

# HotStorage '20: 12th USENIX Workshop on Hot Topics in Storage and File Systems

July 13, 2020, Boston, MA, USA

Sponsored by USENIX, the Advanced Computing Systems Association



The 12th USENIX Workshop on Hot Topics in Storage and File Systems (HotStorage '20) will be co-located with the 2020 USENIX Annual Technical Conference and will take place July 13, 2020 at the Sheraton Boston in Boston, MA, USA.

## Important Dates

- Submissions due: **Thursday, March 26, 2020, 8:59 pm PDT**
- Notification to authors: **Thursday, April 30, 2020**
- Final papers due: **Thursday, May 28, 2020**

## Conference Organizers

### Program Co-Chairs

Anirudh Badam, *Microsoft*

Vijay Chidambaram, *The University of Texas at Austin and VMware Research*

### Program Committee

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Sam H. Noh, *UNIST (Ulsan National Institute of Science and Technology)*

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Florentina Popovici, *Google*

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Amy Tai, *VMware Research*

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## Overview

The HotStorage workshop provides a forum for cutting-edge storage research, a place where researchers and industry practitioners can discuss new opportunities and challenges in storage technology. Submissions should propose new research directions, explore non-traditional approaches, or report on noteworthy or counterintuitive learnings and experience in emerging areas. Submissions will be judged on their originality, technical merit, topical relevance, and the likelihood of leading to insightful discussions that will influence future storage systems design and applications.

In keeping with the goals of the HotStorage workshop, the review process will favor submissions that are forward-looking and open-ended. 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 have open questions, please consider bringing your work to HotStorage. The program committee will also welcome position papers that solicit discussion on controversial topics, introduce emerging methods and paradigms, or call out for new research directions.

## Topics

HotStorage '20 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 and Privacy of storage
- Software-defined storage
- Storage for containers and serverless
- Hybrid cloud storage
- Erasure coding
- Verified storage systems
- Storage for blockchain

## 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.

HotStorage '20 will be a one-day workshop. At least one author of each accepted paper must attend the workshop to present the paper, participate in discussions, and answer questions; if you have any questions or concerns about attending the workshop as a presenting author, please contact the program co-chairs via [hotstorage20chairs@usenix.org](mailto:hotstorage20chairs@usenix.org) to discuss. Presentation details and guidelines will be communicated to the authors of the accepted papers. HotStorage '20 will include a poster session, which may include posters from authors of accepted papers; some submitted papers may also be accepted as posters only.

In each session, there will be significant time devoted to discussion among authors and attendees. Paper presentations will each be 15 minutes plus Q&A. There will also be an online discussion for each paper, which will provide another forum for engagement. This will also be facilitated by a discussion section in the paper, as described below.

## Submission Instructions

Regular submissions must be no longer than five (5) two-column pages excluding references and the discussion section and should be submitted electronically via the submission form, linked from the Call for Papers website, [www.usenix.org/hotstorage20/cfp](http://www.usenix.org/hotstorage20/cfp).

**Discussion Topics Section:** In keeping with the workshop format described above, authors of each full paper are required to add an additional section (beyond the 5-page limit), immediately before references, no longer than a half a page (i.e., a single (1) column) that explicitly calls out what kind of feedback the authors are looking to receive. These could be specific questions about feasibility, applicability, open problems, challenges, limitations, specific design choices, assumptions, importance, or similar issues. The review process will favor papers that are likely to stimulate discussion and benefit from feedback from workshop participants.

**NEW: Indicating Paper Type.** Authors will be indicating one of two paper types in both the submission and on HotCRP: **Position** or **Regular**. Paper titles should be prefixed by their type in the submission. For example, "Position: XYZ." Position titles should explicitly state and argue for a position; the more interesting or forward-looking the position, the better the paper is a match for HotStorage. Position papers may also be used to put forward a vision for storage systems. Regular papers might contain a new and interesting result that is smaller in scope than what is typically published at FAST. Please note that HotStorage '20 will only be accepting a small number of Regular papers; position papers which incite discussion will be preferred.

**NEW: Awards.** HotStorage '20 will present two new awards: **Best Presentation Award** and **Outstanding New Direction Award**. The first award will recognize the best-delivered talk at HotStorage '20, while the second award will recognize the most interesting research direction outlined by one of the workshop papers. We hope these awards will help encourage the submission of provocative and interesting ideas, as well as high-quality presentations of the ideas at the workshop.

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 **7" wide by 9" deep**.

Submissions to HotStorage '20 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 for details at [www.usenix.org/conferences/author-resources/submissions-policy](http://www.usenix.org/conferences/author-resources/submissions-policy). Questions? Contact your program co-chairs, [hotstorage20chairs@usenix.org](mailto:hotstorage20chairs@usenix.org), or the USENIX office, [submissionspolicy@usenix.org](mailto:submissionspolicy@usenix.org).

The review process is double-blind. Authors must not be identified in the submissions, either explicitly or by implication. When it is necessary to cite your own work, cite it as if it were written by a third party. Do not say "reference removed for blind review." Papers from industry may identify the company or the product. For example, it is acceptable to talk about Company X's Product Y (X and Y need not be blinded). Papers accompanied by nondisclosure agreement forms will not be considered. Accepted submissions will be treated as confidential prior to publication on the USENIX HotStorage '20 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](mailto:production@usenix.org). The papers will be available online to everyone beginning on the first day of the workshop.