

# HotCloud '20: 12th USENIX Workshop on Hot Topics in Cloud Computing

July 13, 2020, Boston, MA, USA



Sponsored by USENIX, the Advanced Computing Systems Association

The 12th USENIX Workshop on Hot Topics in Cloud Computing (HotCloud '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: Tuesday, March 24, 2020, 8:59 pm PDT
- Notification to authors: Thursday, April 30, 2020
- Final papers due: Wednesday, May 27, 2020

## Conference Organizers

### Program Co-Chairs

Amar Phanishayee, *Microsoft Research*  
Ryan Stutsman, *University of Utah*

### Program Committee

Peter Alvaro, *University of California, Santa Cruz*  
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Shivaram Venkataraman, *University of Wisconsin—Madison*  
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### Steering Committee

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Swaminathan Sundararaman, *Pyxeda AI*  
Hakim Weatherspoon, *Cornell University*

### Overview

The HotCloud workshop provides a forum for cutting-edge cloud research and a place where researchers and industry practitioners can discuss new opportunities and challenges in cloud computing. Submissions should propose a new position or research direction, explore non-traditional approaches, or report on noteworthy or counterintuitive experiences 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 cloud systems design and applications.

In keeping with the goals of the workshop, the review process will favor submissions that are early-stage, forward-looking, and/or open-ended. If you are only a few months away from submitting to SOCC, NSDI, VLDB, OSDI, SOSP, etc., you are probably already past the sweet spot for this workshop. 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, consider bringing your work to HotCloud. Position papers that solicit discussion on controversial topics, introduce emerging methods and paradigms, or call out new research directions are especially of interest.



To help facilitate discussion, the program will include significant additional time and activities dedicated to constructive questions, debate, and feedback. Hence, the program committee reserves the right to accept some submissions as “poster only” to ensure ample room for discussion while being broad and inclusive across different ideas.

## Topics of Interest

HotCloud is open to examining all models of cloud computing, including the scalable management of in-house servers, remotely hosted Infrastructure-as-a-Service (IaaS), infrastructure augmented with tools and services that provide Platform-as-a-Service (PaaS), and Software-as-a-Service (SaaS). Interesting issues show up at all levels of the software stack, but HotCloud’s emphasis is on combining mechanisms to build working clouds rather than on implementing new low-level mechanisms themselves. For example, papers on using virtual machines in new ways would be preferred over papers on improving core VM technology.

Topics of interest include but are not limited to the following:

- Improving elasticity and availability in cloud infrastructure and cloud services
- Cloud support for new hardware technologies (e.g. accelerators and GPUs)
- Cloud data management and analytics
- Multi-tenancy and related issues such as performance isolation
- Machine Learning for systems
- Systems for Machine Learning
- Micro-cloud (or Cloudlet) infrastructure
- Charging models and economics
- Power-efficient (“green”) computing for clouds
- Monitoring, troubleshooting, and failure recovery
- Debugging and performance analysis of cloud applications
- Cloud management and configuration
- Virtual appliance management and composition
- Storage architectures for cloud computing
- Novel networking approaches for cloud computing
- Programming models
- Security and privacy in clouds
- New applications for clouds
- Mobility
- Cloud workload management including migration to disparate clouds

## 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 in advance of the workshop so participants can come prepared.

The workshop will be one day. At least one author of each accepted paper must attend the workshop to present the paper (through a talk and/or poster session), 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

hotcloud20chairs@usenix.org to discuss. Presentation details and guidelines will be communicated to the authors of the accepted papers. The poster session 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. 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/hotcloud20/cfp](http://www.usenix.org/hotcloud20/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.

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 HotCloud ’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 at [www.usenix.org/conferences/author-resources/submissions-policy](http://www.usenix.org/conferences/author-resources/submissions-policy) for details. Questions? Contact your program co-chairs, [hotcloud20chairs@usenix.org](mailto:hotcloud20chairs@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 HotCloud ’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.