



Embedded Systems Week  
www.esweek.org

September 17 – 22, 2023  
Hamburg, Germany



# Call for Papers

## International Conference on Embedded Software

### September 17 –22, 2023, Hamburg, Germany

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 distributed, networked systems
  - Time-critical embedded systems
  - Multi-/many-core processors, hardware accelerators
  - Embedded operating systems and middleware
  - Scheduling, resource allocation, and execution time analysis
  - QoS management and performance analysis
  - Hardware and software co-design
- Embedded software design and analysis
  - Energy-efficient embedded software
  - Safety/Mixed-critical embedded software
  - Software design for cyber-physical systems
  - Embedded software architectures for data-intensive applications and signal processing
- Resilience
  - Embedded software security
  - Robust implementation of control systems
- Process, methods

#### Journal-Track Submissions

Abstracts: March 16, 2023

Full Papers: March 23, 2023 (firm)

#### Work-in-Progress Submissions

May 22, 2023 (firm)

#### Notification of Acceptance

June 30, 2023 (both tracks)

- Formal modeling and verification
- Testing, validation, and certification
- Model- and component-based approaches
- Empirical studies and their reproduction
- Sustainability, energy sobriety, low techs
- 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 2023 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 TECS (see below).

**Journal-Integrated Publication Model:** EMSOFT 2023 has a dual publication model where papers will be published in two tracks. Journal track papers will be published in the ACM Transactions on Embedded Computer Systems (TECS) 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

Xiaobo Sharon Hu, University of Notre Dame, USA

Alain Girault, INRIA, France

#### EMSOFT Program Chairs

Claire Pagetti, ONERA, France

Alessandro Biondi, Scuola Superiore Sant'Anna, Italy