



Embedded Systems Week

www.esweek.org

October 7-14, 2022
Hybrid-Shanghai



Call for Contributions

- CASES • CODES+ISSS • EMSOFT • NOCS • Workshops • Tutorials • Industry Sessions • Education Classes •

About Embedded Systems Week (ESWEEK)

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

Single Registration System

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

Journal Track:

Abstract Submission: March 31, 2022

Full Paper Submission: April 07, 2022 (firm)

Notification of Acceptance: July 05, 2022

Work-in-Progress Track:

Paper Submission: June 11, 2022 (firm)

Notification of Acceptance: July 05, 2022

Workshop, Tutorial, and

Education Class Proposals: April 16, 2022

Special Session Proposals: April 30, 2022

**All submissions are due by AOE time.*

Covid-19 planning: Given the continued uncertainty regarding the spread of the different variants of Covid-19 virus, ESWEEK 2022 is currently planned as a hybrid event, with the on-site component in Shanghai, China. For all non-local attendees (not from China), virtual attendance and remote presentation will be allowed. 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.

Industry Sessions

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.

Panels



Keynotes

Education Classes

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 **IEEE Transactions on Computer-Aided Design (TCAD)** and presented in the three conferences.

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Review Process

ESWEEK 2022 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 12-page papers describing mature work. They will be published in the IEEE Transactions on Computer-Aided Design (TCAD). 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, and Education Classes

Call for Workshop Proposals

ESWEEK 2022 will host several workshops on October 13/14, 2022. 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, 2022**.

Call for Tutorial Proposals

ESWEEK 2022 is looking for high-quality tutorials that will take place on Sunday, October 09, 2022. 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 16, 2022**.

Call for Special Session Proposals

ESWEEK 2022 will host several special sessions. 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, 2022**.

Call for Education Class Proposals

ESWEEK 2022 will host several education classes. Education classes must target senior undergraduate students of computer science and electrical engineering background, and teach fundamental, yet not standard textbook embedded systems concepts. We invite educators worldwide to submit education classes proposal on any topic related to the broad areas of interest of the conference or beyond before **April 16, 2022**.

ESWEEK 2022 General Chairs

- Aviral Shrivastava, Arizona State University, US
- Xiaobo Sharon Hu, Notre Dame, US

ESWEEK Conference Program Chairs

CASES

- Preeti Panda, IIT Delhi, IN
- Swarup Bhunia, University of Florida, US

CODES+ISSS

- Chengmo Yang, University of Delaware, US
- Mohammad Abdullah Al Faruque, UC Irvine, US

EMSOFT

- David Broman, KTH Royal Institute of Technology, SE
- Claire Pagetti, ONERA, FR

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