

# 2010 Workshop on Power Aware Computing and Systems (HotPower '10)

Sponsored by USENIX, the Advanced Computing Systems Association

<http://www.usenix.org/hotpower10>

October 3, 2010

Vancouver, BC, Canada

*HotPower '10 will be held immediately before the 9th USENIX Symposium on Operating Systems Design and Implementation (OSDI '10), which will take place October 4–6, 2010.*

## Important Dates

Submissions due: July 5, 2010, 11:59 p.m. PDT

Notification to authors: August 2, 2010

Final files due: September 6, 2010

## Workshop Organizers

### Program Chairs

Frank Bellosa, *Karlsruhe Institute of Technology (KIT)*

Trishul Chilimbi, *Microsoft Research Redmond*

### Program Committee

Ricardo Bianchini, *Rutgers University*

Carla Ellis, *Duke University*

Rajesh Gupta, *University of California, San Diego*

Shih-Lien Lu, *Intel*

Yung-Hsiang Lu, *Purdue University*

Srilatha Manne, *AMD*

Sam H. Noh, *Hongik University*

Jose Renau, *University of California, Santa Cruz*

Steven Swanson, *University of California, San Diego*

Feng Zhao, *Microsoft Research Asia*

## 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 batteries, power, heat generation, or cooling.

HotPower 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, measurement, and measurement studies
- Energy and performance profiling, accounting
- Metrics, benchmarks, interfaces
- Principles of power management
- Performance, energy and other resource trade-offs, 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

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 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 '10 Call for Papers Web site, <http://www.usenix.org/hotpower10/cfp>.

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 day of the workshop, October 3, 2010.

Papers accompanied by nondisclosure agreement forms will not be considered. Accepted submissions will be treated as confidential prior to publication on the USENIX HotPower '10 Web site; rejected submissions will be permanently treated as confidential.

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 <http://www.usenix.org/submissionspolicy>. Questions? Contact your program chairs, [hotpower10chairs@usenix.org](mailto:hotpower10chairs@usenix.org), or the USENIX office, [submissionspolicy@usenix.org](mailto:submissionspolicy@usenix.org).

## Registration Materials

Complete program and registration information will be available in August 2010 on the workshop Web site.