# **Curriculum Vitae**

# I. PERSONAL INFORMATION

LAST NAME : KAKAROUNTAS

NAME : ATHANASIOS

FATHER'S NAME : PANAGIOTIS

CITIZENSHIP : GREEK

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# **Short Bio**

Dr. Athanasios Kakarountas (S'98-M'04-SM'12) was born in Lamia city, Greece. He holds a Diploma (1998) and a Ph.D. (2004) in Electrical & Computer Engineering from the University of Patras, Greece, and an MBA (2015) from Cyprus Open University. He is currently an Associate Professor at the University of Thessaly, holding a position for "Embedded Computing Systems" at the Department of Computer Science and Biomedical Informatics. He is the Head of the Department and the Director of the Intelligent Systems Laboratory-iSL. He is also the Director of the Innovation and Entrepreneurship Office in Lamia for the University of Thessaly, and the founder and manager of ParICT, the Central Greece parallel computing node.

In parallel to his academic career, he has served as the Deputy Chairman of National Infrastructures for Research and Technology (GRNET – 2019-2023), the Chair of the Research and Innovation Regional Committee for the Region of Central Greece (2018-2022), the Vice Chair of the Research and Innovation Regional Committee for the Region of Central Greece (2024),the Director for Strategic Development of the Patras Science Park (2007-2008), as a tutor and auditor of the educational material of the Hellenic Open University, and IT expert for the Region of Western Greece and the General Secretariat for Research and Technology (GSRT) of the Greek Government (2007-2008).

His research interests are focused on Computer and Embedded Systems Architecture, VLSI Circuits & Systems Design, Low-power Design and/or Design-for-Test, and Design of Hardware Accelerators for a variety of applications (e.g., image processing, cryptography, medical devices, etc.). Furthermore, he is active in Internet of Things, Cybersecurity, and SmartCity/Smart Home research on Hardware. As a researcher, he has participated in more than 25 research projects funded by EU and the Greek Secretariat for Research and Technology. He has published more than 150 articles in international journals and conference proceedings, and he is the co-author of 2 e-books and 8 chapters in technical books. His research has received more than 1300 citations. He also received 3 international awards, 4 national awards, and the IEEE Outstanding Branch Counselor Award (2013).

He is a Senior Member of IEEE (2012), of IET, and a Senior Member of ACM. He is a reviewer in 27 magazines and journals and a permanent reviewer for more than 20 conferences. He has been a member of the Organizing Committee of several IEEE conferences and workshops (e.g., ICCE-Berlin 2022, DESSERT 2022-2024, etc.) and a member of the Technical Program Committee of numerous IEEE conferences and workshops.

Dr. Kakarountas has served occasionally as a delegate of Greece at the IEEE Region 8 Committee Meetings since 2008. He has served as Secretary (4 years) and as Section Vice-Chair (6 years, 2022 last year) on the Board of the Greece IEEE Section and the interim Chairman of the IEEE Consumer Technology Society – Greece Chapter. Currently, he is a co-Chair of the eGOV Special Technical Committee of the IEEE Computer Society, a member of the IEEE Consumer Technology Technical Committee - Application-Specific CE for Smart Cities (SMC), and Editor-in-Chief in IEEE Potentials magazine.

## II. STUDIES

# 06/2009 - 07/2015

MBA in "Business Management" from the Open University of Cyprus

# 02/2004 - 05/2007

Post-Doc in the Dpt. of Electrical & Computer Engineering from the University of Patras, Greece, Laboratory of VLSI Design.

## 02/2004:

Ph.D. of Electrical & Computer Engineering from the University of Patras, Greece, Laboratory of VLSI Design.

Thesis: "Design of low-power fault-secure systems"

## 06/1998:

Diploma of Electrical & Computer Engineering, from the University of Patras, Greece.

