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SIGPLAN

TRANSACT:

First ACM SIGPLAN Workshop on Languages, Compilers, and Hardware Support for Transactional Computing

PLDI 2006

Ottawa, Canada, June 11, 2006

::Motivation::

The goal of this workshop is to provide a forum for the presentation of research on all aspects of transactional computing. There has been much recent interest on extending programming languages, systems, and hardware with support for transactions, speculation, and related abstractions that provide alternatives to classical lock-based concurrency mechanisms. The goals of this workshop should be construed broadly to include any novel software or hardware techniques, algorithms, or implementations for transactional concurrency abstractions applicable to multi-core, multithreaded, or high- performance parallel systems. This workshop is intended to cover foundations of concurrent programming as it relates to all forms of transactional computing, as well as tools, techniques, and applications that leverage these principles. Experience reports are also welcome.

::Goal::

The workshop seeks papers on topics related to all areas of software and hardware for new concurrency abstractions, models, and implementations. Topics of interest include (but are not limited to):

- Transactional Memory
- Hardware support
- Atomicity
- Non-blocking algorithms
- Memory models
- Checkpointing
- Debugging
- Semantics and verification
- Static analysis and Compiler optimizations
- Runtime implementations
- Persistence and I/O
- Speculative concurrency
- Applications

Papers should present original research relevant to any of these areas of concurrent programming and should provide sufficient background material to make them accessible to the broader community. Papers focussed on foundations should indicate how the work can be used to advance practice; papers on experiences and applications should indicate how the experiments reinforce principles.

::Important dates::

Submissions due: March 1.
Notification: April 15.
Final version : May 15.

::Paper submission::

Papers must be submitted in Postscript or PDF format. Hard copies of all research presentations and position papers will be distributed at the meeting. The conference web page will make available all slides from presentations given by the attendees, but the conference web page will not host papers. This is to ensure that the workshop is correctly understood to be an informal workshop, and that presentation of research at the workshop is not considered a barrier to republication of that research in conferences. Papers should be clearly labeled as either:

1. Research papers: These papers present new results which have not appeared and are not under submission elsewhere. These papers should not exceed 10 pages in ACM double column format.
2. Position/Experience papers: Short papers (<5 pages in ACM format).

A special journal issue is being considered with a selection of the best research papers.

::Organizers::

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::Related Events::

Workshop on Transactional Memory Workloads