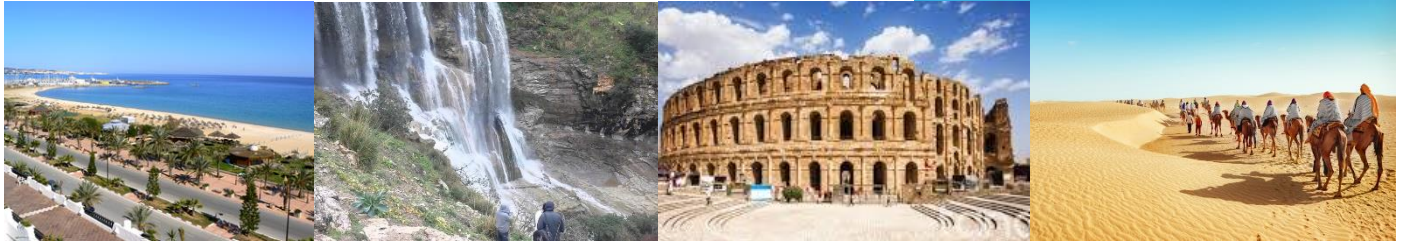


2020 IEEE International Conference on Design & Test of integrated micro & nano-Systems

June, 7-10, 2020 Hammamet, Tunisia

IEEE DTS'2020 First Call For



Aim of the Conference: The second IEEE international conference on Design & Test of integrated micro & nano-Systems represents a scientific and technological event dedicated to integrated electronic systems which reach the nanoscale era. The interests of the conference cover all the aspects from the design to the test of micro and nano systems. IEEE DTS is an important meeting where well known researchers from universities and companies will present the latest innovations in the field of micro and nano electronics. It will be also an opportunity for researchers to present and discuss their latest work.

Papers Submission: Authors are invited to submit original and unpublished research work. Paper submissions should be complete manuscripts not exceeding six pages in a standard IEEE two-column format. The paper must clearly indicate the area, main results and contributions. The manuscript should follow the instructions included in the author's kit at the conference web site. Submitted articles should be in PDF format and uploaded to the on-line submission system. A submission will be considered as evidence that, upon acceptance, the author(s) will prepare the final camera-ready version of the paper in time for inclusion in the proceedings, and will present the paper at the conference.

Best Paper award: A best paper award will be given during the conference.

Journal Special Issue: A selection of the best papers presented in the Conference will be considered for publication in a Special Issue of well-known international journals.

Papers are solicited in, but not limited to, the following topics:

Systems Design & Technology (SDT)

- Analog, digital, mixed, and RF circuits design
- SoC, MPSoC, NoC, SIP, and NIP design
- Embedded electronics and System architecture
- MEMS, NEMS and MOEMS systems design
- Low-power electronics and systems design
- Sensory Systems Design
- Wireless communication systems design
- Opto-electronic System Design
- Biomedical Circuit & Systems
- Bio-engineering & Bio-chip design
- Linear & Non-Linear Circuits
- Power electronics and systems design
- Hardware co-design & FPGA design
- VLSI systems circuit and design
- DSPs and multiprocessor systems
- Embedded systems for Deep Learning
- Control Systems & Mechatronics
- Algorithms, methods and tools for modeling, simulation, synthesis and verification of ICs
- Algorithms, methods and tools for signal processing and image processing
- Algorithms, methods and tools for information security and cryptography
- Artificial Intelligence systems
- Electronic systems for energy harvesting applications
- GPS based engineering systems
- Process technologies, CMOS, BiCMOS, GaAs
- Microwave Systems & Integrated antenna
- 3D integration design and analysis
- ICs packaging

Systems Testing & Reliability (STR)

- Analog, digital, mixed, and RF circuits testing
- SoC, MPSoC, NoC, SIP, and NIP test
- On-line Testing and fault Tolerance
- Defect and Fault Modeling
- MEMS, NEMS and MOEMS Testing
- 3D testing
- Delay testing
- DFT, BIST and BISR
- Fault Simulation, ATPG
- Yield Optimization
- Memory & FPGA Test and Repair
- Automotive reliability and test
- Reliability failures and modeling
- Electronic System Reliability
- Test and Security Issues
- ATE issues
- Alternatives test strategies

Nano Electronic Systems (NES)

- Nanostructured / nanoporous Materials and devices
- Nano-circuits and Nano-architectures
- Nano-sensors and Actuators
- Nanorobotics and Nano-manipulation
- Modeling and Simulation at the Nanoscale
- Carbon Nanostructures and devices
- Microfluidics and Nanofluidics Systems
- 3D printing systems
- Polymer Nanotechnology
- Nanoscale Materials Characterization
- Sensors based on emerging devices
- Renewable Energy Technologies
- Smart Grid
- Measurement of health risk
- Aerospace and Vehicle Manufacturers

VLSI IoT Devices (IoT)

- Ultra-low power VLSI design for IoT
- System on Chip for IoTs
- IoT Application oriented Technologies
- IoT communication systems
- Real-time IoT systems
- RFID systems
- IoT Services and Applications
- IoT nodes architectures
- Sensors and Actuators for IoT
- Power and Energy systems design for IoT nodes
- Connectivity for IoT
- Computing Platforms for IoT
- Data Acquisition, Storage and Management for IoT
- Security and Privacy Enhancing Technologies for IoT devices
- IoT System Interfaces
- Reliability of IoT VLSI

Key Dates for Scientific Papers:

Paper Submission Deadline : **January, 14th 2020**
Notification of acceptance : **March, 2nd 2020**
Final version due date : **April, 6th 2020**

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