IEEE Transactions on Computers Special Section on Computer Arithmetic

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Schedule:
- deadline for submissions: october 28, 2016
- first decision (accept/reject/revise): february 1, 2017
- submission of revised papers: march 15, 2017
- notification of final decision: may 29, 2017

Authors are invited to submit a manuscript to the special section on Computer Arithmetic.

Relevant topics include (but are not limited to):
1. Foundations of computer arithmetic: number systems, arithmetic algorithms and their analysis, elementary function algorithms (even papers of a theoretical nature must have clearly identified and realistic potential applications)...
2. Efficient, low-power and novel implementations of computer arithmetic: processors and units, elementary and special functions, multiple-precision, interval arithmetic...
3. Floating-point units and algorithms, properties of floating-point arithmetic
4. Standards, high-level language and compiler impact on arithmetic systems
5. Test, verification, formal proof, computer aided design (CAD) automation and fault/error-tolerance for computer arithmetic implementations
6. New arithmetic for FPGA's or configurable logic
7. New arithmetic for specific application domains such as cryptography, security, neural networks, deep learning, signal processing, computer graphics, multimedia, computer vision, distributed and parallel computing (e.g. HPC), finance...
8. Computer arithmetic for emerging technologies and non-conventional computer arithmetic

Submitted papers must include a new significant contribution to Computer Arithmetic (simple application of classical computer arithmetic methods to other domains will not be considered). The submitted papers must include clear evaluation of the proposed solutions (based on models and/or implementations results) and comparisons to state-of-the-art solutions. For additional information please send an email to specialissuetc@listes.ens-lyon.fr

Papers under review elsewhere are not acceptable for submission. Extended versions of published conference papers are welcome BUT there must be at least 40% of new technical/scientific material in the submitted manuscript. Guidelines concerning the submission process, LaTeX and Word templates can be found at https://www.computer.org/web/tc/author.

Submission deadline is sharp. While submitting through Scholarone, please select the option "Special Section on Computer Arithmetic". As per TC policies, only full length papers (9-14 pages, double column) can be submitted to special sections.