

TRANSACT 2012 7th Workshop on Transactional Computing February 26, 2012 New Orleans, LA, USA (co-located with PPoPP 2012)

Call for Papers

The past decade has seen an explosion of interest in programming languages, systems, and hardware to support transactions, speculation, and related alternatives to classical lock-based concurrency. In the last year alone, significant progress has been made toward integrating transactional memory support into mainstream programming languages, like C++ and Scala, and hardware transactional memory support has been announced for a next-generation microprocessor.

This workshop, the seventh in its series, will provide a forum for the presentation of research on all aspects of transactional computing. The scope of the workshop is intentionally broad, with the goal of encouraging interaction across the languages, architecture, systems, database, and theory communities. Papers may address implementation techniques, foundational results, applications and workloads, or experience with working systems. Environments of interest include the full range from multithreaded or multicore processors to high-end parallel computing.

Topics

The workshop seeks papers on topics related to all areas of software and hardware for transactional computing. Specific topics of interest include but are not limited to:

- · Run-time systems
- Hardware support
- Memory models
- Language mechanisms and semantics
- Formal verification
- Speculative concurrency
- · Conflict detection and contention management
- Debugging and tools
- · Static analysis and compiler optimizations
- · Checkpointing and failure atomicity
- Persistence and I/O
- · Nesting and exceptions
- · Applications, workloads, and test suites
- · Experience reports

Papers should present original research. As transactional memory spans many disciplines, papers should provide sufficient background material to make them accessible to the broader community. Papers focused on foundations should indicate how the work can be used to advance practice; papers on experiences and applications should indicate how the experiments reinforce or reflect principles.

Submissions

Papers must be submitted in PDF, and be no more than 7 pages in standard two-column <u>SIGPLAN conference</u> <u>format</u>, excluding bibliography (but including all figures, appendices, etc.). Submissions must be made through the on-line submission site. Final papers will be available to participants electronically at the meeting, but to facilitate resubmission to more formal venues, no archival proceedings will be published, and papers will not be sent to the ACM Digital Library.

Authors will have the option of having their final paper accessible from the workshop website. Authors must be familiar with and abide by <u>SIGPLAN's republication policy</u>, which forbids simultaneous submission to multiple venues and requires disclosing prior publication of closely related work.

At the discretion of the program committee and with the consent of the authors, particularly worthy papers may be recommended for a special journal issue.

Important Dates

Submission Deadline December 1, 2011 Author Notification: January 20, 2012 Final Copy Due: February 12, 2012 Workshop: February 26, 2012

Program Chair

Michael Spear, Lehigh Univ.

Program Committee

(TBD)

Steering Committee

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