



1st Workshop on Energy Aware Reconfigurable WSNs

EARN'2015

26 - 27 January 2015, Sfax, Tunisia

Cooperation ENIS CESLab/ Cetic (Tunisia)—KACST (KSA)

First Call for participation



Honorary Chairs

Rafik Bouaziz

President of Sfax University, Tunisia

Mohamed Jmaiel

General Director Cetic, Technopole of Sfax, Tunisia

Farhat Rekhis

Director of ENIS, Sfax, Tunisia

Chairs

Abdulfattah M. Obeid

KACST, KSA

Mohamed S. Bensalah

KACST, KSA

Mohamed Abid

CES Lab, ENIS-Sfax, Tunisia

Project Managers

Yousef A. Alzahrani

KACST, KSA

Zied Marrakchi

LIP6, France

Organizing Committee

Kais Loukil

CES, Sfax, Tunisia

Manel Elleuchi

CES, Sfax, Tunisia

Ahmed Masmoudi

CES, Sfax, Tunisia

Fatma Karray

CES, Sfax, Tunisia

Technical Committee

Syed Manzoor Qasim

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Mohamed Wassim Jmal

CES, Sfax, Tunisia

Nesrine Attitallah

CES, Sfax, Tunisia

Manel Boujelbene

CES, Sfax, Tunisia

Sonda Chtourou

CES, Sfax, Tunisia

EARN (Energy Aware Reconfigurable Wireless Sensor Networks) is a cooperation project between CES lab-ENIS/Cetic-Sfax-Technopole/KACST-KSA started in 2014. The Tunisian/KSA Workshop intends to present EARN project activities on the development of Energy Aware Reconfigurable Node Architecture for WSNs. WSNs, composed of individual embedded systems, are able to interact with their environment through various sensors, to process the information locally, and to communicate this information wirelessly with their neighbours. In most applications of WSN, energy efficiency is a primary and major concern. The objective of this project is to explore and to develop novel architectures using state-of-the-art FPGA and ultra-low power deep sub-micron Application Specific Integrated Circuit (ASIC)/SoC technologies. The developed architecture will focus on offloading the compute intensive processing task from the processor to the augmented reconfigurable coprocessor and achieve high energy efficiency.

EARN' 2015 will introduce the project, different activities and works progress. In addition, technical sessions will be held on the second day of the workshop.

Preliminary Program

Monday, 26th of January

09:30 - 10:30	Registration/Guest Reception
10:30 - 11:00	Welcome
11:00 - 11:30	Cetic presentation : Pr. Mohamed Jmaiel
11:30- 12:00	KACST presentation: Dr. Abdulfattah M. Obeid
12:00-12:30	EARN presentation: Dr. Mohamed S. Bensalah
12:30-13:00	Discussion
13:00 - 14:00	Lunch





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Tuesday, 27th of January

Technical meeting (members of the EARN project)

09:00-09:30	<i>Team 1 Presentation: Dr. Mohamed Wassim Jmal</i>
09:30-10:00	Energy optimization in routing and security for WSNs based on new technologies: <i>Manel Elleuchi</i>
10:00-10:30	optimization of energy consumption in wireless sensor networks: <i>Fatma Karray</i>
10:30-11:00	<i>Coffee Break</i>
11:00-11:30	<i>Team2 Presentation: Kais Loukil</i>
11:30 -12:00	Efficient Cross-layer adaption for Wireless Sensor Networks (WSNs): <i>Nesrine Atitallah</i>
12:00-12:30	<i>Team3 Presentation: Zied Marrakchi</i>
12:30-13:00	Specification and Development of an innovative Embedded FPGA IP (eFPGA): Software Configuration Flow : <i>Ahmed Masmoudi</i>
13:00-13:30	<i>Discussion and Closing</i>
13:00-14:00	<i>Lunch</i>