#### III. RESEARCH INTERESTS

- Embedded Systems for Smart Cities and Medical applications
- Computer Architecture
- Design for Testability
- Safety-critical system design
- Design Low Power Systems
- Security System Design and Optimization
- Design of Cryptographic primitives
- Wearable devices (e.g., medical)
- Integration of ML Algorithms on portable systems
- ML at the edge
- Hardware accelerators
- Microprocessors
- Neuromorphic circuits/systems

## **IV. LANGUAGES**

- 1. Fluent Greek
- 2. Fluent English
- 3. Good knowledge of the French language
- 4. Satisfactory knowledge of the German language

#### V. ACADEMIC POSITIONS

- 2/2021-today: Associate Professor at the University of Thessaly, Dpt. of Computer Science and Biomedical Informatics, topic "Embedded Computing Systems".
- 3/2016-2/2021: Assistant Professor at the University of Thessaly, Dpt. of Computer Science and Biomedical Informatics, topic "Computer Architecture".
- 12/2012-3/2016 Assistant Professor at the TEI of Ionian Islands, Dpt. of Computer Science for Management and Economy, topic "Computing Embedded Systems' Architecture".

#### VI. Participation in Projects

- 1. "EASY: Energy-Aware SYstem-on-Chip design of the HIPERLAN/2 standard" IST-2000-30093, European Union funding (1/9/2001-31/8/2004)
- 2. "COSAFE: Low Power Hardware-Software Co-Design for Safety-Critical Applications" IST-1998-28593, European Union funding KE 846, (1/8/1998 30/1/2001)
- 3. "A memory management methodology for real-time and low-power embedded multimedia systems", in the bounds of PENED'99 99ED501, Greek Secretariat of Research and Technology funding
- "LPGD: A low-power design methodology/flow and its application to the implementation of a DCS1800-GSM/DECT Modulator-Demodulator" ESPRIT IV European Union funding through INTRACOM, (11/97 - 10/99).
- 5. "AMDREL: Architectures and Methodologies for Dynamic Reconfigurable Logic", IST-2001-34379, European Union funding
- 6. "TARDIS: Technical Coordination and Dissemination", Esprit project 25213-ESD-LPD, European Union funding
- 7. "MARLOW: A central market place for dissemination of lowpower microelectronics", IST-2001-37115, European Union funding
- 8. "INTRALED: Industry-driven training for low-power European designers", IST-2001-34631, European Union funding
- 9. "AMIED: Asynchronous low-power methodology and implementation of an encryption-decryption system", Esprit project 25249-ESD-LPD, European Union funding
- 10. "PYTHAGORAS: Methodologies for Revealing Reconfigurable Architectures for Embedded Systems", Greek Secretariat of Research and Technology funding
- 11. "ARCHIMIDIS II: Design of crypto-systems based on residual structures", Greek Secretariat of Research and Technology funding
- 12. «Regional Innovation pole Region of Western Greece», development project from General Secretariat of Research and Technology (researcher of Patras Science Park)
- 13. «ALMA: Architecture oriented paraLlelization for high performance embedded Multicore systems using scilAb», funded by EU as researcher (duration: 01/09/2012 31/08/2013)

- 14. "Development of JPEG-XR encoder for integration into digital electronic systems" in the framework of the "New Business Support for Research & Technological Development Activities" Act, as an experienced researcher, funded by EYDE-ETAK for applied research. (Duration: 1/1/11 12/2012) (Proposal writer rated 1st in the respective ranking list)
- 15. "MOTHER LANGUAGE", as project coordinator, development project, financing INTERREG IIIA (duration: 1/6/07 31/5/08)
- 16.TOPEKO LEFKADAS, development project, NSRF funding (Duration: 1/2011 11/2014) as Scientific Supervisor for the Ionian Islands TEI (24th issue, Committee on Education and Research, 18th Regular Board Meeting, 16/05/2012)
- 17. "Regions 4 Green Growth" Regional policy instruments and approaches to improve access to finance and accelerated investment in sustainable energy, development work, financing INTERREG IVC, as a researcher for the preparation of a Regional Action and Implementation Plan (Duration) 01/07/2014 30/09/2014)
- 18. "Runtime Verification Beyond Monitoring (ARVI)", ICT COST Action IC1402, as the representative of Greece to the Management Committee. (12/2014 2017)
- 19. "Bio-informatics IoT Security Research (SmartBIoT)", International grant by Nokia Corporation (Bell Labs), 30 k€. (01.09.2017 31.08.2019)
- 20. "Smart Delivery", National Research-Creator-Innovative National Program, EYDE-ETAK, as a Scientific Supervisor and Researcher, 320 k€ out of a total of 1 M€. (01.06.2018 30.05.2021)
- 21. "Monitoring the supply chain and process of producing food products using blockchain technology," Action "Support for Research, Technological Development and Innovation Plans in areas of RIS3 of the Central Greece Business Program 2014-2020", P.I. Vassilis Plagianakos, Budget: €698.000, duration: 2020-2022
- 22. "GeoMake-It: Geo-Games Organization and Development Integrated System", National Research-Creator-Innovative National Program, EYDE-ETAK, as a Researcher, 668 k€ out of a total of 1 M€. (2019 2021)
- 23. "Development of a statistical machine learning toolbox for integrating medical data bases," as Deputy P.I. (2020-2022)
- 24. "ParICT\_CENG: ICT Research infrastructures enhancement in Central Greece for the processing of Big Data from sensor streams, multimedia, and complex mathematical models simulations," Action "Reinforcement of the Research and Innovation Infrastructure," funded by the Operational Programme "Competitiveness, Entrepreneurship and Innovation" (NSRF 2014-2020) and co-financed by Greece and the European Union (European Regional Development Fund), P.I. Athanasios Kakarountas, Budget: € 1.200.000, duration: 11/2019-04/2022
- 25. "Population Health Information Research Infrastructure (PHIRI) for COVID-19", Horizon 2020, No 101018317, Researcher (sub-contractor)
- 26. "ARTEMIS Securing Supply Chain Traceability Using Distributed and Embedded Security Mechanisms", National Research-Creator-Innovative National Program, EYDE-ETAK, as a Scientific Supervisor and Researcher, € 996.650. (2021-2023)

