

SOSR 2018: Call for Papers

More than 10 years have now elapsed since the beginning of Software-Defined Networking (SDN). Over the course of a decade, SDN has fueled incredible innovation, revolutionizing virtually all networking areas. SDN is now deployed in a growing number of production and experimental settings, including data centers, enterprise networks, content providers, and Internet Service Providers.

At its core, SDN revisits the relationship between the network hardware and the software that controls it. Through programming interfaces, SDN enables specifying and provisioning network-wide forwarding behaviors, as well as adapting how the network hardware itself forwards traffic. SDN has enabled more flexible and predictable network control, and makes it easier to extend the network with new functionality.

The Symposium on SDN Research (SOSR) is the premiere venue for research publications on SDN, building on past years' successful SOSR and HotSDN (Hot Topics in Software Defined Networking) workshops. Similarly to previous years, SOSR will be co-located with the Open Networking Summit (**organized this year in Los Angeles**) to foster interaction between academic and industrial attendees. Attendees of each event will be able to access selected sessions in the other event.

We invite researchers and practitioners to submit both long and short previously unpublished papers, choosing the length appropriate to the level of completeness and detail in the work. We particularly encourage position papers, radical ideas, and papers on building, deploying and operating SDN systems.

We invite submissions on a wide range of research, including, but not limited to:

- Applications of SDN in home, wireless, cellular, enterprise, data-center, backbone, and content distribution networks, etc.
- Applications of SDN to network management, monitoring, security, Internet of Things (IoT), content-centric networking, etc.
- Applications of SDNs at the physical layer (e.g., programmable topologies, bandwidth variable links, optical networks)
- Virtualized network functions (e.g., firewalls, intrusion detection systems, load balancers)
- Network virtualization

- White-box and bare-metal switching
- Novel data-plane architectures
- Novel offload and acceleration techniques to support SDN operations (e.g. using smart NICs, switch dev, FPGA and kernel or network stack bypass)
- Programming languages, verification and testing techniques
- Incremental deployment of SDN into operational networks along with experiences deploying SDN technology and applications in operational networks
- Novel techniques for improving the security, reliability, performance, and scalability of SDN architectures
- SDN controller frameworks

In addition to traditional research papers, we also seek papers that present:

- The design and application of useful SDN tools
- Surveys of important SDN concepts, techniques, and standards
- Technical overviews of larger research projects, production systems, and use cases
- Open-source benchmark suites or measurement data for evaluating SDN systems

Submission Instructions:

Submissions must be original, unpublished work, and not under consideration at another conference or journal. Each submission must be a single PDF file in two columns, 10 point format following the alternate ACM SIG LaTeX style file. Submitted short papers should be no longer than six (6) pages, and long papers no longer than twelve (12) pages, including all material except references. Papers must include the author names and affiliations for single-blind peer reviewing by the program committee. Papers should be submitted electronically via the submission site.

Accepted papers will be published in the ACM Digital Library. We stress that the publication of short papers at SOSR does not preclude the later publication of a full-length version of the paper at a conference or in a journal. Authors of accepted papers are expected to present their papers at the symposium and will have the opportunity to present a poster/demo at an interactive session, co-located with ONS.

Please direct any submission-related questions to sosr18chairs@ethz.ch

Submission: Please visit <https://sosr18.hotcrp.com/> to submit.

Important Dates:

Paper registration (with abstract):	November 3, 2017 (AoE)
Paper submission:	November 10, 2017 (AoE)
Notification:	January 19, 2018
Camera-ready due:	February 28, 2018
Conference:	March 27-29, 2018 in Los Angeles, CA