FPT 2023

International Conference on Field-Programmable Technology

11th–14th December 2023, Yokohama, Japan
(held in-person, tentative)

FPT'23
Yokohama

Call for Papers

Important Dates (all 23:59, AoE)

Conference Track
- Title and abstract submission due: 14 July 2023
- Paper submission due: 21 July 2023
- Initial reviews/rebuttal questions available: 13 September 2023
- Rebuttal responses due: 20 September 2023
- Notification: 11 October 2023

Journal Track (ACM TRETS)
- Paper submission due: 30 June 2023 (extended)
- Initial reviews available: 28 July 2023 (tentative)
- Revised paper submission due: 25 August 2023
- Notification: 11 October 2023

Ph.D. Forum
- Title and abstract submission due: 15 September 2023
- Paper submission due: 22 September 2023
- Notification: 11 October 2023

FPT conference is the premier conference in the Asia-Pacific region on field-programmable technologies including reconfigurable computing devices and systems containing such components. Field-programmable devices promise the flexibility of software with the performance of hardware. The development and application of field-programmable technology have become important topics of research and development. Field-programmable technology is widely applied, in high-performance computing systems, embedded and low-power control instruments, mobile communications, rapid prototyping and product emulation, among other areas.

Submissions are solicited on new research results and detailed tutorial expositions related to field-programmable technologies, including but not limited to:

- **Tools and Design Techniques** for field-programmable technology including placement, routing, synthesis, verification, debugging, runtime support, technology mapping, partitioning, parallelization, timing optimization, design and run-time environments, high-level synthesis (HLS) compilers, languages and modeling techniques, provably-correct development, intellectual property core-based design, domain-specific development, hardware/software co-design.
- **Architectures** for field-programmable technology including field-programmable gate arrays, complex programmable logic devices, coarse-grained reconfigurable arrays, field- programmable interconnect, field-programmable analogue arrays, field-programmable arithmetic arrays, memory architectures, interface technologies, low-power techniques, adaptive devices, reconfigurable computing systems, high-performance reconfigurable systems, evolvable hardware and adaptive computing, fault tolerance and avoidance.
- **Device technology** for field-programmable logic including programmable memories such as non- volatile, dynamic and static memory cells and arrays, interconnect devices, circuits and switches, and emerging VLSI device technologies.
- **Applications** of field-programmable technology including accelerators for biomedical / scientific / neuro-morphic computing and machine learning, network processors, real-time systems, rapid prototyping, hardware emulation, digital signal processing, interactive multimedia, machine vision, computer graphics, cryptography, robotics, manufacturing systems, embedded applications, evolvable and biologically-inspired hardware.
- **Education** for field-programmable technology including courses, teaching and training experience, experiment equipment, design and applications.

Note that simply implementing an application using an FPGA is not considered a sufficient research contribution. Application-based papers should emphasize novel design techniques, novel use of embedded resources, or clearly articulated and measured system performance benefits.

Submission Guidelines

FPT 2023 is grateful to the **ACM Transactions on Reconfigurable Technology and Systems (TRETS)** for enabling us to offer a **Journal Track** in addition to regular and short papers directly submitted to the **Conference Track** of FPT. The Journal Track is specifically intended for submissions that would benefit from the longer articles possible in TRETS (up to 32 ACM-style single-column pages), e.g., for clearer presentation of complex research, or an in-depth discussion of comprehensive results. Submissions to the Journal Track that do not take advantage of the additional space offered by TRETS, or deviate significantly from the TRETS Author Guidelines, will receive the corresponding feedback early, and can then be revised and entered into the direct submission process of the Conference Track.

Details are available at FPT 2023 WEB site: https://www.fpt2023.org

ChatGPT Policy

FPT 2023 allows the use of tools such as ChatGPT, Grammarly, and other AI assistants to help improve submissions. We recommend that you review your submission for English language usage by means of such services. However, it is not required that you make use of such services, and you should judge whether the results are satisfactory. Authors must disclose their use of such tools, including details on which tools were used and the extent of their use. Use of such tools to generate content, hide plagiarism or change the meaning of content is prohibited, and may result in sanctions, not necessarily limited to the rejection of your submission.

Artifact Evaluation

FPT 2023 will be able to offer the authors of accepted papers to optionally participate in an artifact evaluation process, aiming to increase the reproducibility of results. Details on this will be forthcoming and be described on the FPT 2023 web site. Note that participating in this optional process will not require you to open-source your research artifacts.

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