

# WORKSHOP ON MOBILE SYSTEM TECHNOLOGIES

## Architectures, technology trends and memory solutions

3<sup>rd</sup> edition

October 27<sup>th</sup>, 2017 | 9.00

Politecnico di Milano | Aula Rogers | via Ampère 2 - Milano

Join us for the 3<sup>rd</sup> **WORKSHOP ON MOBILE SYSTEMS TECHNOLOGIES (MST 2017)**. MST workshops bring together researchers, professionals, and industrial engineers with an interest in technologies for mobile systems. The third edition offers a comprehensive view on architecture models, technology trends, and memory solutions enabling personal and industrial mobile systems, including smartphones, tablets, smartwatches, IoT devices. The interest is on the role that memory and storage subsystems play upon system performance, energy, dependability, security, and functionalities.

### SCHEDULE

#### 8.30 Registration

#### 9.00 Welcome

Donatella **Sciuto**, Politecnico di Milano

#### 9.10 Workshop Introduction

Marco **Dallabora**, Micron Technology Inc.

#### 9.30 Keynote I

*Processing Data Where It Makes Sense: Enabling In-Memory Computation* - Onur **Mutlu**, ETH Zurich

#### 10.20 Coffee Break

#### 10.35 Session: Architecture I

10.35 *3D NAND NVM Memory* - Tommaso **Vali**, Micron Technology Inc.

11.00 *UFS 3.0 - Controller Design Considerations* - Filipe **Ramos Rios**, Phison Electronics Corporation

11.25 *Battery Modeling in Electronic Designs* - Alberto **Macii** and Massimo **Poncino**, Politecnico di Torino

11.50 *ARM Technology Update* - John **Goodacre**, ARM

#### 12.15 Lunch

#### 13.30 Keynote II

*Local Computing: Battles with Parallelism* - Anupam **Chattopadhyay**, Nanyang Technological University

#### 14.20 Session: Architecture II

14.20 *Radio Optimisation and Measurement Procedure in LTE* - Stefania **Zinno**, Università di Napoli Federico II

14.45 *Mobile User Experience and Storage Latency* - Luca **Porzio**, Micron Technology Inc.

15.10 *Low Power Wide Area (LPWA) network technologies for the Internet of Things* - Daniele **Cagnolato** and Francesco **Stabile**, Sierra Wireless

#### 15.35 Coffee Break

#### 15.50 Session: Security

15.50 *What Can Memory Tell Us about Malware?* - Miroslaw **Malek**, ALaRI - Università della Svizzera Italiana

16.15 *Cloak & Dagger: Why Boring UI Bugs Matter* - Yanick **Fratantonio**, Eurecom - University of California Santa Barbara

16.40 *Physical Attacks and Beyond* - Francesco **Regazzoni**, ALaRI - Università della Svizzera Italiana

17.05 *Side channel attacks: reacting to a practical threat* - Alessandro **Barengi**, Politecnico di Milano

#### 17.30 Special Topic

17.30 *PowerVR Series2NX: an approach to high efficiency Neural Network acceleration* - Salvatore **De Dominicis**, Imagination Technologies

#### 17.55 Workshop Closure

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

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