

ALaRI Master Research Projects in Embedded Systems Design

Date: Wednesday, 23 July, 2008

Time: 9.00 - 13.00

Where: Università della Svizzera italiana, Via G. Buffi, 13 – Lugano (CH)

Presentation room: Auditorium – main university building, third level

Admittance is free

Workshop Program

9.00 Welcome and Opening

Prof. Piero Martinoli, Università della Svizzera italiana President

Prof. Luigi Dadda, ALaRI President, and Prof. MariaGiovanna Sami, ALaRI Scientific Director, Università della Svizzera italiana

9.15 Keynote Speech

"Undertaking an entrepreneurial career: a mission (im)possible?"

Prof. Giuseppe Serazzi, from Politecnico di Milano

Master of Advanced Studies: research project's presentation

9.45 Guiding theme: *Security*

Providing Security to Embedded Devices through Virtualization – *Brahim Sabir*

9.55 Guiding theme: *HW/SW for Advanced Applications*

Micro-benchmarks for Hardware Performance Counter Validation - *Mahesh Kumar Meenakshisundaram*

10.05 Guiding theme: *System-On Chip*

Validation of Response Surface Reconstruction Techniques Based on Neural Networks - *Monica Ayde Vallejo Velasquez*

10.15 Guiding theme: *Low Power Design*

Leakage and Technology Variations - *Nima Aghaee*

Power Model of Energy Cost of Wireless Sensor Networks: Transmission and Security - *Filippo Borlenghi*

10.30 Guiding theme: *Pervasive Computing*

Optimizing WSN Configurations depending on Power Consumption to measure Vineyard Microclimate Conditions - *Zoran Filipovic and Gabriele Memmi*

Simulation of WSN for the cold chain - *Armen Poghosov*

10.45 Poster's Session - Coffee Break

Master of Sciences: research project's presentation

11.05 Guiding theme: **Security**

Possible Implementations of Security on RFID - *Michael Fercu and Daniel Ostojic*

Metrics to Evaluate Logic Styles Resistance against Side-Channel Attacks: Theoretical Analysis and Practical Implications - *Federico Ferrari*

11.20 Guiding theme: **HW/SW for Advanced Applications**

Implementation of an E-PON Network Node - *Ramy Gad*

A VHDL Implementation of ONU Auto-discovery Process of the IEEE 802.3ah MPCP Protocol - *Mady Alie El-Din*

Automatic Transformation of Controller Algorithms for Fixed-point Implementation - *Paulo Edward Del Tedesco Marita*

Assisted GNSS receivers - *Andrea Adamoli*

11.50 Guiding theme: **System-On Chip**

Yield Enhancement by Robust Application-Specific Mapping on Networks-on-Chip - *Anirban Dutta Choudhury*

Development of a Hybrid-Simulation Framework for MPSoC - *Prabhat Saraswat*

12.05 Guiding theme: **Low Power Design**

Novel Enhanced Sleep Transistor Techniques for reducing Leakage - *Kuntal Roy*

Guiding theme: **Pervasive Computing**

Trusting Evaluation of Reconfigurable Self Adaptive Elements in Distribute Computing - *Anastasiya Stulova*

Craig interpolation - *Lilia Nikulina*

12.30 Closing Session: Diploma Ceremony

Professors MariaGiovanna Sami and Luigi Dadda – ALaRI

Aperitif follows