

# WORKSHOP ON MOBILE SYSTEM TECHNOLOGIES

## Architectures, technology trends and memory solutions

May 22, 2015 | 9.00

Politecnico di Milano | Aula Magna | Piazza Leonardo Da Vinci, 32, Milano

Join us for the 1<sup>st</sup> **WORKSHOP ON MOBILE SYSTEM TECHNOLOGIES (MST)**. This workshop aims at providing a comprehensive view on architecture, technology trends and memory solutions in evolving mobile systems (like smartphones, tablets, phablets, and smartwatches). The interest is on memory and storage sub-systems role upon system performance, energy, dependability, security, and functionalities.

The 1<sup>st</sup> **MST** workshop will be structured in two sessions:

- The first session will tackle the complexity of mobile systems from different points of view: SoC architectures, operating systems, energy consumption, storage and memory sub-systems, and memory technology;
- The second session will focus on security, a key emerging topics in mobile systems. It will cover software and hardware infrastructures, and threats in mobile.

### SCHEDULE

#### 9.00 Registration

#### 9.40 Welcome

Donatella **Sciuto**, Politecnico di Milano

#### 9.45 Workshop Introduction

Marco **Dallabora**, Micron Technology

#### 10.00 Keynote

*Advance mobile compute subsystems, heterogeneous and low-power* - John **Goodacre**, ARM

#### 10.45 Coffee Break

#### 10.55 Session: Architecture I

10.55 *Latency in 5G networks* - Lorenzo **Di Gregorio**, Intel Mobile

11.20 *Extending NAND life with advanced controller technology* - Lin **Wei**, Phison

11.45 *Emerging memory technologies vs mainstream: challenges and opportunities* - Giorgio **Servalli**, Micron Semiconductor

12.10 *Linaro - building the future of open source software on ARM* - Ulf **Hansson**, Linaro

12.35 *About I/O scheduling and application responsiveness and latencies* - Paolo **Valente**, Università degli Studi di Modena e Reggio Emilia

#### 13.00 Lunch

#### 14.00 Session: Architecture II

14.00 *Power management in battery powered handheld portable applications* - Stefano **Saggini**, Università degli Studi di Udine

14.25 *Mobile memory systems* - Emanuele **Confalonieri**, Micron Semiconductor

#### 14.50 Session: Focus on Security I

Luca **Breveglieri**, Politecnico di Milano

15.00 *Permutation-based cryptography for resource-constrained applications* - Guido **Bertoni**, STMicroelectronics

15.25 *Security challenges at hardware design time for mobile systems* - Francesco **Regazzoni**, ALaRI

15.50 *Secure mobile devices: from smart cards to smart phones* - Marco **Macchetti**, Nagra

#### 16.15 Coffe break

#### 16.30 Session: Focus on Security II

16.30 *Static and dynamic techniques for Android malware detection: an empirical path* - Aaron **Visaggio**, Università degli Studi del Sannio

16.55 *Forging the USB armory* - Daniele **Bianco**, Inverse Path

17.20 *Network measures to improve the security of mobile devices communications* - Corradino **Corradi**, Vodafone

17.45 *Wolf! Wolf! So much malware. So little malware* - Federico **Maggi**, Politecnico di Milano

#### 18.10 Workshop closure

Online registration: [www.mstworkshop.eu](http://www.mstworkshop.eu)

For more information: [comunicazione@fondazione.polimi.it](mailto:comunicazione@fondazione.polimi.it)