# Fourth IEEE International Workshop on
## Automotive Reliability & Test

# ART Workshop

**Washington, D.C., USA**
**November 14-15, 2019**

http://ART.tttc-events.org

**General Chair:**
**Y. Zorian – Synopsys (US)**

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**Publication Chair:**
**M. Restifo – Polito/Xilinx (IT/US)**

**Program committee (not limited to)**
| | |
|---|---|
| M. Abdelwahid | Mentor Graphics |
| R. Arnold | Infineon Technolog |
| N. Bishnoi | Globalfoundries |
| G. Boschi | Intel Corporation |
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| W. Dobbelaere | On Semiconductor |
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| R. Montino | Elmos Semi |
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| H.M. von Staudt | Dialog Semi |
| M. Wahl | Siegen U. |
| J. Yi | AMD |

# Call for Papers

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** – Submissions must be sent in as PDF file. The Workshop prefers Full Paper submissions (of up to six pages), but also allows Extended Abstract submissions (of at least two 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 poster presentation at the Workshop.

**Publications** – The workshop selects among the submitted papers for Oral Presentations and Posters. All manuscripts (either accepted as oral presentation or poster) will be available in an Electronic Workshop Digest. The **best poster will be awarded** during the closing session of the workshop.

**Key Dates**
- Submission deadline : **September 10, 2019**
- Notification of acceptance : **September 28, 2019**
- Camera-ready material : **October 12, 2019**

**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

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