

Call for Papers



**ACM SIGPLAN/SIGBED
Conference on
Languages, Compilers, and Tools
for Embedded Systems (LCTES'04)
Washington, DC, June 11-13, 2004
(in conjunction with PLDI'04)**



<http://www.acm.org/sigplan/lctes.htm>

Important Dates

- papers due: February 6, 2004 at UTC 23:00 (5 PM Central time), strict deadline
- author notification: March 15, 2004
- final papers due: April 5, 2004

Description

As the complexity of the application domains for the embedded systems increases, new research challenges are encountered for achieving desired performance goals, such as speed, real time constraints, code size, power, and scalability. Due to limited resources locally available, embedded systems are increasingly used in networked (wired, wireless, as well as mobile) environments. In addition, advances in hardware motivate the use of a combination of hardware and software techniques. The aim of LCTES is to provide a forum for discussing the latest research related to the above trends and to allow researchers and developers working on different aspects to get together and interact. Original submissions are invited in all areas relevant to this theme. Appropriate topics include, but are not limited to the following aspects of embedded systems:

- Program optimization for real-time performance and DSPs
- Compilation for hardware/software co-design
- Compilers for reconfigurable architectures
- Optimization for low-power architectures
- Exploitation of memory hierarchies
- Memory management/garbage collection for embedded systems
- Programming languages for embedded applications
- Real-time and embedded Java, real-time UML
- Object-oriented modeling and design
- Design, specification, analysis of embedded systems
- Software Synthesis
- Validation and verification techniques for embedded software
- Embedded system integration and testing
- Standardization for embedded systems
- Real-time operating systems: environment and tools
- Real-time scheduling analysis
- Exception and interrupt handling for real-time
- Software design for multiprocessor embedded systems
- Concurrent+distributed embedded environments/runtime systems
- Timing analysis: static and dynamic approaches
- Timing predictability of modern architectures
- Support for partitioning, mapping, and compression
- Profiling, measurement, debugging of embedded applications

Submitting Papers

Papers should report new, previously unpublished research and should not exceed 5000 words (approximately 10 pages typeset on 16-point spacing), **including figures and references**. All accepted papers will be presented at the workshop and published in the proceedings as well as the ACM Digital Library.

Electronic submissions must be received by **UTC 23:00 (5:00 PM Central Time), February 6, 2004**. Detailed submission procedures and updates on the submission date will be announced on the conference web page: <http://lctes04.flux.utah.edu>.

General Chair

David Whalley
Florida State University
Department of Computer Science
Tallahassee, FL 32306-4530 (USA)
phone: (+1) (850) 644-3506, fax: -0058
whalley@cs.fsu.edu

Program Chair

Ron Cytron
Washington University Box 1045
Department of Computer Science
St. Louis, MO 63130
phone: (+1) (314) 935-7527, fax: -7302
cytron@cs.wustl.edu

Program Committee

- Marcel Becker, Kestrel Institute, USA
- Morris Chang, Iowa State University, USA
- Perry Cheng, IBM T.J. Watson Research Center, USA
- Trishul Chilimbi, Microsoft Research, USA
- Bruce Childers, University of Pittsburgh, USA
- Alex Dean, North Carolina State University, USA
- Koen De Bosschere, Ghent University, Belgium
- Michael Franz, University of California Irvine, USA
- Kyle Gallivan, Florida State University, USA
- Rajiv Gupta, University of Arizona, USA
- Mary Jane Irwin, Pennsylvania State University, USA
- Daniel Kaestner, AbsInt, Germany
- Chandra Krintz, University of California Santa Barbara, USA
- E. Christopher Lewis, University of Pennsylvania, USA
- Peter Marwedel, University of Dortmund, Germany
- Al Mok, University of Texas Austin, USA
- Yunheung Paek, Seoul National University, Korea
- Barry Pangrle, Synopsis, USA
- Isabelle Puaut, IRISA, France
- Karen Tomko, University of Cincinnati, USA
- Youtao Zhang, University of Texas Dallas, USA