Call for Papers

• We are soliciting papers from academia and industry that emphasize cross-layer innovation in the field of tinyML!
• Submissions must intersect and leverage synergy between at least two of the subject areas listed below.
• An author of an accepted paper must attend the symposium in person to give a presentation.
• Accepted full papers will be published as peer-reviewed online proceedings on arXiv.

Submission Format

• Maximum of 6 pages, excluding references
• Submissions must be anonymized for double-blind review
• For paper formatting, please use the tinyML Research Symposium Template

Subject Areas

• tinyML Datasets: Public release of new datasets to tinyML; frameworks that automate dataset development; survey and analysis of existing tiny datasets that can be used for research
• tinyML Applications: Novel applications across all fields and emerging use cases; discussions about real-world use cases; user behavior and system-user interaction; survey on practical experiences
• tinyML Algorithms: Federated learning or stream-based active learning methods; deep learning and traditional machine learning algorithms; pruning, quantization, optimization methods; security and privacy implications
• tinyML Systems: Profiling tools for measuring and characterizing performance and power; design space exploration frameworks; solutions that involve hardware and software co-design; characterization of tiny real-world embedded systems; in-sensor processing, design, and implementation
• tinyML Software: Interpreters and code generator frameworks for tiny systems; optimizations for efficient execution; software memory optimizations; neural architecture search methods
• tinyML Hardware: MCU and accelerator architecture design and evaluation; circuit and architecture design for digital, analog, and in-memory processing; ultra-low-power memory system design; power management, reliability, security, performance
• tinyML Evaluation: Measurement tools and techniques; benchmark creation, assessment, and validation; evaluation and measurement of real production systems.

Important Dates (AoE)

Submission deadline EXTENDED
Fri 16 Dec 2022 11:59
Fri 23 Dec 2022 11:59 EST

Decision notification
Mon 6 Feb 2023 11:59 EST

Submission Link: https://eecs.harvard.edu/tinyml-symp-2023
Organizing Committee

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