

Call for Papers: Workshop on Power Aware Computing and Systems (HotPower '09)

Big Sky, Montana, USA
October 10, 2009

co-located with SOSP 2009

<http://hotpower09.stanford.edu>

Important Dates

Submissions due: **June 8th, 2009**, 11:59PM PDT

Notification to authors: **July 13, 2009**

Final files due: **August 3, 2009**

HotPower '09 will be held immediately before the 22nd ACM Symposium on Operating Systems Principles (**SOSP'09**), October 11-14, 2009, on October 10th (Saturday).

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.

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, 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
- 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.

Program Committee

Jeff Chase, Duke

David Culler, UC Berkeley

Adriel Dorofeev, VMWare

James Hamilton, Amazon

Mor Harchol-Balter, Carnegie Mellon

Paul Kimmelman, Luminary Micro

Charles Lefurgy, IBM

Philip Levis, Stanford University (*co-chair*)

Sylvia Ratnaswamy, Intel Research

Partha Ranganathan, HP Labs (*co-chair*)

Suzanne Rivoire, Sonoma State University

Mehul Shah, HP Labs

Thomas Wenisch, University of Michigan

Feng Zhao, Microsoft Research

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. The HotPower '09 web page will have more detailed instructions as well as sample templates.

Papers must be in PDF and must be submitted via a web submission form.

Simultaneous submission of the same work to multiple venues, submission of previously published work, or plagiarism constitutes dishonesty or fraud. Papers meeting any of these criteria will be rejected. Authors uncertain whether their submission meets these guidelines should contact the program chairs.

Papers accompanied by nondisclosure agreement forms will not be considered. Accepted submissions will be treated as confidential prior to publication on the HotPower '09 web site; rejected submissions will be permanently treated as confidential.

Registration Materials

Complete program and registration information will be available in August 2009 on the [workshop web site](#).