
April 2-6, 2011, Chamonix, France

CALL FOR PAPERS

The International Symposium on Code Generation and Optimization (CGO) brings together researchers and practitioners working on bridging the gap between software abstraction and hardware execution. The conference spans the spectrum from purely static to fully dynamic approaches, and from pure software-based methods to architectural features and support.

Original contributions are solicited in areas including but not limited to the following:

**Code Generation and Optimization**
- Techniques for efficient execution of dynamically typed languages
- Techniques for developing or targeting custom or special-purpose targets
- Code generation for emerging programming models
- Code transformations for energy efficiency
- New or improved optimization algorithms, including profile-guided and feedback-directed optimization
- Techniques for measuring and tuning optimization effectiveness
- Intermediate representations enabling more powerful or efficient optimization

**Parallelism**
- Language features and runtime support for parallelism
- Transformations for heterogeneous or specialized parallel targets, e.g. GPUs
- Data distribution and synchronization
- Virtualization support for multicore and/or heterogeneous computing
- Thread extraction and thread level speculation

**Static and Dynamic Analysis**
- Profiling and instrumentation for power, memory, throughput or latency
- Phase detection and analysis techniques
- Efficient profiling and instrumentation techniques
- Program characterization methods targeted at program optimization
- Profile-guided optimization and re-optimization

**OS, Architecture and Runtime support**
- Architectural support for improved profiling, optimization and code generation
- Integrated system design (HW/OS/VM/SW) for improved code generation, including custom or special-purpose processors
- Memory management and garbage collection

**Security and Reliability**
- Code analysis and transformations to address security or reliability concerns

**Practical Experience**
- Real dynamic optimization and compilation systems for general purpose, embedded system and HPC platforms

**Important Dates**
- **Abstract Submission:** September 15, 2010
- **Paper Submission:** September 22, 2010
- **Acceptance Notification:** November 10, 2010