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

CURRENT STATUS

- **Assistant Professor, International Hellenic University (IHU)**
  Dept. of Computer Science, **Jan 2018 – now**
- **Director of "Industrial and Educational Embedded Systems" Lab**, **Aug 2018 – now**
- **President of the Municipality of Drama Council, Jan 2022 – now**

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)

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 HORECA (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

D. P. Karampatzakis participates in (35) 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

Undergraduate: Digital Design, Computer Organization, Advanced Digital Design, Embedded Systems, Computer Architecture.
Postgraduate: Embedded Systems, Immersive Systems IoT.

RESEARCH AREAS - ACTIVITY

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 ▪ 10th IEEE IOLTS 2004 ▪ PCI '05 ▪ APMS2012 ▪ PACET2019 ▪ COMNET2019 ▪ IJIREEICE
Conference Participation: XVIII EUROSENSORS (Rome) ▪ ICCAD '04 (San Jose, CA) ▪ DAC'05 (Anaheim, CA), 8th PhD Forum, Poster presenter ▪ IEEE PRIME '05 (Lausanne, Swiss) – '06 (South Italy) ▪ PCI '08 (Samos, Greece) ▪ APMS2012 (Rhodes, Greece)

ACADEMIC PROJECTS (as supervisor)

- 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
- «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
- «Design and development of a RISC-V SoC system on FPGAs», IHU, 2022.
  Key words: FPGA, LiteX, Python, RISC-V, SoC

TECHNICAL SEMINARS

- "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", GS1 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

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

LANGUAGES

Greek (mother tongue)   English (Advanced)