- 27. «Population Health Information Research Infrastructure (PHIRI) for COVID-19», Horizon 2020, No 101018317, Researcher (sub-contractor)
- 28. "Practical security in the quantum era", International grant by Nokia Corporation (Bell Labs), € 40.000. (01.12.2022 01.12.2025)
- 29. "HSmartBPM: Smart Hypertension and Blood Pressure Monitoring Solution for essential care and prevention", Private project (2023).
- 30. "Climate Change and Natural Disasters Awareness Raising using Virtual Worlds", 2023-1- EL01-KA220-SCH-000155463, Erasmus+, € 250.000. (01.12.2023 01.12.2025)

## VII. PROFESSIONAL EXPERIENCE

- 1. Collaboration with Micrel Medical Devices (01/10/98 15/08/02). Design, testing and development of a medical medicine infusion pump, including hardware and software.
- 2. Collaboration with Alma Techologies (01/01/02 31/01/04). Author of numerous scripts for automatic VHDL code generation.
- 3. Collaboration wirh Alma Techologies (01/01/02 31/01/04). Responsible for optimizing the synthesis algorithms for electronic circuits and systems.
- 4. Collaboration with Alma Techologies (01/01/02 today). Technical Advisor for Design and Testing topics.
- 5. Collaboration with Sciensis Ltd (01/09/03 28/02/05). Programmer for embedded systems' kernels.
- 6. Collaboration with Sciensis Ltd (01/09/03 28/02/05). Technical Advisor for Design and Testing topics.

## VIII. SCIENTIFIC MEMBERSHIP AND SCIENTIFIC POSITIONS

- Senior Member of IEEE
- IEEE Societies
  - Member of the Consumer Technology Society
  - Member of Computer Society
  - Member of the Circuits and Systems Society (CAS)
  - Member of the Engineering in Medicine and Biology (EMB) Society
  - Member of the Solid-Satete Society
  - Member of the Test Technology Technical Council
- Member of the Greek CAS & SSC IEEE Chapter
- Senior Member of the Association Computing Machinery (ACM)
- Member of the IET
- Member of the Greek Technical Chamber (TEE)
- Member of the EPY
- Member of EmiPEE

- Member of Application-Specific CE for Smart Cities (SMC) Technical Committee, IEEE Consumer Technology Society (2021-today)
- Co-chair of e-Government Technical Society Committee (TSC), IEEE Computer Society (2022-today).
- Member of IEEE Publication Services and Products Board (Lead Volunteers of Institute-Wide Publications) (2024)
- Chair of IEEE Potentials Magazine Committee Initiative (MGA Student Activities Committees)
   (2024)
- Vice President of GRNET (National Infrastructures for Research and Technology (2019-2023)
- President of the Central Greece Regional Committee for Research and Innovation (2017-2023)
- Vice President of the Central Greece Regional Committee for Research and Innovation (2024today)
- Vice-chair of IEEE Greece Section (2016-2022)
- Chairman of IEEE Consumer Electronics Society Greece Chapter (2011-2022)
- Counsellor of IEEE Student Branch University of Thessaly (Lamia) Greece

