CALL FOR PAPERS

ACM Transactions on Embedded Computing Systems
Special Issue on Languages Compilers Tools and Theory of Embedded Systems

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Topic Summary
The ACM SIGPLAN/SIGBED Conference on Languages, Compilers, Tools and Theory for Embedded Systems (LCTES 2019) was held on June 23, 2019 in Phoenix, AZ, USA. This special issue in the ACM Transactions on Embedded Computing Systems will consider peer-reviewed journal versions of top papers from LCTES 2019, as well as other papers received from the open call.

Embedded system design faces many challenges both with respect to functional requirements and nonfunctional requirements, many of which are conflicting. They are found in areas such as design and developer productivity, verification, validation, maintainability, and meeting performance goals and resource constraints. Novel design-time and run-time approaches are needed to meet the demand of emerging applications and to exploit new hardware paradigms.

This special issue solicits papers presenting original work on programming languages, compilers, tools, theory, and architectures that help in overcoming these challenges. Research papers on innovative techniques are welcome, as well as experience papers on insights obtained by experimenting with real-world systems and applications.

We solicit original papers on the following topics of interest related to LCTES:

- Programming languages
- Compilers
- Tools for analysis, specification, design, and implementation
- Theory and foundations of embedded systems
- Novel embedded architectures
- Mobile systems and IoT
- Security, privacy and trust in Internet of Things
- Industrial case studies on the above topics

Submissions Guidelines
Prospective authors are invited to submit their manuscripts electronically after the “open for submissions” date, adhering to the ACM Transactions on Embedded Computing Systems guidelines (tecs.acm.org/authors.cfm). Please submit your papers through the online system (mc.manuscriptcentral.com/tecs) and be sure to select the “SI:LCTES2019” option for the paper-type. Also, please indicate that you are submitting to the Special issue on LCTES 2019 in author’s cover letter. Manuscripts should not be published or currently submitted for publication elsewhere. Extended versions of conference papers (including LCTES 2019) are acceptable with at least 30% new content. Any questions on this special issue should be addressed to Aviral Shrivastava at Aviral.Shrivastava@asu.edu.

Important Dates (with Extended Deadline)
- Open for submissions in ScholarOne Manuscripts: August 25, 2019
- Closed for submissions: October 15, 2019 (Deadline Extended to November 15, 2019)
- Results of first round of reviews: January 01, 2020
- Submission of revised manuscripts: March 01, 2020
- Results of second round of reviews: May 01, 2020
- Publication materials due: August 15, 2020