



Embedded Systems Week  
www.esweek.org

September 29 – October 4, 2024  
Raleigh, NC, USA



## Call for Papers

### 2024 International Conference on Embedded Software (EMSOFT) September 29 – October 4, 2024, Raleigh, NC, USA

**EMSOFT** (*ACM SIGBED International Conference on Embedded Software*) aims at advancing the science and engineering of **embedded software**. Since 2001, EMSOFT has been at the forefront of embedded software innovation, connecting academia, industry, and government. At EMSOFT, cutting-edge research meets practical application in designing and analyzing software that brings the digital and physical worlds together. EMSOFT's tradition is at the heart of *cyber-physical systems*, where computation, networking, and physical dynamics converge.

We invite submissions 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 and analysis for cyber-physical systems
  - Embedded software architectures for data-intensive applications and signal processing
- **Cyber-security, safety, and resilience**
  - Embedded software security and privacy
  - Safety mechanisms and methods for embedded software
  - Robust implementation of control systems

#### Journal Track:

Abstract Submission: March 24, 2024  
Full Paper Submission: March 31, 2024 (firm)  
Notification of Acceptance: July 14, 2024

#### Late Breaking and Work-in-Progress Tracks:

Paper Submission: June 2, 2024 (firm)  
Notification of Acceptance: June 30, 2024

#### Proposals of Workshops, Tutorials, Education Classes, and Special Sessions:

March 24, 2024

**All submissions are due by midnight, AOE.**

#### • Processes and methods

- Formal modeling and verification
- Testing, validation, and certification
- Model- and component-based approaches
- Empirical studies and their reproduction
- Sustainability and energy sobriety
- Application areas including automotive, avionics, energy, health care, mobile devices, multimedia, machine learning, and autonomous systems

Submitted manuscripts must be **double blind**. Authors should not reveal their identity directly or indirectly (e.g., through references). The submitted work must be **original**, not formerly published or under review elsewhere.

EMSOFT 2024 will follow a **two-stage review** process for the journal track. Authors of papers that pass the first review stage will be asked to revise their work based on the received comments, within a short time frame (around two weeks). Papers accepted at the second stage will appear in IEEE TCAD (see below).

**Journal-Integrated Publication Model:** All full papers accepted in EMSOFT'24 will be published in **IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)**. All late-breaking papers accepted in one of the three conferences will be published in **IEEE Embedded Systems Letters (ESL)**.

See details at <https://esweek.org/author-information>

#### ESWEEK General Chairs:

Alain Girault, INRIA, France  
Tei-Wei Kuo, National Taiwan University, Taiwan

#### EMSOFT Program Chairs:

Alessandro Biondi, Scuola Superiore Sant'Anna, Italy  
Martina Maggio, Lund University, Sweden