Fourteenth International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS '09)

Washington, DC, March 7 – 11, 2009

ASPLOS is a multi-disciplinary conference for research that spans the boundaries of hardware, computer architecture, compilers, languages, operating systems, networking, and applications. ASPLOS provides a high quality forum for scientists and engineers to present their latest research findings in these rapidly changing fields. It has captured some of the major computer systems innovations of the past two decades (e.g., RISC and VLIW processors, small and large-scale multiprocessors, clusters and networks-of-workstations, optimizing compilers, RAID, and network-storage system designs).

This conference occurs at a time when computer architecture is facing great challenges, due both to the end of single-processor performance scaling and to new demands imposed by mobile and gigascale computing. Multi-disciplinary research is increasingly important as boundaries between hardware/software and local/network computing blur, as the form and capabilities of computing devices becomes ever more varied, and as users and applications continue to expand. In addition to the main program, this upcoming ASPLOS will offer several tutorials and workshops on a variety of focus areas.

Like its predecessors, the ASPLOS 2009 conference will focus on ground-breaking research, particularly efforts focusing on the interplay of architecture and software systems. The program committee welcomes research papers on a wide range of non-traditional topics that emphasize the multi-disciplinary aspects of their work. Full papers are solicited on, but not limited to, these topics:

- Interaction of operating systems, compilers, programming languages, and architectures
- Architecture/software issues for multicores
- Architecture/software issues for new platforms, from sensor networks to wireless PDAs to wall-sized displays
- Architecture/software issues focusing on Internet services
- Architecture/software platforms for delivering graphics and multimedia
- Embedding computation and storage (e.g., caches) within networks
- Case studies of architecture/software design in novel experimental systems
- Studies of Internet applications and services with implications for systems design
- Security and availability issues for current/future computer systems
- Evaluations of experimental systems for performance, power, availability
- Effect of technology and application drivers on architectures, operating systems, and/or compilers

Abstract Deadline:	August 1, 2008 (6pm Pacific Daylight Savings Time)
Full Paper Deadline:	August 7, 2008 (6pm Pacific Daylight Savings Time)
Rebuttal Period:	October 23-24, 2008
Notification of Acceptance:	November 14, 2008
Final Paper Submission:	December 31, 2008

General Chair:	Mary Lou Soffa (University of Virginia)	soffa@cs.virginia.edu
Program Chair:	Mary Jane Irwin (Penn State University)	mji@cse.psu.edu