

Workshop on Power Aware Computing and Systems (HotPower '08)

Sponsored by USENIX, the Advanced Computing Systems Association

<http://www.usenix.org/hotpower08>

December 7, 2008

San Diego, CA, USA

HotPower '08 will be held immediately before the 8th USENIX Symposium on Operating Systems Design and Implementation (OSDI '08), December 8–10, 2008.

Important Dates

Paper submissions due: *September 15, 2008, 11:59 p.m. PDT*

Notification to authors: *October 21, 2008*

Final files due: *November 13, 2008*

Workshop Organizers

Program Chair

Feng Zhao, *Microsoft Research*

Program Committee

Tarek Abdelzaher, *University of Illinois at Urbana-Champaign*

Carla Ellis, *Duke University*

Jason Flinn, *University of Michigan*

Rajesh Gupta, *University of California, San Diego*

Mor Harchol-Balter, *Carnegie Mellon University*

Bill Kaiser, *University of California, Los Angeles*

Aman Kansal, *Microsoft Research*

Randy Katz, *University of California, Berkeley*

Christos Kozyrakis, *Stanford University*

Partha Ranganathan, *Hewlett-Packard*

Amin Vahdat, *University of California, San Diego*

Overview

Power is increasingly becoming a central issue in designing systems, from embedded systems to data centers. We do not understand energy and its tradeoff with performance and other metrics very well. This limits our ability to further extend the performance envelope without violating physical constraints related to power, heat generation, or cooling.

This workshop hopes to provide a forum in which to present the latest research and to debate directions, challenges, and novel ideas about building energy-efficient computing systems. In addition, researchers coming to these issues from fields such as computer architecture, systems and networking, measurement and modeling, language and compiler design, and embedded systems will gain the opportunity to interact with and learn from one another.

Topics

Topics of interest related to energy-efficient computing include but are not limited to:

- Instrumentation and measurement
- Energy and performance profiling, accounting
- Metrics, benchmarks, interfaces
- Performance, energy and other resource tradeoffs, energy complexity

- Compiler optimization, application design
- System-level optimization, cross-layer coordination
- Load and resource modeling, management
- Scheduling, run-time adaptation, feedback control
- Processor, network, storage, hardware components and architecture
- Reliability and power management
- Application to multi-core, data center, and embedded systems

The workshop encourages submissions of early-stage research and novel ideas that have a high likelihood of generating interesting discussion.

Submission Instructions

Submitted papers must be no longer than 5 single-spaced 8.5" x 11" pages, including figures, tables, and references; two-column format, using 10-point type on 12-point (single-spaced) leading; and a text block 6.5" wide x 9" deep. Author names and affiliations should appear on the title page.

Papers must be in PDF and must be submitted via the Web submission form on the HotPower '08 Call for Papers Web site, <http://www.usenix.org/hotpower08/cfp>.

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, on the recommendation of a program chair, take action against authors who have committed them. In some cases, program committees may share information about submitted papers with other conference chairs and journal editors to ensure the integrity of papers under consideration. If a violation of these principles is found, sanctions may include, but are not limited to, barring the authors from submitting to or participating in USENIX conferences for a set period, contacting the authors' institutions, and publicizing the details of the case.

Authors uncertain whether their submission meets USENIX's guidelines should contact the program chair, hotpower08chair@usenix.org, or the USENIX office, submissionspolicy@usenix.org.

Papers accompanied by nondisclosure agreement forms will not be considered. Accepted submissions will be treated as confidential prior to publication on the USENIX HotPower '08 Web site; rejected submissions will be permanently treated as confidential.

Registration Materials

Complete program and registration information will be available in October 2008 on the workshop Web site. If you would like to receive the latest USENIX conference information, please join our mailing list: <http://www.usenix.org/about/mailling.html>.