



# Embedded Systems Week

www.esweek.org

October 10-15, 2021  
Virtual Conference



## Call for Papers, Workshops, Tutorials, Special Sessions

- CASES
- CODES+ISSS
- EMSOFT
- NOCS
- Workshops
- Tutorials
- 

### About Embedded Systems Week (ESWEEK)

Embedded Systems Week (ESWEEK) is the premier event covering all aspects of hardware and software design for smart, intelligent and connected computing systems. By bringing together three leading conferences (CASES, CODES+ISSS, EMSOFT), one symposium (NOCS), and several workshops and tutorials, ESWEEK allows attendees to benefit from a wide range of topics covering the state of the art in embedded systems research and development.

### One Registration, Three Conferences & One Symposium

Registered attendees can attend sessions in any of the ESWEEK conferences (CASES, CODES+ISSS, EMSOFT), the NOC symposium, tutorials and workshops.

#### Journal Track:

Abstract Submission: April 2, 2021  
Full Paper Submission: April 9, 2021 (firm)  
Notification of Acceptance: July 5, 2021

#### Work-in-Progress Track:

Paper Submission: June 4, 2021 (firm)  
Notification of Acceptance: July 5, 2021

#### Workshop Proposals: April 16, 2021

#### Tutorial Proposals: April 30, 2021

#### Special Session Proposals: April 30, 2021

**Covid-19 planning:** Given the continued uncertainty, the next ESWEEK is currently planned as a virtual event. We will, however, closely monitor the situation and if it improves significantly consider a hybrid in-person/virtual event in an appropriate location that will be announced well in advance. In all cases, virtual attendance and remote presentations of accepted papers will be possible. Please watch the website or social media channels for updates.

## CASES

**International Conference on Compilers, Architectures, and Synthesis for Embedded Systems**

CASES is a premier forum where researchers, developers and practitioners exchange information on the latest advances in compilers and architectures for high-performance, low-power embedded systems. The conference has a long tradition of showcasing leading edge research in embedded processor, memory, interconnect, storage architectures and related compiler techniques targeting performance, power, predictability, security, reliability issues for both traditional and emerging application domains. In addition, we invite innovative papers that address design, synthesis, and optimization challenges in heterogeneous and accelerator-rich architectures.

**International Conference on Hardware/Software Codesign and System Synthesis**



The International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS) is the premier event in system-level design, hardware/software co-design, modeling, analysis, and implementation of modern Embedded Systems, Cyber-Physical Systems (CPS), and Internet-of-Things (IoT), from system-level specification and optimization to system synthesis of multi-processor hardware/software implementations. The conference is a forum bringing together academic research and industrial practice for all aspects related to system-level and hardware/software co-design.

Panels

## Tutorials

## Workshops

## EMSOFT

**International Conference on Embedded Software**

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.

Keynotes

**International Symposium on Networks-on-Chip (NOCS)**



ESWEEK 2021 will co-host the 15<sup>th</sup> International Symposium on Networks-on-Chip (NOCS). NOCS is the premier event dedicated to interdisciplinary research on on-chip, package-scale, chip-to-chip, and datacenter rack-scale communication technology, architecture, design methods, applications and systems. NOCS brings together scientists and engineers working on NoC innovations and applications, including discrete optimization and algorithms, computer architecture, networking, circuits and systems, packaging, embedded systems, and design automation.

**Journal-integrated Publication Model:** All accepted journal-track papers will be published in the **ACM Transactions on Embedded Computer Systems (TECS)** and presented in the three conferences.

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## Paper Process

ESWEEK 2021 continues a dual publication model comprising the Journal track and the Work-in-Progress (WiP) track for the three conferences (CASES, CODES+ISSS, and EMSOFT). Journal track papers are full-length papers describing mature work. They will be published in the ACM Transactions on Embedded Computer Systems (TECS). The WiP track papers are short (2-page) papers representing not-yet-mature but promising research. They will be published in the ESWEEK proceedings and will be listed as regular publications within the IEEE and/or ACM digital libraries. Authors of WiP papers have the opportunity to publish an extended form of their work in any conference or journal they prefer. Journal and WiP papers are mutually exclusive, i.e., a work can only be in submission in one of the two tracks. For more information on the ESWEEK dual-track publishing process, please refer to <https://www.esweek.org/author-information>.

## Workshops, Tutorials, Special Sessions

### Call for Workshop Proposals

ESWEEK 2021 will host several workshops on October 14/15, 2021. ESWEEK workshops are excellent opportunities to bring together researchers and practitioners from different communities to share their experiences in an interactive atmosphere. We invite you to submit workshop proposals on any topic related to the broad set of research, education, and application areas in embedded systems before **April 16, 2021**.

### Call for Tutorial Proposals

ESWEEK 2021 is looking for high-quality tutorials that will take place on Sunday, October 10, 2021. Tutorials offer a unique opportunity where presenters can interact with attendees and attendees can gain in-depth knowledge on specific topics. Tutorials on all topics related to embedded system design, analysis and development are welcome and can be either half or full day, lecture style or hands on. We invite you to submit tutorial proposals before **April 30, 2021**.

### Call for Special Session Proposals

ESWEEK 2021 will host several special sessions. They should cover hot, contemporary topics that are complementary to regular sessions and can constitute individual presentations, panels or other formats. Participants of each accepted special session will have the opportunity to co-author an overview paper (maximum 10 pages) of the session, published in the ESWEEK proceedings. We invite you to submit special session proposals on any topic related to the broad areas of interest of the conference or beyond before **April 30, 2021**.

## ESWEEK 2021 General Chairs

- Andreas Gerstlauer, University of Texas Austin, US
- Aviral Shrivastava, Arizona State University, US
- Tulika Mitra, National University of Singapore, SG

## ESWEEK Conference Program Chairs

### CASES

- Umit Ogras, University of Wisconsin-Madison, US
- Preeti Panda, IIT Delhi, IN

### CODES+ISSS

- Jason Xue, City University of Hong Kong, HK
- Chengmo Yang, University of Delaware, US

### EMSOFT

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

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