



CALL FOR PAPERS

HiPEAC 2015 10th International Conference on High-Performance Embedded Architectures and Compilers

January 19-21, 2015
Amsterdam, The Netherlands
<http://www.hipeac.net/conference>

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The HiPEAC conference is the premier European forum for experts in computer architecture, programming models, compilers and operating systems for embedded and general-purpose systems.

The 10th HiPEAC conference will take place in Amsterdam, The Netherlands from Monday, January 19 to Wednesday, January 21, 2015. Associated workshops, tutorials, special sessions, several large poster session and an industrial exhibition will run in parallel with the conference. The three day event attracts about 500 delegates each year.

Paper selection is done by ACM TACO, the ACM Transactions on Architecture and Code Optimization. Prospective authors submit their original papers to ACM TACO at any time before the paper deadline of **June 1, 2014** to benefit from two rounds of reviews before the conference paper track cut-off date which is November 15, 2014.

See reverse side for detailed information about the new publication model called ACM TACO 2.0.

Topics of interest include, but are not limited to:

- Processor, memory, and storage systems architecture
- Parallel, multi-core and heterogeneous systems
- Interconnection networks
- Architectural support for programming productivity
- Power, performance and implementation efficient designs
- Reliability and real-time support in processors, compilers and run-time systems
- Application-specific processors, accelerators and reconfigurable processors
- Architecture and programming environments for GPU-based computing
- Simulation and methodology
- Architectural and run-time support for programming languages
- Programming models, frameworks and environments for exploiting parallelism
- Compiler techniques
- Feedback-directed optimization
- Program characterization and analysis techniques
- Dynamic compilation, adaptive execution, and continuous profiling/optimization
- Binary translation/optimization
- Code size/memory footprint optimizations

Conference organized by



Paper selection organized by ACM TACO





Call for contributions to ACM TACO 2.0

Do you know ACM TACO 2.0?

Over the last three years ACM TACO has optimized its internal review processes. Today, the average turnaround time from submission to first response is 46 days and 95% of the manuscripts get a response within 2 months. For revised manuscripts, the review process goes even faster. In 2013, most accepted manuscripts went through two rounds of reviews to reach a final decision only 5 months after submission. Accepted manuscripts are immediately uploaded in the ACM digital library. Hence, excellent manuscripts can make it from submission to publication in about three months; papers needing a major revision are published after 6 months. We call this "ACM TACO 2.0"

ACM TACO 2.0 now has a review cycle and an acceptance rate which is competitive with the best ACM conferences, but without the inconvenient non-negotiable submission deadlines, and with the advantage of being able to revise a paper based on the detailed review reports by carefully selected reviewers, and of being published as soon as it is accepted. On top of that, authors of original work papers get an open invitation to present their paper at the yearly HiPEAC conference, which is the premier European network event on topics central to ACM TACO, attended by more than 500 scientists.

For the 2014 ACM TACO 2.0 issues, we are calling for high-quality manuscripts on topics included, but not limited to:

- Computer system architectures and processor architectures, including multiprocessors and multithreaded computers
- Interaction of operating systems, compilers, programming languages, and architecture
- Feedback-Directed Software/Hardware Optimization

- Dynamic compilation, adaptive execution, and continuous profiling/optimization.
- Virtual machine, binary translation hardware, and software optimizations
- Compiler optimizations that exploit instruction level parallelism, such as software pipelining, global scheduling, register allocation, and memory disambiguation
- Advanced software and hardware speculation, prediction, and predication techniques.
- High-performance microarchitecture innovation (e.g., VLIW, superscalar, multithreaded, etc.)
- Architectures and compilers for embedded processors, application specific processors and DSPs, including network and router architectures
- Memory system optimization
- Parallel processing
- Architecture or compiler-based power and energy optimization
- Application characterization and architectural implications
- Performance evaluation and measurement of real systems
- Papers of interest to the SIGMICRO, SIGARCH, and SIGPLAN community

There is no deadline but manuscripts are processed on a first-come-first-served basis. Submit your best work via:

<http://mc.manuscriptcentral.com/taco>

as soon as it is ready to go. We will work hard to get back to you in 2 months with your reviews.

Prof. Koen De Bosschere
ACM TACO interim Editor-in-Chief

Prof. Per Stenström
ACM TACO Senior Editor