

## ALaRI Master Research Projects – Academic Year 2004/2005

21st of July 2005 – time: 9.00 – 13.00

Università della Svizzera italiana – Room A31

Via G. Buffi, 13 – 6904 Lugano

Admittance is free

### Program Of the Workshop

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#### 9.00 Welcome

Marco Baggiolini – President of Università della Svizzera italiana

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#### 9.10 Workshop Opening

MariaGiovanna Sami – Scientific director of ALaRI

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#### 9.15 Keynote Speech

Designing Reliable Systems With Unreliable Components

Giovanni De Micheli – EPFL

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#### 9.50 Master Of Advanced Studies Presentations

##### ***Guiding theme: Security***

Cryptographic Functions For IKE

*Rodrigo Pousas Navarro*

SOC Implementation Study Of IPSEC Databases

*Kaveripakam Satish Chandra Kumar*

Secure Customization Of the FOX Block Cipher

*Giovanni Ansaloni*

Security For Wireless Sensor Networks

*Philippe Rivard*

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#### 10.20 ***Guiding theme: HW/SW for Advanced Applications***

CATV Return Path Noise Reducer

*Davide Finardi and Andrea Tonini*

Wireless Sensor Networks

*Marcello Mura*

System-Level Design Of the Security Concept Of a Remote Meter Reader

*Daniel Spanagel*

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#### 10.45 Poster Session and Coffee Break

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- 11.00** Automated Power Characterization For Bluetooth Modules  
*David Macii*
- Processing Of Data From Intraocular Distance Measurement With OLCR  
*Liufang Xu*
- Analysis and Benchmarking For Innovative CPU Architectures  
*Oleksander Dorosh and Sebastian Isaza*
- Profibus and Wireless Profibus  
*Hernan Giannetta*
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**11.35 Master Of Science Presentations**

***Guiding theme: Security***

Scheduling Policies For an IPSec Crypto-processor  
*Seyyd Hasan Mirjalili*

Communication Security For the Future Home  
*Georgios Panagiotis Tampouratzis*

Sensor Networks: Power Aspects and Application in the Home Environment  
*Fabio Fabbri*

Enhancing Communication Security on the Client Side  
*Dilek Tekbas*

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**12:05 *Guiding Theme: HW/SW for Advanced Applications***

Controlling and Programming on the Fly an Embedded System Using a Generic Device on a Personal Network  
*Onur Derin*

Hardware/Software Codesign From UML Specifications  
*Tihomir Barakov*

Protection from Side Channel Attacks in Networks-On-Chips  
*Anton Olshevsky*

Analysis of Fault Tolerant Communication Algorithms for Networks-On-Chips  
*Karthik Sankaranarayanan*

Synthesis Of Supervisory Control Programs  
*Jenner Dante Rodriguez Cruz*

An Ethernet PON (EPON) IEEE 802.3ah MAC Controller VHDL implementation  
*Rishi Prasad*

Design and Implementation Of an Enhanced Bluetooth Universal Remote Controller  
*Maksim Djackov*

Secure Transmission Of JPEG2000 Images Over a Wireless Link  
*Baghdasaryan Yelena*

Specification and Modelling Of an Advanced Network on Chip Architecture  
*Payal Kapoor and Gloria Marcela Zuluaga Agudelo*

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- 12:45 Closing Session: Diploma Ceremony**  
MariaGiovanna Sami and Luigi Dadda – ALaRI
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- 13.00 Cocktail**
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