MoBS 2005 Call For Papers

Workshop on Modeling, Benchmarking, and Simulation

http://www.arctic.umn.edu/MoBS

MoBS 2005

Held in conjunction with the 32nd Annual International Symposium on Computer Architecture	**Madison, WI** **June 4, 2005**

Organizers and Chairs:
Lieven Eeckhout, *Ghent University*
Joshua J. Yi, *Freescale Semiconductor*

Program Committee:
David I. August, *Princeton University*
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Peter S. Magnusson, *Virtutech*
Jim Smith, *University of Wisconsin at Madison*

Overview:
With few exceptions, simulation is the quantitative foundation for virtually all computer architecture research and design projects – from microarchitectural exploration to hardware and software trade-offs to processor and system design. However, its continued efficacy is limited by problems such as increasing complexity, additional critical constraints (*e.g.* power consumption, reliability, *etc.*), an ever expanding design space, benchmark suite quality and coverage, and radical changes in processor architectures to compensate for technological changes (*i.e.* reduced transistor widths, *etc.*).

The primary goals of this workshop are to accelerate the development of simulation technologies that are necessary to support the research of future generation architectures – in particular, processors built with nanotechnology – and to encourage the advancement of "under-researched" areas related to computer architecture measurement, such as modeling; benchmark implementation and benchmark suite construction; and formal methods of design space exploration and performance analysis.

Topics of interest include, but are not limited to:

- New or efficient techniques to model performance, power, reliability, *etc.*
- Additional alternatives to cycle-accurate, execution-driven simulation
- Reduced simulation time techniques
- Development of parameterizable, flexible benchmarks
- Formal methods for benchmark suite construction or benchmark suite sub-setting
- Techniques to measure the characteristics (dissimilarity, coverage, etc.) of a benchmark suite
- Efficient processor modeling techniques
- Simulation alternatives and performance estimation
- Analytical and statistical models

Submission Guidelines:
The authors should submit a 200 word or less abstract by 11:59 PM (CST) March 28, 2005. The full paper should be 5000 words or less and be submitted in pdf format by 11:59 PM (CDT) April 4, 2005. See workshop website for submission instructions. Papers that are excessively long may be rejected without review.

Important Dates:

Abstract Submission:	**March 28, 2005**
Full Paper Submission:	**April 4, 2005**
Notification Date:	**May 4, 2005**
Final Version Due:	**May 18, 2005**
Workshop Date:	**June 4, 2005**