Call for Abstracts

2018 ACM/IEEE Workshop on Variability Modeling and Characterization (VMC)

Co-located with the 37th ACM/IEEE ICCAD, November 8, 2018, San Diego, CA, USA

Background
Variability has emerged as a fundamental challenge to IC design in scaled CMOS technology; and it has profound impact on nearly all aspects of circuit performance. While some of the negative effects of variability can be handled via improvements in the manufacturing process, comprehensive methods are necessary to assess and manage the negative effects of variability, which in turn requires accurate and tractable variability models. The goal of the VMC workshop is to provide a forum for theoreticians and practitioners to freely exchange opinions on current practices as well as future research needs in variability modeling and characterization. In this year's edition of the VMC workshop, particular emphasis will be placed on the applications of machine-learning techniques to the variability topics listed below.

The workshop organizers strongly encourage the submission of *early* results in the related topics. The submissions will be promptly evaluated and the author(s) of the accepted submissions are expected to present the results in a poster format preceded by a brief introductory presentation at the workshop. Distribution of Workshop Proceedings is limited to attendees. Programs of previous workshops are archived at http://www.cerc.utexas.edu/utda/vmc/.

Topics
1. Fundamental physics of device variability
2. Compact variability modeling development and applications
3. Statistical extraction of variability
4. Variability test structure design and calibration
5. Design interface with manufacturing and solutions for variability
6. Variability issues in emerging semiconductor technology
7. Temporal variability issues
8. Reliability considerations that may be closely related to variability
9. Variability in computing and systems

Program Committee

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Submission

Maximum of 2 pages in US Letter or A4 format.
Submission site:

https://easychair.org/conferences/?conf=vmc2018

Submission Deadline: October 8, 2018

Notification: October 15, 2018

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