#### IX. PARTICIPATION IN THE LABORATORY'S ACTIVITIES

Director of the Intelligent Systems Laboratory (2019-today). He has organized the laboratory to become one of the largest research laboratories in Central Greece and Thessaly, employing 5 Professors, 1 Senior Researcher as Laboratory Teaching Staff, 4 PostDoc researchers, more than 20 Ph.D. candidates, more than 10 MSc, and approximately 25 undergraduate students. The laboratory supports its activities by one technician, one financial assistant, one marketing expert, and one secretary. Its premises include more than 70 sq.m. of offices and 100 sq.m. of laboratory facilities. The funding of the iSL exceeds 5M€ for the last five years, attracting collaborations with prestigious organizations and enterprizes. iSL operates one the argest HPC node in Central Greece; that is one the four competitive HPC nodes of Greece.

## X. PUBLICATIONS

## A. Ph.D. Thesis

**A1.** A.P. Kakarountas: "Design of Low-Power Fault-Secure Systems", University of Patras, Patra, Greece, 2004.

#### **B. Book Chapter**

**B1.** A.P. Kakarountas, K.S. Papadomanolakis, C.E. Goutis, "Low-Power Design for Safety-Critical Applications" in "Designing CMOS Circuits for Low Power," editors D. Soudris, C. Piguet, and C.E. Goutis, September 2002, Dordrecht/London/Boston, Kluwer Academic Publishers, September 2002, Dordrecht/London/Boston, pp. 9-22.

- **B2.** A.P. Kakarountas, R.E. King, "Simulation and Virtual Reality" in "Industrial Informatics," (greek language) editor R.E. King, 2004, Tziolas Publications, pp. 177-185.
- **B3.** A.P. Kakarountas, H.E. Michail, "Chapter 12: Performance for Cryptography: hardware and software approach", in "Supercomputing Research Advances", Ed. Yongge Huang, Nova Science Publishers, Inc., ISBN: 978-1-60456-186-9, 2008, pp. 403-418.
- **B4.** A.P. Kakarountas, H.E. Michail, "Chapter 9. Performance for Cryptography: a hardware approach", in "Cryptography Research Perspectives", Ed. Roland E. Chen, Nova Science Publishers, Inc., ISBN: 978-1-60456-492-1, 2009, pp. 217-232.
- **B5.** A.P. Kakarountas, H.E. Michail, "Chapter 5: Performance for Cryptography: a hardware approach", in "Computer Security: Intrusion, Detection and Prevention", Eds. Ronald D. Hopkins and Wesley P. Tokere, Nova Science Publishers, Inc., ebook, ISBN: 978-1-60876-657-4, Q2 2009, pp. 91-106.
- **B6.** E. Boumpa and A. Kakarountas, "Home Supporting Smart Systems for elderly people", in "Convergence of ICT and Smart Devices for Emerging Applications", editors Sara Paiva and Suman Paul, 2020, EAI/Springer Innovations in Communications and Computing, ISBN: 978-3-030-41367-5, DOI: 10.1007/978-3-030-41368-2, pp., 2020.
- **B7.** D. Myridakis and A. Kakarountas, "Mimicking Biometrics on Smart devices and its application in IoT Security for Health systems", in "IoT and ICT for Healthcare Applications", editors Nishu Gupta and Sara Paiva, 2020, EAI/Springer Innovations in Communications and Computing, ISBN: 978-3-030-42933-1, DOI: 10.1007/978-3-030-42934-8, pp., 2020.
- **B8.** V. Chioktour and A. Kakarountas, "Degradation of reliability of digital electronic equipment over time and redundant hardware-based solutions", accepted for inclusion in the collective book "Statistical Modeling of Reliability Structures and Industrial Processes", Triantafyllou, I. and Ram, M. (eds), CRC Press, Taylor & Francis Group, USA. (to appear), 2021.
- **B.9** K. Papageorgiou, A. Fakis, G. Spathoulas and A. Kakarountas, "Chapter 9: A holistic overview of security issues for blockchain-based distributed applications", in the collective book "Security and Privacy in Smart Environments," S. Katsikas and N. Pitropakis (eds), Springer (in pre-publication phase).

