Seventh Annual IEEE/ACM INTERNATIONAL SYMPOSIUM ON CODE GENERATION AND OPTIMIZATION (CGO-7)

March 22-25, 2009, Seattle, Washington

CALL FOR PAPERS

The International Symposium on Code Generation and Optimization (CGO) provides a premier venue to bring together researchers and practitioners working on feedback-directed optimization and back-end compilation techniques. The conference covers optimization for parallelism, performance, power, and security, where that optimization occurs in the mapping from an input (including APIs, high-level languages, byte codes such as .NET or Java, or ISAs) to a similar or lower-level target machine representation.

Papers are solicited in areas that support such mapping and optimization:

- Compilers, back-end code generators, translators, binary optimization tools and runtime environments; static, dynamic, adaptive, or continuous techniques
- Innovative analysis, transformation, and optimization techniques
- Profiling and feedback-directed methodologies
- Memory management, including data distribution, synchronization and GC
- Thread extraction and thread-level speculation, especially for multi-core systems
- Vertical integration of language features, representations, optimizations, and runtime support for parallelism (including support for transactional semantics, efficient message passing, and dynamic thread creation)
- Phase detection and analysis techniques
- Mechanisms and optimization techniques supporting the efficient implementation of security protection models, reliability and energy efficiency
- Traditional compiler optimizations
- Intermediate representations that enable more powerful or efficient optimization
- Hardware mechanisms and systems that implement or assist in any of the above
- Experiences with real dynamic optimization and compilation systems, particularly with large, complex applications
- Explorations of trade-offs concerning when (static/dynamic) and where (software/hardware) to optimize
- Particularly novel ideas of interest to this community

IMPORTANT DATES:
Abstract deadline is September 12, 2008, papers are due September 19, 2008, 11:59PM EDT. There will be no exceptions. Contact Manish Vachharajani (manishv@colorado.edu) to submit a Workshop or Tutorial proposal by November 18, 2008.

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