

Embedded AI and IoT

The number of ‘things’ connected to the Internet drastically grows and has already exceeded the number of people on earth. We consider a ‘smart thing’ as a tiny embedded system with sensing, processing and communication capabilities which can be accessed 24/7. However, very few example of ‘smart things’ are really intelligent. Blending of learning algorithms and constrained electronic devices happening today will make IoT devices even smarter by enabling cognitive functions. Although there are promising early results appearing across many domains, e.g. hardware, machine learning, constrained computing platforms, the research in embedded Artificial Intelligence (AI) is in its infancy. Progress in this area opens up wide vista for numerous applications, including smart-x (where x is a city, home, transport), wearable computing, security. Topics of interest for this special session include, but are not limited to:

- New techniques for data processing and inference on embedded/mobile devices.
- Adaptation and optimization of data processing algorithms for use on IoT devices.
- Decision making and actuation based on data from pervasive and IoT environments.
- Human-machine interaction using wearable systems.
- Design and implementation of real-world applications and systems
- Experiences, challenges, comparisons of platforms.
- Embedded machine learning algorithms.
- Hardware and system design to enable machine learning on sensor data.
- Computer vision for resource-constrained and mobile platforms.
- Experiences from real-world low-power smart IoT applications and deployments

Organizers

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Submission instructions

The 5th IEEE World Forum on Internet of Things (WF-IoT 2019) solicits full paper workshop paper submissions describing original research. Suggested size is four pages; papers up to six pages will be accepted. Extended versions of selected papers may be considered for publication in the IEEE IoT Journal. EDAS submission link is <https://edas.info/newPaper.php?c=25109&track=94794>

Important Dates

Paper Submission Due Date: 22 January 2019

Paper Acceptance Notification: 4 February 2019

Camera-Ready Submission: 27 February 2019