HotStorage '18: 10th USENIX Workshop on Hot Topics in Storage and File Systems

July 9–10, 2018, Boston, MA, USA

Sponsored by USENIX, the Advanced Computing Systems Association

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HotStorage '18 will be co-located with the 2018 USENIX Annual Technical Conference, July 11–13, 2018.

Important Dates

- Paper submissions due: **Thursday, March 15, 2018, 8:59:59 p.m. PDT**
- Notification to authors: **Thursday, April 19, 2018**
- Final paper files due: **Thursday, May 17, 2018**
- Breakout submissions due: **Thursday, June 14, 2018**
- Notification to Breakout leads: **Thursday, June 28, 2018**

Conference Organizers

Program Co-Chairs

Ashvin Goel, *University of Toronto*
Nisha Talagala, *ParallelM*

Program Committee

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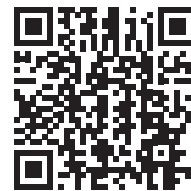Erez Zadok, *Stony Brook University*

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Overview

The purpose of the HotStorage workshop is to provide a forum for the cutting edge in storage research, where both researchers and industry practitioners can exchange and debate new opportunities in our field. The workshop seeks submissions that explore longer-term challenges and opportunities in storage technology and research. Submissions should propose new research directions, advocate non-traditional approaches, or report on noteworthy learnings and experience in emerging areas. We particularly value submissions that effectively advocate fresh, unorthodox, unexpected, controversial, or counterintuitive ideas for advancing the state of the art.

Submissions will be judged on their originality, technical merit, topical relevance, and likelihood of leading to insightful discussions that will influence future storage systems design, application and use.

In keeping with the goals of the HotStorage workshop, the review process will heavily favor submissions that are forward looking and open ended. A good way to think about this is that if you are only a few months away from submitting to FAST, NSDI, EuroSys, VLDB, OSDI, SOSP, etc. you are probably already past the sweet spot for HotStorage. If you have a forward-looking or unorthodox idea or new research, and some evidence or early working system to support your view, but still open questions, please consider bringing your work to HotStorage.

New This Year: Breakouts Session

In HotStorage '18, we will be introducing a Breakouts session featuring group discussion on emerging and/or controversial topics in storage and memory. The session will include short (5-minute) presentations by each breakout leader, followed by 30-minute group discussions running in parallel (attendees can choose which breakout to attend). Breakout leads are invited to submit a one-page abstract describing their Breakout. Breakouts will be listed in the conference program and breakout abstracts will be posted on the Workshop Program page. Notes from the breakouts will be available online as Google docs.

Topics of Interest

HotStorage '18 welcomes innovative submissions in the broad areas of storage, data management, data applications, and cross-disciplinary topics that relate to these. Specific areas are below but are not exhaustive.

- New and complex memory hierarchies
- Persistent memory
- Storage for edge devices (sensors, home, and IoT etc.)
- Distributed edge/cloud storage management
- Application-specific storage
- Applications of machine learning and deep learning to data management
- Archival storage
- Big-data management (stream processing, batch analytics etc.)
- Storage for analytics applications
- Cloud storage
- Memory-centric storage systems
- Key-value and NoSQL stores
- Solid-state storage, systems and optimizations
- Energy-efficient storage
- File systems
- Mobile storage
- Performance modeling and prediction for storage
- Programming models for data management
- Quality of service for storage
- Caching, tiering, and replication
- Distributed storage and data consistency
- Security of storage
- Software-defined storage
- Storage and server convergence

What to Expect from the Workshop

The program committee encourages active participation from authors, presenters, and attendees. A key element of this is a moderated discussion on each presented paper where contributions from workshop participants are highly encouraged. We'd like to hear from people about additional context, issues and prior work—not just ask questions. To allow this level of engagement, the accepted papers will be available for download at least a week in advance so participants can come prepared.

Workshop Details

HotStorage '18 will be a two-day workshop. At least one author of each accepted paper must attend the workshop to present the paper. Presentation details and guidelines will be communicated to the authors of the accepted papers. Authors of accepted papers will also be expected to prepare a poster summarizing their submission to be presented as part of a HotStorage '18 poster session.

Submission Instructions

- Regular submissions must be no longer than five (5) two-column pages excluding references, and should be submitted electronically via the web submission form linked from the Call for Papers website, www.usenix.org/hotstorage18/cfp.
- Breakout submissions should be one (1) two-column page including all content, and should be submitted via email to hotstorage18breakout@usenix.org.

Submissions should be PDF documents that are viewable by standard tools. Submissions must follow the USENIX formatting guidelines: 10-point type on 12-point (single-spaced) leading, with the text block being no more than 6.5" wide by 9" deep. Please see the detailed formatting requirements at www.usenix.org/conference/hotstorage18/requirements-authors

Submissions to HotStorage '18 may not be under consideration for any other venue. Simultaneous submission of the same work to multiple venues, submission of previously published work, or plagiarism constitutes dishonesty or fraud. USENIX, like other scientific and technical conferences and journals, prohibits these practices and may take action against authors who have committed them. See the USENIX Conference Submissions Policy at www.usenix.org/conferences/submissions-policy for details. Questions? Contact the HotStorage '18 program co-chairs at hotstorage18chairs@usenix.org, or the USENIX office, submissions-policy@usenix.org.

The review process is not blind. The names and affiliations of the authors should be included on the first page. The names of the reviewers, however, will remain anonymous. Papers accompanied by nondisclosure agreement forms will not be considered. Accepted submissions will be treated as confidential prior to publication on the USENIX HotStorage '18 website; rejected submissions will be permanently treated as confidential.

All papers will be available online to registered attendees before the workshop. If your accepted paper should not be published prior to the event, please notify production@usenix.org. The papers will be available online to everyone beginning on the first day of the workshop.