15th IEEE International Conference on



Embedded Software and Systems

Call for Papers

http://lcs.ios.ac.cn/icess2019/

Co-located with DAC 2019

(Attendees can access DAC Keynotes, Exhibits and Receptions)



Paper submission:

Important Dates

March 15, 2019 (Extended)

April 2, 2019











Las Vegas **Convention Center Nevada, United States** June 2-3, 2019





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 IEEE 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.

All accepted papers are expected to be included in IEEE Xplore and indexed by El. Selected papers, after further revisions, will be considered for publication in a special issue of the Elsevier Journal of Systems Architecture.



Organizing Committee:

General Chairs:

Naijun Zhan, Chinese Academy of Sciences, China Qi Zhu, Northwestern University, USA

Technical Program Committee Chairs:

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· Web Chair:

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Paper Submission Guidelines:

Submissions should 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 conforming to the IEEE conference proceedings format (8.5" x 11" page size, two-column). All paper submissions must represent original work. Papers must be submitted as PDF files through EasyChair website: https://easychair.org/conferences/?conf=icess2019.

Papers should not be longer than 8 pages in the IEEE conference format. Some papers may be accepted after review as short papers; the camera-ready versions of such papers should normally not exceed 4 pages. Authors of accepted papers (regular-length or short papers) will have the option to pay for up to 2 extra pages at the time of registration.



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
- Intelligent Intersection Traffic Signal Control
- Robotics and Control Systems
- Wireless Sensor Networks
- Cyber-Physical Systems (CPS)
- Assured Autonomy for Safety-Critical
- Automotive and Avionics Systems
- Medical Systems
- Database & Multimedia Systems
- Network Protocols and Security
- Emergency and Disaster Management
- Consumer Electronics
- Mobile Cloud Computing and Approximate Computing
- Industrial Practices and Case Studies