



CALL FOR PAPERS

IISWC 2007



The Annual IEEE International Symposium on Workload Characterization

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

September 27-29 2007, Boston MA.

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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, wireless and embedded systems 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. Workload issues impacting the performance, power, reliability and security issues when functioning in a networked environment, whether they are in an embedded setting or in a datacenter, are also welcome. Topics of interest include (but are not limited to):

- Characterization of applications in areas like
 - Search engines, E-commerce, Web server, Database and Multi-tier
 - Embedded, Mobile, Multimedia, 3D-Graphics, Gaming, Telepresence
 - Life Sciences, Bio-Informatics, Scientific computing
 - Security, Reliability, Biometrics
- Characterization of OS, Virtual Machine, middleware and library behavior
 - VMs, 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
 - Failures, availability and reliability
- Implications of workload in design issues, such as
 - Processors, memory hierarchy, I/O and Networks
 - Hardware accelerators (GPGPU, XML, crypto, etc)
 - Power management, reliability, security
- Benchmark creation issues, including
 - Multithreaded benchmarks
 - Profiling, trace collection, synthetic traces
 - Validation of benchmarks
- Abstract modeling of program behavior

Submissions need to be in two-column IEEE Proceedings format with a 10-page limit including figures, references, etc. Format guidelines and submission details can be obtained from the Web site. The text font sizes should be no smaller than 10pt with single spacing. Submissions need to be in PDF format and readable using Adobe Acrobat Reader. Accepted papers will be published as an IEEE Proceedings. Submissions must be **blind**.

Important Dates

Abstract submission: March 19, 2007
Paper submission: March 26, 2007
Notification: May 28, 2007

Paper submission details can be found at <http://www.iiswc.org/>