



CALL FOR PAPERS

IISWC 2006



The Annual IEEE International Symposium on Workload Characterization

Sponsored by IEEE Computer Society and the Technical Committee on Computer Architecture

October 25-27, 2006, Hilton Hotel, San Jose, California, USA

(Immediately following ASPLOS XII at same venue)

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Important Dates

Abstract/Final Paper Submission: **July 3, 2006**

Acceptance Notified: **August 25, 2006**

Final Manuscript Submission: **September 8, 2006**

This symposium is dedicated to the understanding and characterization of workloads which run on all types of computer systems. New applications and programming paradigms continue to emerge as the use of computers becomes more widespread and more sophisticated. Improving process and communication technology, innovations in microarchitecture, compilers, and virtual machine technology are also changing the nature of problems that are being solved by computing systems. Whether they are PDAs at the low end or massively parallel systems at the high end, the design of tomorrow's computing machines can be significantly improved through the knowledge and ability to simulate the workload expected to run on them.

Papers are solicited in all areas related to characterization of computing system workload. Topics of interest to participants in the symposium include (but are not limited to):

- Characterization of applications in areas like
 - Search engines, E-commerce, Web server, Database
 - Games, console and online
 - Embedded, Mobile, Multimedia
 - Life Sciences, Bio-Informatics, Scientific computing
 - Security, Reliability, Biometrics
- Characterization of middleware and library behavior
 - Websphere, .NET, Java VM, CLI
 - Graphics libraries, scientific libraries
- Characterization of system behavior, including
 - Operating system and hypervisor effects
 - Effects due to virtualization and dynamic optimization
- Implications of workload in design issues, such as
 - Microarchitecture, memory hierarchy, I/O
 - Power management, reliability
 - Instruction set architecture
- Benchmark creation issues, including
 - Multithreaded benchmarks
 - Profiling, trace collection, synthetic traces
 - Validation of benchmarks
- Abstract modeling of program behavior

Special Feature: Benchmark Workshop

Authors are invited to submit C or C++ code and inputs to this code for possible inclusion in a benchmark set that IISWC is making available to researchers. A paper must also be submitted explaining the benchmark and its relevance to its user community. Papers accompanying selected benchmarks will be presented at a special workshop to be held during the conference.

<http://www.iiswc.org/>