IEEE/ACM International Symposium on Code Generation and Optimization

Call for Posters

Barcelona, Spain
March 12-16, 2016
http://cgo.org/cgo2016/

The International Symposium on Code Generation and Optimization (CGO) provides a premier venue to bring together researchers and practitioners working at the interface of hardware and software on a wide range of optimization and code generation techniques and related issues. The conference spans the spectrum from purely static to fully dynamic approaches, and from pure software-based methods to specific architectural features and support for code generation and optimization.

As in previous years, CGO will host a dedicated poster session. Poster submissions in the form of an extended abstract (details below) are solicited in any topics relevant to the main conference, including:

- Code Generation, Translation, Transformation, and Optimization
  - For performance, energy, virtualization, portability, security, or reliability concerns, and architectural support.
  - Efficient execution of dynamically typed and higher-level languages
  - Optimization and code generation for emerging programming models, platforms, domain-specific languages
  - Dynamic/static, profile-guided, feedback-directed, and machine learning based optimization,
- Static, Dynamic, and Hybrid Analysis
  - For performance, energy, memory locality, throughput or latency, security, reliability, or functional debugging.
  - Program characterization methods.
  - Efficient profiling and instrumentation techniques; architectural support.
  - Novel and efficient tools.
- Compiler design, practice and experience
  - Compiler abstraction and intermediate representations.
  - Vertical integration of language features, representations, optimizations, and runtime support for parallelism.
  - Solutions that involve cross-layer (HW/OS/VM/SW) design and integration.
  - Deployed dynamic/static compiler and runtime systems for general purpose, embedded system and Cloud/HPC platforms.
- Parallelism, heterogeneity, and reconfigurable architectures
  - Optimizations for heterogeneous or specialized targets, GPUs, SoCs, CGRA.
  - Compiler-support for vectorization, thread extraction, task scheduling, speculation, transaction, memory management, data distribution and synchronization.

Submission Information

Extended abstracts of up to 200 words should be submitted by email to florian.brandner@telecom-paristech.fr before **December 15, 2015**. All submissions will be reviewed by a selection committee. Notifications will be sent out by **December 20, 2015**. Selected poster submissions will have their abstract included in the CGO 2016 proceedings.

ACM Student Research Competition

Poster submissions can also participate in the ACM Student Research Competition (SRC). Participants must be undergraduates or graduate students pursuing an academic degree at the time of initial submission. Participants must be current student members of the ACM. Similar to regular poster submissions, the abstract will be examined by a selection committee.

SRC poster submissions are, in addition, evaluated by a jury during the poster session at the conference. The best three posters are then invited to give a short presentation (10 minutes + 5 minutes questions) on the next day. Based on the submitted abstract, the poster, and the presentation, the winner of CGO's Student Research Competition will be selected, who will receive an award.

Further information on the ACM SRC is available at: http://src.acm.org/

Important Dates

- Submission..**December 15, 2015**
- Notification...December 20, 2015
- Poster session..March 13, 2016
- Best student poster presentations (SRC) ....March 14, 2016
- ACM SRC Award (SRC).....................................March 16, 2016

Selection Committee

Florian Brandner (**Chair**, Telecom ParisTech)

Mary Lou Soffa (University of Virginia)

Mila Dalla Preda (University of Verona)

Alexandra Jimborean (Uppsala University)

Tipp Moseley (Google)

Laure Gonnord (University of Lyon)