

# tinyML<sup>®</sup> Summit 2023

Enabling Ultra-low Power Machine Learning at the Edge

March 27-29, 2023 | Burlingame, California

## 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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