TTTC News

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PAST TTTC EVENTS

The 27th International Symposium on On-Line Testing and Robust System Design (IOLTS'21)

June 28–30 2021
Virtual Live Event
https://orion.polito.it/iolts/

The International Symposium on On-Line Testing and Robust System Design (IOLTS) is an established forum for presenting novel ideas and experimental data on these areas. The Symposium is sponsored by the IEEE Council on Electronic Design Automation (CEDA) and by the IEEE Computer Society Test Technology Technical Council (TTTC). The 2021 edition is organized by Politecnico di Torino, the University of Athens, the TIMA Laboratory, and iRoC Technologies.

Issues related to on-line testing techniques, and more generally to design for robustness, are increasingly important in modern electronic systems. In particular, the huge complexity of electronic systems has led to growth in reliability needs in several application domains as well as pressure for low-cost products. There is a corresponding increasing demand for cost-effective design for robustness techniques. These needs have increased dramatically with the introduction of nanometer technologies, which impact adversely noise margins; process, voltage, and temperature variations; aging and wear-out; soft error and EMI sensitivity; power density and heating; and make mandatory the use of design for robustness techniques for extending, yield, reliability, and lifetime of modern SoCs. Design for reliability becomes also mandatory for reducing power dissipation, as voltage reduction, often used to reduce power, strongly affects reliability by reducing noise margins and thus the sensitivity to soft-errors and EMI, and by increasing circuit delays and thus the severity of timing faults. There is also a strong relationship between design for reliability and design for security, as security attacks are often fault-based.

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The 34th IEEE International Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems (DFT'21)

October 6–8 2021
Virtual Event, Athens, Greece
http://www.dfts.org/

DFT is an annual symposium providing an open forum for presentations in the field of defect and fault tolerance in VLSI and nanotechnology systems inclusive of emerging technologies. One of the unique features of this symposium is to combine new academic research with state-of-the-art industrial data, necessary ingredients for significant advances in this field. All aspects of design, manufacturing, test, reliability, and availability that are affected by defects during manufacturing and by faults during system operation are of interest. Topics include (but are not limited to) the following: yield analysis and modeling; testing techniques; design for testability in IC design; error detection, correction, and recovery; dependability analysis and validation; repair, restructuring, and reconfiguration; defect and fault tolerance; radiation effects; aging and lifetime reliability; dependable applications and case studies; emerging technologies; and design for security.

The IEEE International Test Conference (ITC 2021)
October 10–15 2021
Virtual Conference
http://www.itctestweek.org/

International Test Conference is the world's premier venue dedicated to the electronic testing of devices, boards, and systems—covering the complete cycle from design verification, design-for-test, design-for-manufacturing, silicon debug, manufacturing test, system test, diagnosis, reliability and failure analysis, and back to process and design improvement. At ITC, design, test, and yield professionals can confront challenges faced by the industry and learn how these challenges are being addressed by the combined efforts of academia, design tool and equipment suppliers, designers, and test engineers. ITC, the cornerstone of the Test Week event, offers a wide variety of technical activities targeted at test and design theoreticians and practitioners, including: formal paper sessions, tutorials, panel sessions, case studies, invited lectures, commercial exhibits, and presentations, and a host of ancillary professional meetings.

UPCOMING TTTC EVENTS

The 25th Design, Automation, and Test in Europe (DATE) Conference
March 14–23 2022
Antwerp, Belgium, and Virtual Online
https://www.date-conference.com/

The 25th DATE Conference is the main European event bringing together designers and design automation users, researchers, and vendors, as well as specialists in the hardware and software design, test, and manufacturing of electronic circuits and systems. DATE lays a strong emphasis on both technology and systems, covering ICs/SoCs, reconfigurable hardware and embedded systems, and embedded software. The multi-day event consists of a conference with regular papers, complemented by panels, hot-topic sessions, tutorials, workshops, special focus days, and executives. The event will also host the Young People Program, the University Fair and Multi-Partner Projects dissemination on innovative research activities fostering the networking and the exchange of information on relevant issues, recent research outcomes, and career opportunities. DATE 2022 is the 25th edition of an event that has been the place for researchers, young professionals, and industrial partners to meet, present their research, and discuss the current development and next trends, with a high emphasis on social interaction. For its 2022 event, DATE presents a special format, as the situation related to COVID-19 is improving but safety measures and restrictions still remain uncertain for the upcoming months across Europe and worldwide. In transition toward a future post-pandemic event again, DATE 2022 will host a two-day live event in presence in the city of Antwerp, to bring the community together again, followed by other activities carried out entirely online in the subsequent days. This setup combines the in-presence experience with the opportunities of online activities, fostering the networking and social interactions around an interesting program of selected talks and panels on emerging topics to complement the traditional DATE high-quality scientific, technical, and educational activities.

NEWSLETTER EDITOR'S INVITATION

I would appreciate input and suggestions about the newsletter from the test community. Please forward your ideas, contributions, and information on awards, conferences, and workshops to Theocharis (Theo) Theocharides, Department of Electrical and Computer Engineering, University of Cyprus, 75 Kallipoleos Avenue, PO Box 20537, Nicosia, 1678, Cyprus; ttheocharides@ucy.ac.cy.

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