



DSD 2019

22nd Euromicro Conference on Digital System Design

Kallithea, Chalkidiki, Greece, Aug. 28th – Aug. 30th, 2019

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SPECIAL SESSION on

“Future Trends in Emerging Technologies (FTET)”

SPECIAL SESSION SCOPE

The Euromicro Conference on Digital System Design (DSD) addresses all aspects of (embedded, pervasive and high-performance) digital and mixed HW/SW system engineering, covering the whole design trajectory from system specification down to micro-architectures, digital circuits and VLSI implementations.

It focuses on today and future challenges of advanced embedded, high-performance and cyber-physical applications; system and processor architectures for embedded and high-performance HW/SW systems; design methodology and design automation for all design levels of embedded, high-performance and cyber-physical systems; modern implementation technologies from full custom in nanometer technology nodes, through FPGAs, to MPSoC infrastructures.

Emerging technologies promise to not just revolutionize the way computations are carried out but also have heavy implications on everyday situations. Quantum computers, for example, threaten to completely break state-of-the-art encryption schemes; approximate circuits aim to provide fast and low energy circuits by sacrificing absolute correctness whereas microfluidic devices try to revolutionize laboratory processes. This special session aims to provide a forum to present recent research results and to discuss current and upcoming trends in the different fields of emerging technologies.

Of special interest for this special session are contributions on new devices and technologies, synthesis approaches for these technologies and the corresponding design automation. Within the scope of this special session, practical results, such as novel hardware implementations or heuristics/algorithms, as well as theoretical results are highly welcomed. The topics of interest for this special session include but are not limited to:

- Approximate Computing
- Microfluidics / Microfluidic Biochips
- Reversible Logic
- Quantum Computing
- Genetic Circuits
- Memristors
- Quantum Dot Cellular Automata
- DNA Computing
- Nano-emerging technologies
- Optical Circuits/Computing

SUBMISSION GUIDELINES

Authors are encouraged to submit their manuscripts via EasyChair web service at web page <https://easychair.org/conferences/?conf=dsd2019>. Should an unexpected web access problem be encountered, please contact the Program Chair by email (dsd2019@easychair.org, nkonofao@csd.auth.gr). Each manuscript should include the complete paper text, all illustrations, and references. The manuscript should conform to the IEEE format: single-spaced, double column, US letter page size, 10-point size Times Roman font, up to 8 pages. In order to conduct a blind review, no indication of the authors' names should appear in the manuscript, references included.

CPS, Conference Publishing Services, publishes the (ISI indexed) DSD Proceedings, available worldwide through the IEEE Xplore Digital Library. Extended versions of selected best papers will be published in a special issue of the ISI indexed “Microprocessors and Microsystems: Embedded Hardware Design” Elsevier journal.

IMPORTANT DATES

Deadline for paper submission: 21 April 2019
Notification of acceptance: 31 May 2019
Camera ready papers: 23 June 2019

MORE INFORMATION (WEB PAGES)

- DSD 2019: <http://dsd-seaa2019.csd.auth.gr/>
- Euromicro: www.euromicro.org