EMSOFT 2020

Call for Papers
International Conference on Embedded Software
September 20 – 25, 2020, 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, with a long- standing tradition for results on cyber-physical systems, which compose computation, networking, and physical dynamics.

Journal-Track Submissions
Abstract: April 3, 2020 (firm)
Full Paper: ~~April 10, 2020~~
April 17, 2020 (extended, firm)

Work-in-Progress Submissions
~~June 5, 2020~~
June 12, 2020 (extended)

Notification of Acceptance
July 6, 2020 (both tracks)

Submissions are invited on all aspects of embedded software systems, 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

A special day focusing on the Trustworthy Internet of Things (Trustworthy IoT) will be organized jointly by all conferences in ESWEEK. Papers aligned to the topics of interest for EMSOFT, focusing on trust, security, and privacy for the Internet of Things with an emphasis on software are encouraged.

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

EMSOFT will follow a two-stage review process, 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 will participate in the direct journal publication track and appear in IEEE TCAD (see below).

EMSOFT 2020 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. More details at http://www.esweek.org/author-information.

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