



LCTES 2006



Call For Papers ACM SIGPLAN/SIGBED Conference on Languages, Compilers, and Tools for Embedded Systems

(in conjunction with PLDI'06)

Ottawa, June 14-16, 2006

Sponsored by ACM SIGPLAN and ACM SIGBED

<http://www.elis.ugent.be/lctes2006>

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As the complexity of embedded systems increases, new research challenges are encountered for achieving the desired performance goals, such as speed, timing constraints, size, energy, power, time to market, reliability, security, and scalability. Furthermore, embedded systems are increasingly used in networked (wired, wireless, as well as mobile) environments and advances in hardware motivate the use of a combination of hardware and software techniques to build them. 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.

Topics of interest. Papers are solicited on, but not limited to, the following aspects of embedded systems design.

- ◆ Programming languages for embedded systems
- ◆ Operating system kernels for embedded systems
- ◆ Analysis, specification and design of embedded systems
- ◆ Validation and verification techniques for embedded systems
- ◆ Profiling and debugging of embedded systems
- ◆ Embedded system integration and testing
- ◆ Embedded computer architecture
- ◆ Development environments and tools for embedded systems
- ◆ Standardization for embedded systems
- ◆ Reliability and security for embedded systems
- ◆ Compilers for reconfigurable architectures, and for hardware/software co-design
- ◆ Optimizations for low power, for low energy, for code and data size reduction
- ◆ Optimizations for (real-time) performance
- ◆ Exploitation of memory hierarchies, memory management/garbage collection for embedded systems
- ◆ Timing analysis, timing predictability, and real-time scheduling analysis
- ◆ Exception and interrupt handling for real-time systems
- ◆ Real-time and embedded Java, real-time UML

Submission. Prospective authors must submit papers electronically via the conference web site. Papers must be formatted according to the ACM proceedings format and should be no longer than 10 pages in this format. Templates for ACM format are available for Word Perfect, Microsoft Word and Latex and are located at <http://www.acm.org/sigs/pubs/proceed/template.html>.

Submissions should be in PDF and printable on US Letter and A4 sized paper. Authors of accepted papers must sign a copyright release form. The best papers may be considered for publication in ACM TECS as extended versions.

Papers must describe unpublished work. The program chair will automatically reject papers that exceed the length requirement, that are submitted late, that are found to have been previously published, or that are currently in submission elsewhere.

Evaluation. The program committee will evaluate the technical contribution of each submission as well as its general accessibility to the LCTES audience. Papers will be judged on significance, originality, relevance, correctness, and clarity. The paper must be organized so that it is easily understood by an audience with varied expertise. The paper should clearly identify what has been accomplished, why it is significant to embedded systems design, and how it compares with previous work.

Important dates

- ◆ Submission deadline: February 4, 2006
- ◆ Author notification: April 2, 2006
- ◆ Camera ready deadline: April 21, 2006