



MoBS 2007 Call For Papers and Tools

Workshop on Modeling, Benchmarking, and Simulation

<http://www.arctic.umn.edu/~jjyi/MoBS>

Held in conjunction with the
34th Annual International Symposium on Computer Architecture

San Diego, California
June 10, 2007

Organizers and Chairs:

Lieven Eeckhout, *Ghent University*
Joshua J. Yi, *Freescale Semiconductor*

Program Committee:

David Brooks, *Harvard University*
Derek Chiou, *UT-Austin*
Joel Emer, *Intel*
Babak Falsafi, *Carnegie Mellon University*
Russ Joseph, *Northwestern University*
Tejas Karkhanis, *AMD*
Sally McKee, *Cornell University*
Harish Patil, *Intel*
Steve Reinhardt, *Reservoir Labs / U of Michigan*

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), additional critical design constraints (e.g., power consumption, reliability, etc.), an ever expanding design space, 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 and development of future generation architectures and to encourage the advancement of “under-researched” areas in computer architecture measurement. Consequently, this workshop places a special premium on novelty and on preliminary work. Topics of interest include, but are not limited to:

- Performance/energy/temperature measurement and analysis tools
- New or efficient techniques to model performance, power, temperature, reliability, etc.
- Simulation methodologies for multi-core architectures
- Development of parameterizable, flexible benchmarks
- Efficient processor modeling techniques
- Alternatives to cycle-accurate, execution-driven simulation
- Statistically-rigorous performance analysis techniques
- Analytical and statistical modeling

Special session on Measurement and Performance Analysis Tools

This workshop will feature a special session on measurement and performance analysis tools. All submissions to this session must include a paper describing the tool, examples of how the tool could be used, and its source code. Submissions will be judged based on their novelty and ease of installation/use. The presentations for accepted submissions will consist of an overview of the tool (15 minutes) followed by a demonstration of its capabilities (15 minutes). Open-source versions of all tools will be released before or by the end of the workshop.

Submission Guidelines:

The authors should submit a 200 word or less abstract by 11:59 PM April 11, 2007. The full paper should be 5000 words or less and be submitted in pdf format by 11:59 PM April 13, 2007. Both the abstract and the full paper can be submitted to Lieven Eeckhout (leeckhou@elis.ugent.be) through email. Papers can be submitted as a regular paper or tool. Excessively long papers may be rejected without review.

Important Dates:

Abstract Submission:	April 11, 2007
Full Paper Submission:	April 13, 2007
Notification Date:	May 8, 2007
Final Version Due:	May 18, 2007
Workshop Date:	June 10, 2007