Fifth Annual IEEE/ACM INTERNATIONAL SYMPOSIUM ON CODE GENERATION and OPTIMIZATION (CGO-5)

March 11-14, 2007 – San Jose, California

PRELIMINARY CALL FOR PAPERS

Co-sponsored by IEEE Computer Society TC-uARCH and ACM SIGMICRO

In cooperation with ACM SIGPLAN

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

SUBMISSION DEADLINE: Friday Sept. 8, 2006 at 6pm EDT.

There is an automatic extension to Sept. 15th, 2006 at 6pm EDT. There will be no other extensions. Submit one electronic copy of your 6000-word paper in PDF format. Please visit the website for paper format guidelines and submission instructions. Notification of acceptance will occur by November 8th.

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