# **Special session on**

# Mobile Systems with Multicore Architectures (MS-MA'16)

In conjunction with IEEE 10th International Symposium on Embedded Multicore/Many-core Systems-on-Chip (MCSoC-16), Lyon Congress Center, Lyon, France, September 21-23, 2016

Mobile Systems (MSS), such as phones, tablets, smart watches, robots or connected vehicles are becoming increasingly used. The embedded architectures employed by these systems must comply with constraints of mobility (autonomy, performance, etc.) while providing the best performance for multiple applications such as multimedia, real time, research, augmented reality or video games for example. Designers therefore have to find a good compromise in order to create architectures that answer to the constraints and to the needs of mobile systems.

These technology limitations (mobility, autonomy, complexity, memory, speed, efficiency, performance) require the transition to multicore architectures allowing essentially the continuation of increasing the computing power. Multicore architectures allow to effectively accelerating the execution of different types of applications for the MS. These architectures are programmable, they may be adapted to the appearance of new formats. In addition, they can be mutualised across multiple applications, which allow improved use of the silicon surface.

In this special session, researchers are encouraged to submit papers focused on the design, development, analysis or optimization of protocols and solutions for exploiting multicore architecture for better performance of Mobile Systems (MS). This session targets to gather researchers from academia and industrial sectors to present analytical research, simulations, practical results, position papers addressing the problems related to the use of the architecture multicore in MS. The topics suggested by the session can be discussed in term of concepts, state of the art, standards, protocols, solutions, deployments, implementations, running experiments and applications.

Papers describing original, previously unpublished research work, experimental efforts, practical experiences, and industrial and commercial developments in all aspects of architecture multicore and Mobile and Smart Systems are solicited.

The chairs of MS-MA'16 are seeking original papers on research and development topics in the field of the topics listed below. Prospective authors are cordially invited to submit original technical papers up to 8 pages of length. Accepted papers will be published in the conference proceedings and their authors will provide an oral presentation, as scheduled in the conference program.

## Topics of interest include, but are not limited to:

- Multicore architectures aware mobile and smart systems;
- Multicore architectures aware mobile and social media applications;
- Multicore architectures aware distributed sensing and sensor fusion;
- Multimedia, real time and scientific applications on mobile systems;
- Cloud computing for mobile and smart systems;
- Multicore architectures aware communication protocols for mobile systems;

- Programming models and design methodologies for reconfigurable and adaptable computing in mobile systems;
- Evaluation and optimization of multicore architectures solutions, algorithms and approaches in mobile systems.

#### **IMPORTANT DATES**

Paper Submission: March 11, 2016

Acceptance notification: June 24, 2016

Camera ready paper: July 15, 2016

Special Session: TBD

#### **SUBMISSION GUIDELINES**

Electronic paper submission should not exceed 8 double-column IEEE format pages, including figures and references. Papers should be formatted as close as possible to the final format – double column, single spaced, and Times or equivalent font of minimum, 10pt size.

The acceptable format is PDF only. Any other file format and manuscripts received in hard copy form will not be processed. Please use IEEE Formats: (http://www.ieee.org/conferences\_events/conferences/pu blishing/templates.html) for paper formatting.

Please submit via: http://mcsoc-forum.org/2016/?page\_id=7

For any query, please contact the chair of MS-MA'16, Dr. Sofiane Hamrioui at sofiane.hamrioui@uha.fr or s.hamrioui@gmail.com

#### **COMMITTEE**

#### MS-MA'16 Chair:

Sofiane Hamrioui, University of Haute Alsace, France.

#### MS-MA'16 vice chair:

Amine Bergia, Mohammed V University in Rabat, ENSIAS, Morocco

## **Tentative list of TPC members**

Rajeev Agrawal, G L Bajaj institute of technology & Management, Inde.

Kang Chen, ECE department of Southern Illinois University, USA.

Leandros Maglaras, de montfort university, united kingdom.

Jerzy Konorski, Gdansk University of Technology, Poland.

Halina Tarasiuk, Warsaw University of Technology, Poland.

Ejaz Ahmed, University of Malaya, Kuala Lumpur, Malaysia.

Ayaz Ahmad, COMSATS IIT, Wah Cantt., Pakistan.

Zhixiao Wang, Xi'an University of Technology, china.

Xiaohong Jiang, Future University Hakodate, Japan.

Noura AKNIN, Abdelmalek Essaadi University, Morocoo.

Sunil kumar, San diego state university, USA.

Salimur Choudhury, Algoma University, Sault Ste. Marie, ON, Canada.

Mohamed S. Hassan, American University of Sharjah, Saoudian Arabia,

Dharma P Agrawal, University of Cincinnati, Cincinnati

Chee Sun Won, Dongguk University, Seoul, South Korea.

Pascal Lorenz, UHA, France.

Haris Simaremare, UIN SUSKA University, Malaysia

Joel Rodrigues, University of Beira Interior, Portugal.

Mehammed Daoui, LARI, University Mouloud Mammeri, Algeria.

Jaime Lloret Mauri, Polytechnic University of Valencia, Spain.

Nadir Bouchama, CERIST Research Center, Algeria.

Guy Pujolle, PHARE - LIP6 - UPMC - University of Sorbonne, France.

Benoit Hilt, UHA, France.

Wei Wang, Zhejiang University, China.

Guangjie Han, Hohai University, China.

Ousmane Diallo, Inst. Telecomunicações, University of Beira Interior, Portugal.

Liang Zhou, Nanjing University of Posts and Telecommunications, China.

Dalei Wu, Massachusetts Institute of Technology, USA.

Kan Zheng, Beijing University of Posts & Telecommunication, China.

Neeraj Kumar, Thapar University, Patiala (Punjab), Inde.

Azeddine Bilami, University of Batna, Algeria.

Rahim Kacimi, Université Paul Sabatier, France.

Soufiene Djahel, University College Dublin, Irlande.

Abdelouahid Derhab, King Saud University, Saudi Arabia.

Amine Abdelmalek, Saida University, Algéria.

Omar Kermia, CDTA, Algeria.

Burhan Gulbahar, Ozyegin University, Turkey.

Christos Chrysoulas, University of Essex, UK.

Ping-Tsai Chung, Long Island University, USA.

Dimitrios Efstathiou, Technological Educational Institute of Central Macedonia Serres, Greece.

Daniel Andresen, Kansas State University, USA.

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