

## SHORT CURRICULUM VITAE

### Dr. Dimitris P. Karampatzakis

Agios Loukas, 65404, Kavala, Greece

Date of birth ▪ December 11, 1978

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#### EDUCATION

**Technical University of Crete (TUC)**, Chania, Greece.

Diploma in Electronics & Computer Engineering (7,73/10), ECE Department, 2003

**University of Thessaly (UTH)**, Volos, Greece.

Ph.D., Department of Electrical & Computer Engineering (Excellent), 2009

**Phd Thesis:** "*Analysis and Optimization of Digital CMOS Circuits*", Advisor Prof. G. Stamoulis

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#### CURRENT STATUS

- **Assistant Professor, International Hellenic University (IHU)**  
(Former EMMATECH - Technological Educational Institute of EMTh/TEI Kavalas),  
Director of "Industrial and Educational Embedded Systems" Lab,  
Dept. of Computer Science, **Jan 2018 - now**

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#### GRANTS

**INTEL unrestricted grant:** "Leakage power analysis & optimization", 2004 (10 kEuros)

**PENED Research Program:** "Concurrent Optimum design for Power Grid and transistor sizing of modern integrated circuits", General Secretariat for Research and Technology of the Greek Ministry of Development, 3 years Program, 2006-2009 (110 kEuros)

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#### WORKING EXPERIENCE

**Post Doc Researcher, ATHENA Research and Innovation Center:** Working in Project called "WelCOM - Wireless Sensor Networks for Engineering Asset Life Cycle Optimal Management" (<http://welcom-project.ceti.gr>), Research and Development Project, "SYNERGASIA", 2011-2014 (1.92 MEuros)

**Broadband Technical Manager:** BTS Greece, Design and implementation of broadband solutions for hotels, restaurants and cafe (Hotspots, IPCameras, IPTelephony), 2007 (1.2 MEuros)

**Microsystems Division Manager:** SENSAP Microsystems SA - a member of Corallia Cluster, Auto-ID - RFID technologies and Applications, Athens, 2007- 2009. I worked for the RFID FP7 EU Project called ASPIRE (<http://www.fp7-aspire.eu/>). Also, I worked on the research for the best RFID products in the market and the decision to resell in Greece the products of IMPINJ, PRINTRONIX and MTI Wireless (year 2007 as a start up company) (350 kEuros).

**Technology Advisor:** Broadband Network of the Prefecture of Magnesia, Capturing - Designing and implementing the project, Volos-Magnesia, 2006 - 2007 (100 kEuros).

**CMOS Chip Tape Out:** Two Tape outs of CAPSENIC, a low-power mixed-signal 0.35u ASIC for integrated MEMS sensors, 2005, University of Thessaly - CERTH - THEON SENSORS S.A., Athens (180 kEuros).

**Information System for the Quality Assurance in Higher Greek Education:** Working in the Project as Project Manager of the Information System Development, TEI Kavalas, 2010 - 2012 (350 kEuros).

**Deputy Mayor of Municipality of Drama:** Responsible for Planning and IT responsible for Integrated Projects for Smart & Sustainable Cities, Sep 2014 - Sep 2019 (13 MEuros).

## **PUBLICATIONS**

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D. P. Karampatzakis participates in (23) academic/scientific publications (En-Gr) in the domain of VLSI, EDA and Information Technologies. All related data are available here:

<https://scholar.google.gr/citations?user=8b-z6IYAAAAJ&hl=en>

## **TEACHING**

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**Undergraduate:** Digital Design, Advanced Digital Design, Embedded Systems, Computer Organization, Computer Architecture.

**Postgraduate:** Embedded Systems

## **RESEARCH AREAS - ACTIVITY**

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**Areas:** RFID Systems, Industrial Maintenance, VLSI Computer Systems, Embedded Systems for LoRaWAN, Systems of Systems modeling, EDA tools

**Reviewer:** IEEE DATE '05 ▪ IEEE ICCAD '04 ▪ 10<sup>th</sup> IEEE IOLTS 2004 ▪ PCI '05 ▪ APMS2012 ▪ PACET2019 ▪ COMNET2019 ▪ IJIREEICE

**Conference Participation:** XVIII EUROSENSORS (Rome) ▪ ICCAD '04 (San Jose, CA) ▪ DAC'05 (Anaheim, CA), 8<sup>th</sup> PhD Forum, Poster presenter ▪ IEEE PRIME '05 (Lausanne, Swiss) - '06 (South Italy) ▪ PCI '08 (Samos, Greece) ▪ APMS2012 (Rhodes, Greece)

## **ACADEMIC PROJECTS (as supervisor)**

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- Design and Implementation using VHDL of a 5-stage ARM processor compatible pipeline, University of Thessaly, 2003-2004.
- Analysis and power consumption for various designs of adders using Synopsys EDA tools, University of Thessaly, 2005.
- Timing and area analysis for H.264-SAD design with various adder structures using Synopsys EDA tools, University of Thessaly, 2006.
- A RTL-to-Grid design flow for power grid verification using a statistical estimation engine, University of Thessaly, 2006.
- «IP Fridge: A smart Refrigerator with internet capabilities», TEI Kavalas, 2010.  
Key words: ARM9, NFC, RFID, SENSORS, .NET
- «A RFID BASED SYSTEM FOR FIREFIGHTING EQUIPMENT MANAGEMENT», TEI Kavalas, 2011.  
Key words: UHF RFID, C#, .NET, BizTalk Server, Impinj, LLRP
- «Smart Digital Portrait», TEI Kavalas, 2011.  
Key words: 4DGL, GOLDELOX-GFX2, uOLED 160 G1, DS18B20
- «Online Survey Questionnaires using CMS», TEI Kavalas, 2012.  
Key words: PHP, JQUERY, LIMESURVEY, AJAX
- «EPC RFID Open Source Platform and Apps», TEI Kavalas, 2011.  
Key words: FOSSTRAK, EPC, UHF RFID, IMPINJ
- «Smart TV app for mass media», TEI Kavalas, 2011.  
Key words: Samsung SDK 4.X, HTML5, CSS, JavaScript and jQuery
- «A parametric building block for the littleBits educational platform», IHU, 2019.  
Key words: littleBits, open hardware, multifunction Logic Gate

## **TECHNICAL SEMINARS**

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- "Power modeling and estimation of digital circuits: Techniques and tools", by OFFIS and ChipVision (Germany). AIT-INTRACOM, Athens, 2003
- NSF-SIGDA-SRC Design Automation Summer School (DASS), Anaheim, CA, 2005
- "The Art of Project Management for IT/IS Projects", HAU - Corallia, Athens, 2008.
- "Auto-ID technologies and Datapools", GSI GR, Athens, 2008.
- "RFID Products - Partners Training", IMPINJ, Nice - France, 2008.
- "RFID Printing Solutions - Partners Training", Printronix, Athens, 2008.
- "Project Management Professional (PMP)® Preparation Course", Thessaloniki, 2013.

## **COMPUTER SKILLS**

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▪ EDA CAD Tools: Synopsys Design Compiler and Power Compiler, Pathmill, PowerMill, HSPICE, MTI HDL Simulator, Intel Quartus FPGA EDA tool, Electric VLSI design

## **LANGUAGES**

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Greek (mother tongue)

English (Advanced)