# 25th Euromicro Conference on Digital System Design

Maspalomas, Gran Canaria, Spain, Aug. 31th-Sept. 2nd, 2022

# **Call for Papers**

### **MAIN TOPICS**

- Design and synthesis of systems, hardware and embedded software
- IoT, cyber-physical and embedded systems
- Autonomous/adaptable/re-configurable systems and architectures
- Reliable, Secure, Safe and Optimized systems and their design methods
- High-performance energy-efficient embedded systems and processor architectures
- Highly-parallel multi- and many-core (heterogeneous) systems and architectures
- Application analysis and parallelization for high-performance energy-efficient multi- and many-core embedded systems
- Systems-on-a-chip, networks-on-a-chip and systems-in-a-package
- Advanced applications of embedded and cyber-physical systems
- Specification, modeling, analysis, validation and test for systems, hardware and embedded software
- Formal Methods in System Design
- Design automation at system, processor, register-transfer, logic and physical levels
- New issues introduced by emerging applications and technologies

## **SPECIAL SESSIONS**

• AHSA: Architectures and Hardware for Security Applications

AAMTM Applications, Architectures, Methods and Tools for Machine - and Deep Learning

ASAASIT Architectures and Systems for Automotive, Aeronautic, Space and Intelligent Transportation

• ASHWPA Advanced Systems in Healthcare, Wellness and Personal Assistance

HASF Hardware and Systems for Smart Farming, Food Chain and Sustainable Environments

HIAAA Hyperspectral Imaging Applications, Algorithms and Architectures

DCPS Design of Cyber-Physical Systems

DCIS: Design of Collaborating Autonomous Systems

• **DTFT** Dependability, Testing and Fault Tolerance in Digital Systems

EPDSD European Projects in Digital System Design
 FTET Future Trends in Emerging Technologies

MCSDIA: Mixed-Criticality System Design, Implementation and Analysis

SPCPS Safety, Security and Privacy of Cyber-Physical Systems

The author's session selection may be changed to create a thematically comprehensive DSD conference program.

### **Conference Venue**

Maspalomas, Gran Canaria, Spain tel. +34 928 451 084 (provisional)

email: dsd-seaa2022@iuma.ulpgc.com (provisional)

**Euromicro** is an international scientific, engineering and educational organization dedicated to advancing the arts, sciences and applications of Information Technology and Microelectronics founded in 1973, inspired by the emerging microprocessor technology. Since then, Euromicro has been devoted to promoting research and technology transfer in its field, as well as discussing and disseminating of knowledge, information and skills in academia, industry, government and in education. As a truly international society Euromicro strictly adheres to impartiality in national and international affairs.



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# **Call for Papers**



### SCOPE

The Euromicro Conference on Digital System Design (DSD) addresses all aspects of (embedded and highperformance) 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 is a forum for researchers and engineers from academia and industry working on advanced investigations, developments and applications.

It focuses on today's and future challenges of advanced embedded, high-performance and cyber-physical applications; system and processor architectures for embedded and high-performance low-energy 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 and MPSiP infrastructures.

Authors are kindly invited to submit their work according (but not limited) to the main topics of the conference main track. In addition, several Special Sessions (with their own coordinators and subprogram committees) do also welcome contributions in specific themes of particular interest. All papers are reviewed following guidelines, quality requirements and thresholds that are common to all committees.

## SUBMISSION GUIDELINES

Authors are encouraged to submit their manuscripts via Easychair web service at web page https://easychair.org/conferences/?conf=dsd2022. Should an unexpected web access problem be encountered, please contact the Program Chair by email (dsd2022@easychair.org).

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.

IEEE Conference Publishing Services (CPS) will publish accepted papers in the conference proceedings and the proceedings will be submitted to the IEEE Xplore Digital library and indexing services.

Extended versions of selected best papers will be published in a special issue of the ISI indexed Euromicro/Elsevier journal "Microprocessors and Microsystems: Embedded Hardware Design" (MICPRO) having the 2021 Impact Factor as high as 1.53.

### **IMPORTANT DATES**

Deadline for paper submission: April 1st Notification of acceptance: May 15th Camera ready papers: June 15th

# MORE INFORMATION (WEB PAGES)

DSD 2022: https://dsd-seaa2022.iuma.ulpgc.es

• Euromicro: www.euromicro.org