## C. Journals and Magazines

- C1. Nikolaidis, E. Karaolis, A. Kakarountas, K. Papadomanolakis and C.E. Goutis, "A Methodology for Calculating the Undetactable Double-Faults in Self-Checking Circuits", Journal of Circuits, Systems and Computers, World Scientific, Vol. 12, No. 1, pp. 75-91, February 2003. (I.F. 1.333, SJR Q3: 0.25, Scopus CiteScore Q2: 2.6)
- C2. A. Milidonis, G. Dimitroulakos, M. D. Galanis, A. P. Kakarountas, G. Theodoridis, C.Goutis, and F.Catthoor, "A Framework for Data Partitioning for C++ Data-Intensive

- Applications", Journal of Design Automation for Embedded Systems, Springer Science+Business Media B.V., Vol. 9, No. 2, pp. 101-121, June. 2004. (I.F. 3.815, SJR Q2: 0.42, Scopus CiteScore Q2: 5.4)
- C3. M.D. Galanis, A. Milidonis, A.P. Kakarountas, and C.E. Goutis, "A Design Flow for Speeding-up DSP Applications in Heterogeneous Reconfigurable Systems", Microelectronics Journal, Elsevier, vol 37, pp. 554-564, 2006. (I.F. 1.605, SJR Q3: 0.29, Scopus CiteScore Q2: 3.0)
- C4. A.P. Kakarountas, H. Michail, A. Milidonis, G. Theodoridis, C.E Goutis, "High-Speed FPGA Implementation of Secure Hash Algorithm for IPSec and VPN Applications", Journal of Supercomputing, Springer Science + Business Media, vol. 37, pp. 179–195, 2006. (I.F. 2.474, SJR Q2: 0.45, Scopus CiteScore Q2: 4.6)
- C5. H.E. Michail, A.P. Kakarountas, A.Milidonis, C.E. Goutis, "Efficient FPGA Implementation of Novel Cryptographic Hashing Core", Computing Letters, VSP/Brill Publishing, vol. 2, num. 1-2, pp. 21-27(7), 2006.
- **C6.** I. Yiakoumis, M. Papadonikolakis, H.E. Michail, A.P. Kakarountas, C.E. Goutis "Maximizing the hash function of authentication codes", IEEE Potentials, vol. 25, iss. 2, pp. 9–12, 2006. (SJR Q3: 0.23, Scopus CiteScore Q3: 1.3)
- C7. H.E. Michail, A.P. Kakarountas, C.E. Goutis "Server Side Hashing Core Exceeding 3 Gbps of Throughput", International Journal of Network Security (special issue), Vol. 1, Nos. 1/2/3, pp. 43–53, 2007. (SJR Q4: 0.12)
- C8. A.P. Kakarountas, N.D. Zervas, H.E. Michail, G. Theodoridis, and D. Soudris, "Power Management through Dynamic Frequency Scaling for Low and Medium bit-rate Digital Receivers", Journal of Low Power Electronics, ASP, vol.2, no 3, pp. 356–364, 2006. (JCI Q4: 0.11, SJR Q4: 0.19, Scopus CiteScore Q3: 1.3)
- **C9.** G. N. Selimis, A.P. Kakarountas, A. P. Fournaris, A. Milidonis and O.Koufopavlou, "A Low Power Design for SBOX Cryptographic Primitive of Advanced Encryption Standard for Mobile End-Users", in Journal of Low Power Electronics, ASP, vol.3, no.3, pp. 327-336, 2007. (JCI Q4: 0.11, SJR Q4: 0.19, Scopus CiteScore Q3: 1.3)
- C10. H.E. Michail, A. P. Kakarountas, A. S. Milidonis and C. E. Goutis, "A Top-Down Design Methodology for Ultrahigh-Performance Hashing Cores", IEEE Transactions on Dependable and Secure Computing, vol.6, is.4, pp.255-268, 2009. (I.F. 7.329, SJR Q1: 1.27, Scopus CiteScore Q1: 13.9)
- C11. M. Papadonikolakis, A.P. Kakarountas, C.E. Goutis, "Efficient High-Performance Implementation of JPEG-LS Encoder", in Journal of Real-Time Image Processing, Springer. vol. 3, no. 4, pp 303-310, 2008. (I.F. 1.968, SJR Q3: 0.3, Scopus CiteScore Q2: 3.5)
- C12. A. Milidonis, V. Porpodas, N. Alachiotis, A. P. Kakarountas, H. Michail, G. Panagiotakopoulos and C. E. Goutis, "Low Power Architecture with Scratch-Pad Memory for Accelerating Embedded Applications with Run Time Reuse", IET

