Announcement and Call for Papers

8th International Workshop on Feedback Computing

Sponsored by USENIX, the Advanced Computing Systems Association

www.usenix.org/conference/feedback13

June 25, 2013   **San Jose, CA**

The 8th International Workshop on Feedback Computing will take place during USENIX Federated Conferences Week, June 24–28, 2013.

Important Dates

Paper submissions due: *April 10, 2013, 11:59 p.m. PDT*
Notification to authors: *April 26, 2013*
Final paper files due: *May 24, 2013*
Workshop date: *June 25, 2013*

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Overview

Following the success of the past six FeBID workshops and the newly debuted Feedback Computing Workshop in 2012, the

2013 International Workshop on Feedback Computing will be held in June 2013, as part of USENIX Federated Conferences Week in the heart of the Silicon Valley. Feedback Computing is a unique forum built around advancing feedback system theory and practice in modeling, analyzing, designing, and optimizing computing systems. The creation of this workshop represents the growing use of feedback in a broader agenda and is a timely response to the following two trends:

1. Computing systems are growing larger, smarter, and more complex, embedding in the physical world, human interactions, and societal infrastructure. Systematic and feedback-driven approaches are critical to address the dynamic complexity that arises in new fields such as cyber-physical systems, cloud computing, social networks, and mobile applications.

2. Advances in disciplines such as machine learning, mathematical optimization, network theories, decision theories, and data engineering provide new foundations and techniques that empower feedback approaches to address computing systems at scale and to achieve goals such as autonomy, adaptation, stabilization, robustness, or performance optimization.

Topics

The Feedback Computing Workshop seeks original research contributions and position papers on advancing feedback control technologies and their applications in computing systems, broadly defined. Topic of interests include but are not limited to:

- Theoretical foundations for feedback computing
- New control paradigms and system architecture
- Sensing, actuation, and data management in feedback computing
- Learning and modeling of computing system dynamics
- Design patterns and software engineering
- Feedback computing education and awareness
- Experiences and best practices from real systems
- Applications in domains such as distributed systems, cloud computing, data center resource management, real-time systems, cyber-physical systems, social network, and mobility

We encourage research paper submissions expressing original research results, challenge paper submissions motivating new research directions, and application paper submissions elaborating experiences from real systems. In addition, the workshop will leverage extended coffee breaks and lunch break to arrange special meetings and to discuss collaborative research agenda built among the participants.

Paper Submissions

Authors are invited to submit three types of papers to emphasize the multiple focuses of this workshop:

- **Research Papers:** Research paper submissions must represent original, unpublished contributions. All submissions 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; submission should not exceed 6 pages in length (excluding references). Manuscript templates are available for download from the USENIX templates page, www.usenix.org/templates-conference-papers.

- **Challenge Papers:** Challenge paper submissions must motivate research challenges with real systems that can take advantage of feedback computing. All submissions 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; submission should not exceed 3 pages in length (excluding references). Manuscript templates are available for download from the USENIX templates page, www.usenix.org/templates-conference-papers.

- **Application Papers:** Application paper submissions must be based on real experience and working systems. All submissions should be formatted as annotated slides—a visual in the upper half of a page and the explanatory text in the lower half—and should not exceed 15 slides in length.

All papers are to be submitted via the Web submission form on the Feedback '13 Call for Papers Web site, www.usenix.org/conference/feedback13/call-for-papers, as PDF files. The workshop follows a single-blind review process.

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, feedback13chairs@usenix.org, or the USENIX office, submissionspolicy@usenix.org.

At least one author of an accepted paper is expected to present the paper in person at the workshop. There will not be copyright-transferred formal proceedings for the workshop. The accepted papers will be available online to registered attendees before the conference and will also be distributed via USB drives at the conference. 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 June 25, 2013. Accepted submissions will be treated as confidential prior to publication on the USENIX Feedback Computing Workshop '13 Web site; rejected submissions will be permanently treated as confidential.

One Best Paper Award will be announced at the end of workshop to recognize the current best work in feedback computing.