

Call for Papers

The 17th International Conference on Embedded Software and Systems (ICESS 2021)
Shanghai, P. R. China, December 10-11, 2021

Overview: The advancement of embedded software and systems, such as intelligent vehicles, industrial robots, wearable devices, and Internet-of-Things, has great societal and economic impacts. It is of utmost importance to ensure the safety, efficiency, and security of their design and implementation. The International Conference on Embedded Software and Systems (ICESS) is a global forum for researchers and developers from academia, industry, and government to present and discuss emerging ideas and trends in embedded software and systems. The conference has a broad scope covering the design, implementation, optimization, and validation of embedded software and systems in various domains, with recent focus on cyber-physical systems, Internet-of-Things, embedded security, and autonomous software systems.

ICESS 2021 is the 17th International Conference on Embedded Software and Systems. It will be held in Shanghai, China, and is the next event of a series of highly successful international conferences, held in recent years as ICESS 2020 (Virtual Event), ICESS 2019 (Las Vegas, USA), ICESS 2017 (Sydney, Australia), ICESS 2016 (Sichuan, China), ICESS 2015 (New York, USA), ICESS 2014 (Paris, France), ICESS 2013 (Sydney, Australia), ICESS 2012 (Liverpool, UK), ICESS 2011 (Changsha, China), and ICESS 2010 (Bradford, UK).

Starting from ICESS 2021, we are proud to announce that the conference will be sponsored by Elsevier and Journal of Systems Architecture (JSA). ICESS 2021 will accept both regular and poster papers. **All accepted regular papers will be directly published on a special issue in Elsevier JSA.** The accepted poster papers will be presented during the poster session in the conference and will not appear in the JSA special issue. However, authors of poster papers are welcome to extend the work and submit the extended version to the journal after the conference.

Conference Scope: Topics of interest include, but are not limited to:

- **Systems, Models & Algorithms Track**
 - Embedded System Architecture
 - Embedded Software Architectures
 - Embedded OS, Scheduling and Runtime Support
 - Embedded Storage and I/O Systems
 - Real-Time Embedded Systems
 - Distributed and Networked Embedded Systems
 - Fault Tolerant and Trusted Embedded Systems
 - Power and Thermal Aware Computing
 - Mixed-Criticality Embedded Systems
 - Heterogeneous SoC and Multicore Embedded Systems
 - Reconfigurable Embedded Computing
- **Design Methodology & Tools Track**
 - Design Technologies of Embedded Systems
 - Formal Methods for Embedded Systems
 - Middleware for Embedded Systems
 - IDE and Software Tools
 - Hardware/Software Co-Design
 - Component-Based Embedded Software Design
 - Model-based Design for Embedded Software
 - Domain/Application-Specific Design Techniques
 - Testing Techniques for Embedded Software/Systems
 - Verification and Validation for Embedded Systems
 - Compilation and Debug Techniques and Tools
 - Performance Evaluation Techniques and Tools
 - Safety of Machine Learning for Embedded Systems
- **Emerging Embedded Applications and Interdisciplinary Topics Track**
 - Intelligent Embedded Systems
 - Machine Learning for Embedded Applications
 - Internet-of-Things (IoT)
 - Wearable Computing
 - Smart City
 - Robotics and Control Systems
 - Wireless Sensor Networks
 - Cyber-Physical Systems (CPS)
 - Assured Autonomy for Safety-Critical CPS
 - Automotive and Avionics Systems
 - Medical Systems
 - Database & Multimedia Systems
 - Network Protocols and Security
 - Emergency and Disaster Management
 - Consumer Electronics
 - Mobile Cloud Computing
 - Industrial Practices and Case Studies

Paper Submission Guidelines

All submissions must contain significant novel ideas and technical results that have not been published or concurrently submitted to any other venue. Submitted manuscripts should be written in English, using the format

for Elsevier Journal of Systems Architecture (here is a [LaTeX template](#) and a [Word template](#)). Papers must be submitted as PDF files through this Easy Chair website: <https://easychair.org/conferences/?conf=icess2021>. ICES 2021 will follow a single-blind review process, allowing authors to reveal their names and affiliations in their submissions. Submissions must be no longer than 20 pages.

Important Dates

Paper Submission: July 31st, 2021, 11:59pm, Anywhere on Earth

Notification: October 4th, 2021

Camera-ready version: October 11th, 2021

Conference: December 10-11th, 2021

Organizing Committee

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