- Computers & Digital Techniques, IET, vol. 3, is. 1, pp.109-123, 2009. (I.F. 0.803, SJR Q3: 0.22, Scopus CiteScore Q3: 1.9)
- C13. D.M. Schinianakis, A.P. Fournaris, H.E. Michail, A.P. Kakarountas and T. Stouraitis, "An RNS Architecture of an Fp Elliptic Curve Point Multiplier", IEEE Transactions on Circuits and Systems I, vol.56, no.6, pp. 1202-1213, June 2009. (I.F. 3.318, SJR Q1: 0.86, Scopus CiteScore Q1: 6.7)
- C14. A.P. Kakarountas, H.E. Michail, C.E. Goutis, A.M. Rjoub, "High-Throughput Implementation of RipeMD-160", International Journal for Internet Technology and Secured Transactions, Inderscience Ltd, vol. 1, no. 3/4, pp. 309 316, 2009. (Scopus CiteScore Q4: 1.0)
- C15. A. Milidonis, N. Alachiotis, V. Porpodas, H. Michail, G. Panagiotakopoulos, A.P. Kakarountas, C.E. Goutis, "Decoupled Processors Architecture for Accelerating Data Intensive Applications using Scratch-Pad Memory Hierarchy", Journal of Signal Processing Systems. Springer Science + Business Media, LLC, vol. 59, no.3, pp. 281-296, 2010. (I.F. 1.348, SJR Q3: 0.28, Scopus CiteScore Q2: 2.7)
- C16. H.E. Michail, A.P. Kakarountas, D. Schinianakis, G. Selimis, C.E. Goutis, "Cipher Block based Authentication Module: A Hardware Design Perspective", Journal of Circuits, Systems and Computers, World Scientific Publishing, Vol. 20, No. 2, pp. 163-184, 2011. (I.F. 1.333, SJR Q3: 0.25, Scopus CiteScore Q2: 2.6)A.P. Kakarountas, H.E. Michail, "Performance for Cryptography: A Hardware Approach", International Journal of Computer Research, Nova Science Publishers, Inc., vol. 19, is. 2/3, pp. -, 2013.
- C17. A.P. Kakarountas, H.E. Michail, "Performance for Cryptography: A Hardware Approach", International Journal of Computer Research, Nova Science Publishers, Inc., vol. 19, is. 2/3, pp. , 2013.
- C18. A.P. Kakarountas, "Safety and Security for Shared Storage Media", in Journal of Engineering Science and Technology Review JESTR, Vol.9, No. 5, pp. 142 144, 2016. (SJR Q2: 0.19, Scopus CiteScore Q3: 1.2)
- C19. P. Oikonomou, A. Dadaliaris, K. Kolomvatsos, T. Loukopoulos, A. Kakarountas, and G. Stamoulis, "Improved Parallel Legalization Schemes for Standard Cell Placement with Obstacles", Technologies, MDPI, vol. 7, no. 1, p. 3, Dec. 2018. (I.F. 3.6, JCI Q2: 0.86, SJR Q1: 0.93, Scopus CiteScore Q1: 5.5)
- **C20.** A.P. Kakarountas, "The Internet of Things: Trends, Threats, and Applications", editorial, in IEEE Potentials Magazine, vol. 38, is. 2, 2019. (SJR Q3: 0.23, Scopus CiteScore Q3: 1.3)
- C21. E. Boumpa, A. Gkogkidis, I. Charalampou, A. Ntaliani, A. Kakarountas, V. Kokkinos, "An Acoustic-based Smart Home System for People suffering from Dementia", Technologies, MDPI, vol. 7(1), is. 29, Mar. 2019. Part of the Special Issue Smart Homes and Assisted Living for Ageing Population: From Sensors to Services. https://doi.org/10.3390/technologies7010029 (I.F. 3.6, JCI Q2: 0.86, SJR Q1: 0.93, Scopus CiteScore Q1: 5.5)

