

HotEdge '18: USENIX Workshop on Hot Topics in Edge Computing

July 10, 2018 • Boston, MA, USA



Sponsored by USENIX, the Advanced Computing Systems Association

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

Important Dates

- Paper submissions due: ~~Tuesday, March 20, 2018, 11:59 pm PDT~~
Tuesday, March 27, 2018, 11:59 pm PDT *Deadline extended!*
- Notification to authors: Tuesday, April 24, 2018
- Final paper files due: Tuesday, May 22, 2018

Conference Organizers

Program Co-Chairs

Irfan Ahmad, *CachePhysics*

Swaminathan Sundararaman, *Parallel Machines*

Program Committee

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Weisong Shi, *Wayne State University*

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Overview

The goal of HotEdge is to bring together researchers and practitioners from academia and industry working on edge computing to share their ideas, discuss research/work in progress, and identify new/emerging

“hot” trends in this important emerging area. The demand for low-latency offloading infrastructure for upcoming applications (such as augmented reality, wearable cognitive assistance, sensor data processing) and the emergence of Internet of Things (IoT) are pushing computing again towards disaggregation. There are many challenges in design, implementation, and deployment of different aspects of edge computing: infrastructure, networking, security, applications, etc. HotEdge would like to foster discussions in these areas.

The HotEdge '18 program committee is placing a strong emphasis on soliciting early-stage ideas. This workshop is specifically designed for novel ideas to get early feedback. Submissions will be judged on their novelty, topical relevance, and likelihood of generating discussions and debate. A good way to think about this is that if you are only a few months away from submitting to SEC, ICDCS, InfoCom, NSDI, OSDI, or SOSP, etc., you are probably already past the sweet spot for HotEdge. To promote research in practical use cases, we plan to dedicate a part of the program to submissions relating to novel applications of edge computing.

Topics of Interest

HotEdge '18 welcomes innovative submissions in the broad areas of infrastructure, applications, security, availability, and interoperability in edge computing. Specific areas are below but are not exhaustive:

- Edge-enabled applications
- Edge computing infrastructure and applications
- Edge-optimized heterogeneous architectures
- Edge-based analytics (including machine learning)
- Edge-based storage systems and databases
- Security and privacy in edge computing
- Interoperability between edge and cloud computing
- Fault-tolerance using edge computing
- Programming models for edge computing
- Quality of Service in edge computing

Workshop Details

HotEdge '18 will be a one-day workshop that is divided into two parts. The first part of the day will be invited talks from both academia and industry to discuss the evolution, trends, practical challenges and research opportunities in edge computing. The second part of the workshop will feature the academic program, including paper and poster presentations.



All accepted papers and abstracts of accepted posters will be published online. At least one author of each accepted paper or poster must attend the workshop to present the paper or poster. Presentation details and guidelines will be communicated to the authors of the accepted papers and posters. Note that authors of accepted papers will also be expected to prepare a poster summarizing their submission to be presented as part of a HotEdge '18 poster session.

Submission Instructions

Please submit your papers (no extended abstracts) in PDF format via the web submission form linked from the Call for Papers website, www.usenix.org/hotedge18/cfp. Do not email submissions.

The complete submission must be no longer than five (5) pages not including references. It should be typeset in two-column format in 10-point type on 12-point (single-spaced) leading, with the text block being no more than 6.5" wide by 9" deep. Submissions that violate any of these restrictions may not be reviewed. The limits will be interpreted fairly strictly, and no extensions will be given for reformatting. If you wish, you may use the LaTeX template and style files available on the USENIX templates page at www.usenix.org/conferences/author-resources/paper-templates

There are no formal restrictions on the use of color in graphs or charts, but please use them sparingly—not everybody has access to a color printer.

The names of authors and their affiliations should be included on the first page of the submission.

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. Papers accompanied by nondisclosure agreement forms will not be considered. If you are uncertain whether your submission meets USENIX's guidelines, please contact the program co-chairs, hotedge18chairs@usenix.org, or the USENIX office, submissionspolicy@usenix.org.

Reviewing of papers will be done by the program committee, potentially assisted by outside referees in limited cases. Accepted papers may be shepherded through an editorial review process by a member of the program committee. 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. Accepted submissions will be treated as confidential prior to publication on the USENIX website; rejected submissions will be permanently treated as confidential.

By submitting a paper, you agree that at least one of the authors will attend the workshop to present it. If the workshop registration will pose a hardship for the presenter of the accepted paper, please contact conference@usenix.org.