



## Fifth IEEE International Workshop on Automotive Reliability & Test

# ART Workshop

Virtual conference  
November 6, 2020

<http://ART.tttc-events.org>

### General Chair:

Y. Zorian – Synopsys (US)

### Program Chair:

P. Bernardi – Polito (IT)

### Publicity Chair:

R. Cantoro – Polito (IT)

### Program committee (not limited to)

M. Abdelwahid - *Mentor Graphics*  
D. Appello - *STMicroelectronics*  
O. Ballan - *Ethernovia*  
N. Bishnoi - *Globalfoundries*  
G. Boschi - *Intel*  
A. Bosio - *Lyon Inst. of Nanotechnol*  
A. Cron - *Synopsys*  
W. Dobbelaere - *On Semiconductor*  
P. Engelke - *Infineon Technologies A*  
K. Greb - *NVIDIA*  
A. Hales - *Texas Instruments*  
P. Harrod - *ARM Ltd*  
G. Harutyunyan - *Synopsys*  
T. McLaurin - *ARM*  
N. Mukherjee - *Mentor Graphics*  
R. Parekhji - *Texas Instruments*  
M. Portolan - *TIMA*  
A. Priore - *ARM*  
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O. Stan - *University of Cluj Napoca*  
C. Suresh - *TSMC*  
D. Tille - *Infineon Technologies*  
F. Venini - *Xilinx, US*  
H.M. von Staudt - *Dialog Semi*  
M. Wahl - *Universitat Siegen*  
J. Yi - *AMD*

## Call for Submissions

The ART workshop focuses exclusively on test and reliability of automotive and mission-critical electronics, including design, manufacturing, burn-in, system-level integration and in-field test, diagnosis and repair solutions, as well as architectures and methods for reliable and safe operations under different environmental conditions. With increasing system complexity, security, stringent runtime requirements for functional safety, and cost constraints of a mass market, the reliable operation of electronics in safety-critical domains is still a major challenge. This edition of the ART Workshop offers a forum to present and discuss these challenges and emerging solutions among researchers and practitioners alike.

ART will take place in conjunction with the IEEE International Test Conference (ITC) and is sponsored by the Test Technology Technical Council (TTTC) of IEEE Computer Society.

**Topic Areas** – You are invited to participate and submit your contributions to the ART Workshop. The workshop's areas of interest include (but are not limited to) the following topics:

- *Functional safety and security in the automotive domain*
- *Automotive standards and certification – ISO 26262*
- *Approximate computing and Artificial Intelligence*
- *Multi-layer dependability evaluation*
- *Verification and validation of automotive systems*
- *Fault tolerance and self-checking circuits*
- *Aging effects on automotive electronics*
- *Resiliency by application*
- *Dependability challenges of autonomous driving mobility*
- *Power-up, power-down and periodic test*
- *System level test*
- *Built-In Self-Test (BIST and SBST) in automotive systems*
- *Reuse of test infrastructure*
- *Functional and structural test generation*
- *High quality volume test and minimizing DPPM*
- *Life cycle test cost minimization*

**Submission Instructions** – The Workshop asks for the submission of **Extended Abstracts of maximum two pages**; camera ready version can be extended up to 4 pages. Detailed submission instructions can be found at the Workshop's website: <http://ART.tttc-events.org>. All submissions will be evaluated for selection with respect to their suitability for the workshop, originality, technical soundness, and presented results. Selected submissions can be accepted for regular or short presentation at the Workshop.

**Publications** – The workshop will make available to all participants an Electronic Workshop Digest, which includes all material that authors are willing to provide: abstract, paper, poster, etc. **The best contributions to ART 2020 will be invited to submit a full version to the ART special issue hosted by the Elsevier Microelectronic Reliability journal.**

**Key Dates**

- Submission deadline : **September 14, 2020**
- Notification of acceptance : **September 28, 2020**
- Camera-ready material : **October 20, 2020**

### Further Information

Yervant Zorian – *General Chair*  
Synopsys  
700 East Middlefield Road  
Mountain View, CA 94043-4033, USA  
Tel.: +1 (650) 584-7120

Paolo Bernardi – *Program Chair*  
Politecnico di Torino  
C.so Duca degli Abruzzi 24  
10129, Torino, Italy  
Tel.: +39 (011) 090 7183

