CALL FOR PAPERS
High Dependability Systems
IEEE Transactions on Emerging Topics in Computing
Special Issue/Section, Third Issue of 2017

IEEE Transaction on Emerging Topics in Computing (TETC) seeks original manuscripts for a Special Issue/Section on High Dependability Systems scheduled to appear in the third issue of 2017. The continuous scaling of microelectronic technology enables to increase system complexity and performance. This comes together with new dependability (i.e., reliability, availability, safety and security) challenges, as possible in general purpose electronics as well for applications demanding high dependability, such as automotive, space, transportation, etc. All aspects of fault modelling, reliability, availability, safety and security are of interest for this Special Issue/Section. Original manuscripts covering the entire spectrum of relevant research activities are sought; topics of interest for this special issue include, but are not limited to:

1. Fault and Variation Modeling: defect/fault models; parameter variation modelling; aging phenomena.
2. Error Detection and Recovery: duplication and comparison; self-checking circuits; error-detecting codes; fault masking and avoidance; recovery schemes, space/time redundancy; hardware/software techniques.
3. Repair and Reconfiguration: repairable logic; reconfigurable circuits.
5. Security: modelling; coding; crypto-analysis; hardware Trojans.
6. Dependable Design for Critical Applications: automotive; railway; avionics; industrial control; biomedicine; space.

Submitted articles must not have been previously published or currently submitted for journal publication elsewhere. An extended version of the article appearing in any conference proceedings can be submitted provided that it has substantially new content w.r.t. to the original conference version. The conference paper must be cited in the main text and the cover letter must clearly describe the differences with the conference version and clearly identify the new contributions.

As an author, you are responsible for understanding and adhering to our submission guidelines; you can access them at the IEEE Computer Society web site, www.computer.org. Please submit your paper to Manuscript Central at https://mc.manuscriptcentral.com/tetc-cs . Please note the following important dates:

- Submission Deadline: September 1, 2016
- Reviews Completed: November 15, 2016
- Major Revisions Due (if Needed): January 1, 2017
- Reviews of Revisions Completed (if Needed): February 1, 2017
- Minor Revisions Due (if Needed): March 1, 2017
- Notification of Final Acceptance: May 1, 2017
- Publication Materials for Final Manuscripts Due: June 1, 2017
- Publication date: Third Issue 2017 (Sept Issue)

Please address all other correspondence regarding this special Section to the Guest Editors.

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