Antonis Paschalis
Title: Professor on Logic Design and Architecture
Sector: Computer Systems and Applications
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Academic Qualifications:

- Ph.D. in Computers (1987) Dept. of Physics, NKUA
- M.Sc. in Electronics and Computers (1986), Dept. of Physics, NKUA
- B.Sc. in Physics (1983) Dept. of Physics, NKUA

Appointments:

- April 1999 - today : Professor, Dept. of Informatics and Telecommunications., NKUA
- Sept. 1995 - March 1999 : Senior Researcher, Inst. of Informatics & Telecommunications (IIT), NCSR "Demokritos"
- Oct. 1988 - August 1995 : Collaborative Researcher, IIT, NCSR "Demokritos"
- April 1989 - March 1993 : Post-Doctoral Fellowship, IIT, NCSR "Demokritos"

Teaching Activities: (current)

Undergraduate courses
- Logic Design
- Design of Digital Systems

Postgraduate courses
- Advanced Design of Digital Systems

Supervisor of 7 Ph.D. dissertations

Research Interests/Activities: (last 10 years)

- Reconfigurable Payload Data Processing Units (PDPU)
- The fastest implementations of all space standards for compression, encryption and LDPC channel coding.
- Image Data Compression IP core for ESA PROBA-3 mission
- Embedded Processor-Based Self-Test of Systems-on-Chips
- Logic/RTL Design and Architecture of Digital Systems based on DFT and BIST Techniques
- Low Power/Energy Processor On-Line Fault Detection and
- Reliability
- Fault Tolerant Design and Architecture
- Director of the Digital Systems and Computer Architecture Lab (DSCAL) – TRL-5 at CDR of PROBA-3 mission

Scientific Publications/Citations:

- 52 publications in refereed journals (20 IEEE transactions)
- 99 refereed conference publications (9 ITC, 8 DATE, 1 DAC)
- 3 Invited papers in international journals
- More than 2000 citations. (H-index 27)
- Author/co-author of one book and one book chapter
- 1 US patent

Top five publications

- "Efficient Modular Design of TSC Checkers for M-out-of-
- 2M Codes" A. M. Paschalis, D. Nikolos and C. Halatsis, IEEE Trans. on Computers, March 1988
- "An Effective Built-In Self-Test Scheme for Array Multipliers", D. Gizopoulos, A. Paschalis and Y. Zorian. IEEE Trans. on Computers, Sept. 1999
- "Effective Software-Based Self-Test Strategies for On-Line Periodic Testing of Embedded Processors", A. Paschalis, D. Gizopoulos, IEEE Trans. on CAD of Integrated Circuits and Systems, Jan. 2005
- "Software-Based Self-Testing of Embedded Processors", N. Kranitis, A. Paschalis, D. Gizopoulos, G. Xenoulis, IEEE Trans. on Computers, April 2005
- "Low Energy On-Line Self-Test of Embedded Processors in Dependable WSN Nodes" A. Merentitis, N. Kranitis, A. Paschalis, D.Gizopoulos, IEEE Trans. on Dependable and Secure Computing, 2011

Distinctions:

- "Golden Core Member" from IEEE Computer Society (CS)
- in 2005
- "Meritorious Service Awards" from IEEE CS in 2005 and
- 2007
- "Certificates of Appreciation" from IEEE CS in 1999,
- 2001, 2002, 2003
- Nov. 1982 – Sep. 1986 : Ph.D. Fellowship, IIT, NCSR "Demokritos"

Other Activities:

- ESA PROBA-3 mission: ASPPICS coronagraph instrument Phases B/C/D/E1 (2011-2019)
- Excellence-II/5149-SCORPIUS Single-Chip Radiation Tolerant Dynamically Reconfigurable PDPU for Space Applications
- Chairman of the Department of Informatics and Telecommunications of NKUA
- DSCAL is an si-Cluster Academic Member
- Member of si-Cluster Steering Board
- COST action MEDIAN: Chair of WG 4 "Fault tolerance for space applications"
- 16 R&D projects in total
- Member of the Editorial Board of JETTA (1996-2005)
- Vice chair of the Communications Group of the Test Technology Technical Council of the IEEE Computer Society
- General Chair (IEEE IOLTS/W, 1997, 1999, 2007, 2008,
- 2010, 2011, 2013, 2015, IEEE ETW 2002)
- Vice-General Chair (IEEE IOLTS 2003, 2009)
- More than 60 program committees