



Embedded Systems Week

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October 7-14, 2022

Hybrid-Shanghai

**EMSOFT  
2022**

## Call for Papers

### International Conference on Embedded Software

**October 10 – 12, 2022, Hybrid-Shanghai**

The ACM SIGBED International Conference on Embedded Software (EMSOFT) brings together researchers and developers from academia, industry, and government to advance the science, engineering, and technology of embedded software development. Since 2001, EMSOFT has been the premier venue for cutting-edge research in the design and analysis of software that interacts with physical processes. Specifically, the conference has a long-standing tradition of presenting results on cyber-physical systems, which integrate computation, networking, and physical dynamics.

Submissions are invited on all aspects of embedded software systems, including but not limited to:

- Embedded / cyber-physical software design and analysis
- Safety-critical and mixed-critical embedded software design
- Time-critical embedded software
- Formal modeling and verification
- Testing, validation, and certification
- Model- and component-based approaches
- Robust implementation of control systems
- Embedded operating systems and middleware
- Embedded distributed, networked systems
- Embedded software on multi- and many-core processors
- Scheduling, resource allocation, and execution time analysis
- QoS management and performance analysis
- Hardware and software design for safe autonomy

#### Journal-Track Submissions

Abstracts: March 31, 2022

Full Papers: April 07, 2022 (firm)

#### Work-in-Progress Submissions

June 11, 2022 (firm)

#### Notification of Acceptance

July 05, 2022 (both tracks)

*\*All submissions are due by AOE time.*

- Embedded software security
- Energy-efficient embedded software
- Embedded software architectures for data-intensive applications and signal processing
- Empirical studies and their reproduction
- Application areas including automotive, avionics, energy, health care, mobile devices, multimedia, machine learning, and autonomous systems

Papers should represent original work, not formerly published or submitted for publication in other forums. A double-blind review process will be enforced. Authors should not reveal authorship directly or indirectly through references.

EMSOFT 2022 will follow a two-stage review process for the journal track, where papers passing the first stage of reviews will be asked to revise their work based on reviewer comments within a short time frame of around two weeks. Accepted papers in the second stage will appear in IEEE TCAD (see below).

**Journal-Integrated Publication Model:** EMSOFT 2022 has a dual publication model where papers will be published in two tracks. Journal track papers will be published in the IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD) and Work-in-Progress track papers will be published in the ESWEEK Proceedings. See details at <http://www.esweek.org/author-information>.

#### ESWEEK General Chairs

Aviral Shrivastava, Arizona State University, USA

Xiaobo Sharon Hu, University of Notre Dame, USA

#### EMSOFT Program Chairs

David Broman, KTH Royal Institute of Tech., Sweden

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