, Cyprus*  
Elad M. Schiller *Chalmers Univ. of Technology, Sweden*

#### Distributed Computing and Communication Networks

Panagiota Fatourou *University of Crete, Greece*  
Sergio Rajsbaum *UNAM, Mexico*

#### Computer Security and Information Privacy

Ari Trachtenberg *Boston University, USA*  
Arkady B. Yerukhimovich *MIT Lincoln Laboratory, USA*

#### Local Arrangements Chair

Ari Trachtenberg *Boston University, USA*

#### Publicity Chairs

Elad M. Schiller *Chalmers Univ. of Technology, Sweden*  
Joel P. Rybicki *University of Helsinki, Finland*  
Isosif Salem *Chalmers Univ. of Technology, Sweden*

#### Dates

Submission deadline (firm) **July 7, 2017**  
Acceptance notification **August 18, 2017**  
Camera-ready copy due **August 25, 2017**

**Scope.** 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.

Research in distributed systems is now at a crucial point in its evolution, marked by the importance and variety of dynamic distributed systems such as peer-to-peer networks, large-scale sensor networks, mobile ad-hoc networks, and cloud computing. Moreover, new applications such as grid and web services, distributed command and control, and a vast array of decentralized computations in a variety of disciplines has driven the need to ensure that distributed computations are self-stabilizing, performant, safe and secure.

The symposium takes a broad view of the self-managed distributed systems area and encourages the submission of original contributions spanning fundamental research and practical applications within its scope, covered by the three symposium tracks: (i) Stabilizing Systems: Theory and Practice, (ii) Distributed Computing and Communication Networks, as well as (iii) Computer Security and Information Privacy.

#### Topics of interest include, but are not limited to:

*Stabilizing Systems:* Self-stabilizing systems, Practically-stabilizing systems, Self-\* abstractions, Stabilization and self-\* properties with relation to dependability of hardware, software and middleware, Self-stabilizing software defined infrastructure, Safety and self-stabilization, Self-stabilizing autonomous mobile agents;

*Distributed Computing and Communication Networks:* Distributed and concurrent algorithms and data structures, Synchronization protocols, Shared and transactional memory, Formal Methods, validation, verification, and synthesis, Game-theory and economical aspects of distributed computing, Randomization in distributed computing, Biological distributed algorithms, Communication networks (protocols, architectures, services, applications), High-performance, cluster, cloud and grid computing, Mesh and ad-hoc networks (wireless, mobile, sensor), Location and context-aware systems, Mobile agents, robots, and rendezvous, Social systems, Peer-to-peer and overlay networks, Population protocols, Infection dynamics;

*Computer Security and Information Privacy:* Network security Privacy, Internet-of-Things Security, Secure cloud computing, Mobile sensor networks / ad-hoc networks security, Verifiable/fault-tolerant computing, Anomaly and networked malware detection, Cryptocurrencies and distributed consensus protocols, Secure multi-party computation/applied crypto.

#### Conference presentations will have two formats:

Regular presentations of 30 minutes accompanied by papers of up to 15 pages in the proceedings. This form is intended for contributions reporting on original research submitted *exclusively* to this conference.

Brief announcements of 10 minutes accompanied by 5 page abstracts in the proceedings. This format is a forum for brief communications and may be published in other conferences.

**Submission.** Papers are to be submitted electronically, following the guidelines available on the conference web page. Authors unable to submit electronically should contact the program co-chairs to receive instructions.

All submission must conform to the formatting instructions of Springer Verlag, LNCS series. Each submission must be in English, in PDF format, and include in the first page: (1) the title, (2) the names and affiliations of all authors, (3) contact author's email, address and telephone number, (4) a brief, one paragraph abstract of the paper, (5) indication whether the paper is a regular submission, or a brief announcement submission, (6) indication whether the submission is eligible to be considered for the best student paper award.

A regular submission must not exceed 15 pages (including the title, authors, abstract, figures, and references). Additional necessary details for an expert to verify the main claims of the submission should be included in a clearly marked appendix if extra space is needed. A brief announcement submission must not exceed 5 pages and should not include appendix. Any submission deviating from these guidelines will be rejected without consideration of its merit.

It is recommended that a regular submission begin 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.

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.

Extended and revised versions of selected papers will be considered for a special issue of the journal *Information and Computation*.

**Paper awards.** Prizes will be given to the best paper and best student paper. A paper is eligible for the best student paper if at least one of its authors is a full-time student at submission time. This must be indicated in the cover page. The PC may decline to confer awards or may split awards.