

CALL FOR PAPERS

The ACM SIGMETRICS conference solicits papers on the development and application of state-of-the-art, broadly applicable analytic, simulation and measurement-based performance evaluation techniques. Of particular interest is work that presents new performance evaluation methods or that creatively applies previously developed methods to make predictions about, or gain insights into key design trade-offs in, a variety of computer and networked systems and cyber-physical systems ranging from mobile devices and Internet-of-Things (IoT) applications to large-scale cloud computing systems and smart grids.

The main conference will be held June 6-8, 2017. There will be tutorials and workshops on June 5 and June 9, 2017. **Differing from previous years, ACM SIGMETRICS has adopted a new submission model and review process with two separate submission deadlines in October 2016 and January 2017** (see below for the exact dates). Papers will be reviewed after each submission deadline by the SIGMETRICS 2017 TPC members. Review decisions allowing for one-shot-revision. All papers accepted will be presented at the Sigmetrics conference in June, 2017, AND will be published immediately upon acceptance in a new journal: the *Proceedings of the ACM Series on Computing Systems Modeling, Measurement and Evaluation*. Please see [Information for the Authors](#) on the website for more details.

The notion of performance is broadly construed, including considerations of speed and scalability as well as reliability, availability, and manageability of systems. *We encourage submissions including theoretical models and analysis as well as empirical studies providing insights into the design, performance, implementation and experimental issues of real-world computer and networked systems and services.*

Topics of interests include, but are not limited to:

Quantitative design and evaluation studies of:

- Computer and communication networks, protocols and algorithms
- Wireless, mobile, ad-hoc and sensor networks, IoT applications
- Computer architectures, multi-core processors, memory systems and storage networks
- Operating systems, file systems and databases
- Data processing
- Virtualization, data centers, distributed and cloud computing
- Mobile and personal computing systems
- Energy-efficient computing systems
- Real-time and fault-tolerant systems
- Software systems and enterprise applications
- Social networks, multimedia systems, service-oriented architectures and Web services
- Large-scale operational systems
- Smart power grids and other cyber-physical systems
- Emerging technologies

Methodologies, formalisms, metrics, solution techniques and algorithms for:

- Analytical modeling techniques and model validation
- Workload characterization and benchmarking
- Performance, scalability, power and reliability analysis

- Sustainability analysis and power management
- System measurement, performance monitoring and forecasting,
- Anomaly detection, problem diagnosis and trouble-shooting
- Capacity planning, resource allocation, run time management and scheduling
- Quality of service, total cost of ownership and pricing
- Experimental design, statistical analysis, simulation
- Performance-oriented applications of game theory, economics and control theory
- Big data, machine learning and signal processing

Submission Guidelines

Papers should not exceed 12 pages double column including figures, tables in standard ACM format excluding references. In addition, authors may supplement their paper with an appendix with unspecified length for the sole purpose of justifying the technical correctness of their claims stated in the body (technical part of a long proof to be self-contained, additional experimental validation). The appendix does not count towards the original 12 pages. Papers must be submitted electronically in printable pdf form. [Templates for the standard ACM format can be found at this link](#). Both strict and alternate styles are acceptable for submission. No changes to margins, spacing, or font sizes are allowed from those specified by the style files. Papers violating the formatting guidelines will be returned without review.

All submissions will be reviewed using a double-blind review process. The identity of authors and referees will not be revealed to each other. To ensure blind reviewing, authors names and affiliations should not appear in the paper; bibliographic references should be made in such a way as to preserve author anonymity. Accepted papers will appear in the conference proceedings published on ACM Performance Evaluation Review.

Warning: It is ACM policy not to allow double submissions, where the same paper is submitted to more than one conference/journal concurrently. Any double submissions detected will be immediately rejected from all conferences/journals involved.

The paper submission website is at <https://sigmetrics17winter.hotcrp.com>.

Important Dates (Deadlines are at 11:59:59 pm EST on the dates indicated)

Fall 2016: Registration of abstract: October 11, 2016; Paper submission: October 18, 2016.

Winter 2017: Registration of abstract: Jan. 10, 2017; Paper submission: January 17, 2017.

Paper notification: TBD

Camera ready submission: April 7, 2017

Conference: June 5-9, 2017