INTESA 2018 Workshop

INTelligent Embedded Systems Architectures and Applications



- → October 4th, 2018
- → Co-Located with ES WEEK 2018 Sept 30 Oct 5, 2018, Torino, ITALY
- → http://intesa-workshop2018.polimi.it/

The INTESA workshop aims to give an up-to-date picture of intelligent embedded systems architectures and applications with emphasis on Smart IoT and Cyber Physical Systems, including hot topics such as accelerating deep learning. The workshop covers several aspects, from the hardware related ones to embedded software and application issues, being complementary to most of the topic addressed during the ESWEEK. From the market standpoint, scientific progress in this field are considered crucial to fuel a widespread diffusion of the potential benefits offered by the Industry 4.0 perspective. The goal of the event is to create cross-fertilization of ideas between application developers and platform providers with the participation of a mix between academic and industry people.

The workshop is organized in two sessions: 1) "Architectures and design methodologies to support embedded intelligence", 2) "Embedded Intelligence: best practices and software support" and it includes: 2 keynote speakers, 4 invited papers and 6 regular papers for an exciting full-immersion day.

Organizers

- General Chair: Maurizio Martina (POLITO Politecnico di Torino, IT)
- Program Chair: William Fornaciari (POLIMI Politecnico di Milano, IT)
- Panel Organizer: To be defined
- Publicity and Publication Chair: Carlo Galuzzi (Maastricht University, NL)
- Web and Submission Chair: Federico Reghenzani (POLIMI Politecnico di Milano, IT)

Topics

A non-exhaustive list of suggested topics for paper submission are the following ones. However, other submissions in line with the workshop objectives are welcome:

- Special purpose hardware to support deep learning in embedded architectures
- Edge computing for smart embedded systems: hardware and software aspects
- Run-time resource management for smart IoT/Edge Computing systems
- HW/SW codesign of Cyber Physical Systems
- Programming models for IoT/Edge computing applications
- Applications and case studies of intelligent embedded systems
- Design methodologies and platforms for wearable computing
- In-memory computing for unsupervised learning

Keynotes

- 1. David Atienza, EPFL Edge Computing Design in the Big Data Era
- 2. Marcello Coppola, STMicroelectronics

Submission instructions

- Full-papers are allowed up to six (6) double-column pages in ACM Standard conference format. <u>The submission</u> is blind, thus the paper must not contain any direct or indirect information of the authors.
- Poster abstracts up to (2) double-column pages in ACM Standard conference format.
- Submit your papers to: <u>https://easychair.org/conferences/?conf=intesa2018</u>

The authors of the accepted papers will be asked to submit an extended version of their contribute to a **special issue of Elsevier Microprocessors and Microsystems (Embedded Hardware Design), Scopus indexed.**

Important dates

- Paper submission: 31 July, 2018 at 24:00 AOE
- Acceptance notification: 30 August, 2018
- Camera ready: 20 September, 2018

Scientific Committee

- William Fornaciari (POLIMI, IT)
- Maurizio Martina (POLITO, IT)
- Andrea Calimera (POLITO, IT)
- Marcello Coppola (STMicroelectronics, FR)
- Guido Dartmann (AACHEN, DE)
- Nikil Dutt (UC, US)
- Franco Fummi (UNIVE, IT)
- Michael Huebner (Ruhr-Universität Bochum, DE)
- Smail Niar (UVHC, FR)
- Jari Nurmi (TUT, SF/FIN)
- Lionel Torres (LIRMM, FR)