DAMP 2009: Workshop on Declarative Aspects of Multicore Programming

Savannah, Georgia, USA — January 20, 2009

http://www.cse.unsw.edu.au/~pls/damp09/

DAMP 2009 is the fourth in a series of one-day workshops seeking to explore ideas in programming language design that will greatly simplify programming for multicore architectures, and more generally for tightly coupled parallel architectures. DAMP 2009 is co-located with the ACM SIGPLAN - SIGACT Symposium on Principles of Programming Languages (POPL 2009).

Scope

The emphasis will be on functional and (constraint-)logic programming, but any programming language ideas that aim to raise the level of abstraction are welcome. DAMP seeks to gather together researchers in declarative approaches to parallel programming and to foster cross fertilization across different approaches. Topics of interest include, but are not limited to, the following:

- suitability of functional and (constraint-)logic programming languages to multicore applications;
- run-time issues such as garbage collection or thread scheduling;
- architectural features that may enhance the parallel performance of declarative languages;
- type systems and analysis for accurately knowing or limiting dependencies, aliasing, effects, and nonpure features;
- ways of specifying or hinting at parallelism;
- ways of specifying or hinting at data placement which abstract away from any details of the machine;
- compiler techniques, automatic parallelization, automatic granularity control;
- experiences of and challenges arising from making declarative programming practical;
- technology for debugging parallel programs; and design and implementation of domain-specific declarative languages for multi-core.

Accepted papers will be published in the ACM Digital Library and must adhere to the SIGPLAN Republication Policy. Concurrent submissions to other conferences, workshops, journals, or similar forums of publication are not allowed. However, publication of a paper at DAMP 2009 is not intended to preclude later publication.

Submission Details

Deadline for abstracts: October 10, 2008
Deadline for full papers: October 14, 2008
Notification of acceptance: November 10, 2008
Final papers due: November 17, 2008
DAMP 2009: January 20, 2009

Authors should submit an abstract of at most 300 words and a full paper of no more than 10 pages (including bibliography and appendices) in the ACM SIGPLAN conference format. Further details are on the workshop web page.

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