

The 2006 ACM SIGPLAN Workshop on Memory Systems Performance & Correctness (MSPC 2006)



October 22, 2006 – San Jose, California, USA Co-located with ASPLOS XII

Call for Papers

www.cs.purdue.edu/MSPC06

Overview MSPC focuses on improving the memory system performance and correctness of general-purpose programs. MSPC continues the successful series of MSP workshops held in 2002 (Berlin), 2004 (Washington, DC), and 2005 (Chicago). This multi-disciplinary workshop fosters collaboration among researchers in a range of fields including *compilers*, *memory management*, *programming languages*, *architecture*, *operating systems*, *performance evaluation*, and *database systems*. We solicit papers on all aspects of memory system performance and correctness. Areas of interest include but are not limited to the following topics:

- Analysis of memory systems performance (including power, bandwidth, and latency)
- Static and dynamic techniques for understanding and improving memory performance
- Hardware and software techniques for ensuring memory safety and detecting memory-related bugs (e.g., memory leaks, dangling pointers, out-of-bounds memory accesses, invalid C pointer arithmetic)
- Hardware memory models and their impact on software
- Specifications of programming language (and library) shared memory semantics
- Better shared-memory programming models (e.g., transactional memory)
- Data race detection and debugging of programs with (possibly intentional) data races
- Managed memory and garbage collection optimizations
- Memory hierarchy design for chip multiprocessors (CMPs)
- Pre-fetching and compression to improve memory system performance
- Code, data, or page placement to eliminate page faults and cache misses
- Memory system issues in embedded computers and tiny devices
- Impact of new storage technologies

Software, hardware, and hybrid approaches are encouraged. In addition, we solicit papers from practitioners describing problems and experiences with memory performance and correctness in specific application domains.

Submission Guidelines Full paper submissions should not exceed 10 pages in standard ACM SIGPLAN conference format. Papers should be submitted electronically through the workshop web site (www.cs.purdue.edu/MSPC06). Copies of accepted papers will be made available at the workshop and published in the ACM digital library. Submitted papers must not be simultaneously under review for any other conference or journal, and authors should point out any substantial overlap with their previously published or currently submitted work.

Key Information

Abstract due: Monday July 24, 2006

• Paper submissions due: Friday July 28, 2006, at 11:59:59 PM Eastern time (firm deadline)

Notification: September 8, 2006Final paper: September 22, 2006

Workshop Web Site: www.cs.purdue.edu/MSPC06

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