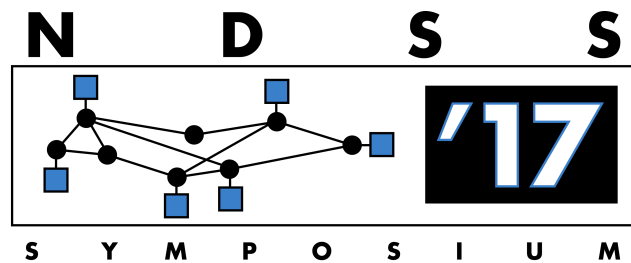


Proceedings

2017

Network and Distributed System Security Symposium



Proceedings

2017

**Network and Distributed
System Security Symposium**

February 26 – March 1, 2017

San Diego, California

Sponsored by the
Internet Society





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Address your correspondence to: Senior Events Manager, Internet Society, 1775 Wiehle Avenue, Suite 201, Reston, Virginia 20190-5108, U.S.A., tel. +1 703 439 2120, fax +1 703 326 9881, ndss@isoc.org.

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General Chair's Message

It is my pleasure to welcome you to the 24th Annual Network and Distributed System Security Symposium.

This year we have two colocated workshops: DNS Privacy Workshop and Usable Security (USEC) Workshop. The workshops encompass two critical topics in network and distributed systems security, privacy and usability. I'd like to thank Matthew Smith, the Workshop Chair, and Karen O'Donoghue, Steering Group Co-Chair, for bringing together such an exciting pair of workshops.

Building on recent success, this year we're continuing the tradition of organizing a poster session to showcase both in-progress and exciting recent work in various aspects of computer security. Thanks are due to Johanna Amann and Amir Houmansadr, the Poster Co-Chairs, for making sure we have an excellent poster program.

Due to increased interest in our field and in NDSS, more papers will be presented at NDSS this year than in any past year, yielding a particularly rich and exciting program. Selecting the papers is a task that involves many people and many hours of hard work. I'd like to thank Ari Juels, the Program Chair, as well Patrick Traynor, Shadow Program Chair, for the tremendous amount of work they donated and the excellent job they've done in putting together this year's program.

Many individuals have contributed to making NDSS a success, including everyone on the Steering Group, Organizing Committee, and the Internet Society and Association Management Solutions staff. I'd like to thank all of them for contributing their time and effort.

NDSS is possible in large part thanks to our generous sponsors. I'd like to thank Baidu, Cisco, Afilias, Check Point Software Technologies, Qualcomm, San Diego Supercomputer Center, and Salesforce for their support, and the Internet Society for hosting the symposium. Funds for our student grants were provided by the National Science Foundation and the Internet Society.

Finally, thank you, all, for participating in the symposium and through that adding the key ingredient that makes NDSS a success. I wish you all an excellent 24th NDSS!

Lujo Bauer
General Chair, NDSS'17
Carnegie Mellon University

Program Chair's Message

It is my great pleasure to welcome you to the 24th Annual Network & Distributed System Security Symposium (NDSS 2017), held at the Catamaran Resort Hotel and Spa in San Diego, CA, United States from February 26 - March 1, 2017. NDSS fosters information exchange among researchers and practitioners of network and distributed system security. The target audience includes those interested in practical aspects of network and distributed system security, with a focus on actual system design and implementation. A major goal is to encourage and enable the Internet community to apply, deploy, and advance the state of network and distributed systems security technologies.

This year NDSS received a record 423 valid submissions (i.e., not counting papers that clearly violated the submission guidelines). Submissions were evaluated on the basis of their technical quality, novelty, and significance. Papers went through three rounds of review. Reviewing culminated in a one-day in-person program committee meeting, at which 68 papers (approximately 16%) were selected to appear in the program.

Organizing a conference as large as NDSS is a substantial endeavor, and I'd like to extend my sincere thanks to everyone who contributed her or his time and effort. I'd also like to specifically thank a few individuals who made particular contributions to NDSS 2017. Karen O'Donoghue and Julie Rowland-Lane handled most of the logistics of organizing the conference, as well as shepherding a new program chair. Patrick Traynor served as the shadow chair; my job was made easier by his being there to catch oversights. Yier Jin graciously hosted the PC meeting at the University of Central Florida in Orlando. This year we tried an experiment in which we ran the PC meeting in two parallel tracks. Several students were especially helpful in addressing the logistical challenges this experiment involved. I'd like to thank Fan Zhang for his extensive technical support, Grant Hernandez and Bradley Reaves for their assistance on the ground, and Yan Ji for creating a scheduling tool for the meeting. Thanks also to David Balenson, the Publications Chair, for his efforts and persistence in producing the proceedings you have before you. I'd also like to thank everyone who served on the program committee and put in the time both to review papers and travel to the PC meeting. It was my pleasure and honor to have worked with you to put together the program for NDSS 2017. Also crucial to the success of NDSS are the authors who submitted papers and the attendees, without whom NDSS would not be possible. Welcome to NDSS 2017. I hope you find the program informative and stimulating.

Ari Juels
Cornell Tech
Program Chair, NDSS'17

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