



MoBS 2009 Call For Papers

Workshop on Modeling, Benchmarking, and Simulation

<http://www-mount.ece.umn.edu/~jjyi/MoBS>

Held in conjunction with the
36th Annual International Symposium on Computer Architecture

Austin, Texas
June 21, 2009

Organizers and Chairs

Lieven Eeckhout, *Ghent University*
Thomas Wenisch, *University of Michigan*
Joshua J. Yi, *Freescale Semiconductor*

Program Committee:

Alaa Alameldeen, *Intel*
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Benjamin Lee, *Microsoft*
Charles Lefurgy, *IBM Research*
Margaret Martonosi, *Princeton University*
David Penry, *Brigham Young University*
Suzanne Rivoire, *Sonoma State University*

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 the need to model or compensate for problems such as increasing complexity (*e.g.*, multiple cores and peripherals), additional critical constraints (*e.g.*, power consumption, reliability, *etc.*), an ever-expanding design space (*e.g.*, chip, system, and data center scale modeling), and benchmark suite quality and coverage.

Accordingly, the goals of this workshop are to accelerate the development of technologies that are necessary to support the research of future generation

architectures and to encourage the advancement of “under-researched” areas in computer architecture measurement. Accordingly, this workshop places a special premium on novelty and on preliminary work. Topics of interest include, but are not limited to:

- System-level architecture modeling and measurement
- Data center level modeling and measurement
- Performance/energy/temperature/reliability measurement and analysis tools
- New or efficient techniques to model performance, power, temperature, reliability, *etc.*
- Simulation methodologies for multi-core and many-core architectures
- Development of parameterizable, flexible benchmarks
- New benchmark suites for emerging application areas
- Analytical and statistical modeling
- Performance/energy/temperature/reliability measurement and analysis tools

The *special emphasis* of MoBS-5 will be on system level architecture, data center level issues, enterprise-scale benchmarks, and tools – submissions in this area will be especially encouraged.

Submission Guidelines:

The full paper should be no more than 10 pages in a double-column format and be submitted in pdf format by April 24, 2009. Papers should be submitted to Lieven Eeckhout (leeckhou@elis.ugent.be) via e-mail.

Important Dates:

Paper Submission:	April 24, 2009
Notification Date:	May 13, 2009
Final Version Due:	June 1, 2009
Workshop Date:	June 21, 2009