

Embedded Systems Week

www.esweek.org

October 10-15, 2021 Virtual Conference **EMSOFT 2021**

Call for Papers

International Conference on Embedded Software

October 11 – 15, 2021, Virtual Conference

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.

Journal-Track Submissions

Abstracts: April 2, 2021 Full Papers: April 9, 2021 (firm)

Work-in-Progress Submissions
June 4, 2021 (firm)

Notification of Acceptance July 5, 2021 (both tracks)

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

- Embedded software design and analysis
- · Formal modeling and verification
- Testing, validation, and certification
- Model- and component-based approaches
- Embedded operating systems and middleware
- Embedded distributed, networked systems
- Embedded software on multi- and many-core processors
- Safety-critical and mixed-critical embedded software design
- Time-critical embedded systems
- Scheduling, resource allocation, and execution time analysis
- QoS management and performance analysis
- Energy-efficient embedded software
- Embedded software security
- Embedded software architectures for data-intensive applications and signal processing

- Software design for cyber-physical systems
- Robust implementation of control systems
- Hardware and software design for safe autonomy
- 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 2021 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 ACM TECS (see below).

Journal-Integrated Publication Model: EMSOFT 2021 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 Computing 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

Andreas Gerstlauer, University of Texas at Austin, US Aviral Shrivastava, Arizona State University, USA

EMSOFT Program Chairs

Linh Thi Xuan Phan, University of Pennsylvania, US David Broman, KTH Royal Institute of Technology, SE