University of Montenegro
Faculty of Electrical Engineering (ETF)
Centre for Electronics
Multimedia Signals and Systems Centre
Montenegrin Centre of Excellence
Montenegrin Association for New Technologies (MANT)
MECO'2015 Conference
IEEE Montenegro Student Branch

Invite you

to

Distinguished lecture

of

Prof. dr Thanos Stouraitis

University of Patras, Greece, IEEE Fellow, President of the IEEE Circuits and Systems Society, 2012-3

TITLE

Matching Data Representation to Application Requirements
Case study: Cryptographic Systems

TIME and PLACE:

Friday, 24.04.2015, Rectorate Building, 11:30.

ABSTRACT
There is a world of gains to be enjoyed by matching the needs of an application algorithm to the most appropriate data representation. This thesis will be showcased through the investigation for optimal implementation of cryptographic systems. Advancing telecommunications, data storage, military, health, and other "information- sensitive" technologies have accented cryptography as an important design and security factor of modern electronics. Of particular interest for this discussion is the impact of recent algorithmic and mathematical advances in computer arithmetic and alternative number system representations that are useful for cryptography. The lecture also attempts to offer directions towards a more qualitative work model for future cryptography hardware system researchers and designers by showcasing the added value offered by mathematical and algorithmic improvements rather than isolated hardware optimization techniques or exploitation of inherent capabilities of state-of-the-art FPGA devices.

SPEAKER BIO

Prof. Thanos Stouraitis, an IEEE Fellow for his "contributions in digital signal processing architectures and computer arithmetic," is a Professor of the ECE Dept. at the University of Patras, Greece, where he directs the Signal and Image Processing Laboratory. He was President of the IEEE Circuits and Systems Society for 2012-3.

He has served as a member of the founding AdCom of the University of Sterea Hellas in Greece. He has served on the faculty of The Ohio State University and has visited the University of Florida, the New York Polytechnic University, and the University of British Columbia.
He got his Ph.D. in Electrical Engineering from the University of Florida, an M.Sc. from the University of Cincinnati, an M.S. from the University of Athens, Greece, and a B.S. in Physics from the University of Athens, Greece.

His current research interests include signal and image processing systems, application-specific processor technology and design, computer arithmetic, and design and architecture of optimal digital systems with emphasis on cryptographic systems.

He has authored more than 180 technical papers as well as several books and book chapters and holds one patent on DSP processor design. He has led several DSP processor design projects funded by the European Union, American organizations, and the Greek government and industry.

He served as Regional Editor for Europe for the Journal of Circuits, Systems, and Computers, as Associate Editor for several IEEE Transactions. He reviews proposals for NSF, the European Commission, and other agencies. He has served as general chair of IEEE ISCAS 2006 and several other IEEE conferences.

He has received several awards, including the IEEE Guillemin-Cauer Award.

More about Prof. Stouraitis http://dsplab.ece.upatras.gr/thanos/

Introduction:

Prof. dr Radovan Stojanović, ETF