- C22. D. Myridakis, G. Spathoulas, A. Kakarountas, D. Schinianakis, "Smart Devices Security Enhancement via Power Supply Monitoring", Future Internet, MDPI, vol. 12, no. 3, is. 48, Mar. 2020. Part of the Special Issue "Security and Reliability of IoT---Selected Papers from SecRIoT 2019". https://doi.org/10.3390/fi12030048 (I.F. 3.4, JCI Q2: 0.78, SJR Q1: 0.93, Scopus CiteScore Q1: 6.7)
- C23. K. Kalovrektis, A. Xenakis, I. Korinthios, A. Kakarountas, A. Gotsinas, G. Stamoulis, "An IoT Sensor Based Hand Trembling Robotic System for Studying Parkinson's Symptoms", International Journal of Internet of Things, SAP, vol. 9, is. 1., pp. 12-19, 2020. https://doi.org/10.5923/j.ijit.20200901.02
- C24. D. Myridakis, S. Papafotikas, K. Kalovrektis, A. Kakarountas, "Enhancing Security on IoT Devices via Machine Learning on Conditional Power Dissipation", Special Issue "Hardware Support for the Security of Computing Devices", in Electronics, MDPI, 9(11), pp. 1799, 2020. https://doi.org/10.3390/electronics9111799 (I.F. 2.9, JCI: 0.65, SJR Q2: 0.36, Scopus CiteScore Q2: 4.7)
- C25. D. Myridakis, P. Myridakis, A. Kakarountas, "A Power Dissipation Monitoring Circuit for Intrusion Detection and Botnet Prevention on IoT Devices", Special Issue "Recent Advances in Computation Engineering", Computation, MDPI, 9(2), pp.19, 2021. https://doi.org/10.3390/computation9020019 (I.F. 2.2, JCI: 0.72, SJR Q2: 0.36, Scopus CiteScore Q2: 3.3)
- C26. V. Chioktour, A. Kakarountas, "Constant Delay Systolic Binary Counter with Variable Size Cellular Automaton-Based Prescaler", in Computers and Electrical Engineering, Elsevier, v.93, 2021. https://doi.org/10.1016/j.compeleceng.2021.107291 (I.F. 2.66, SJR Q1: 0.63, Scopus CiteScore Q1: 7.5)
- C27. G. Giannoukos, A. Kakarountas and V. Chioktour, "Interaction between two cells based on a recurrent neural network using the impedance concept", Journal of Computational Methods in Sciences and Engineering, IOS Press, vol. 21, no. 2, pp. 293-299, 2021. https://doi.org/10.3233/JCM-204367 (I.F. 0.5, JCI: 0.14, SJR Q3: 0.16, Scopus CiteScore Q4: 0.16)
- C28. D. Schor, T. Kakarountas, "The Benefits of Engineering Design Competitions", editorial, in IEEE Potentials Magazine, vol. 40, is. 4, 2021. (SJR Q3: 0.23, Scopus CiteScore Q3: 1.3)
- C29. C. Velaora, I. Dimos, S. Tsagiopoulou, A. Kakarountas, "A game-based learning approach in Digital Design course to enhance students' competency", Information, MDPI, 13(4), 177, pp. 1–25, 2022. https://doi.org/10.3390/info13040177 (I.F. 3.1, JCI: 0.67, SJR Q2: 0.93, Scopus CiteScore Q2: 5.8)
- C30. A. Gkogkidis, V.Tsoukas, A. Kampa, G. Spathoulas, A. Kakarountas, "Enhancing food supply chain security through the use of blockchain and TinyML", Information, MDPI, 13(5), 213, 2022. https://doi.org/10.3390/info13050213 (I.F. 3.1, JCI: 0.67, SJR Q2: 0.93, Scopus CiteScore Q2: 5.8)

- C31. A. Fragkou, A. Kakarountas, V. Kokkinos, "Low Power EEG Data Encoding For Brain Neurostimulation Implants", Information, MDPI, 13(4), 194, pp. 1–15, 12 April 2022. https://doi.org/10.3390/info13040194 (I.F. 3.1, JCI: 0.67, SJR Q2: 0.93, Scopus CiteScore Q2: 5.8)
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- D72. D. Myridakis, G. Spathoulas, A. Kakarountas, D. Schoinianakis, and J. Lueken "Monitoring Supply Current Thresholds for Smart Device's Security Enhancement", to appear in Proc. of the 1st International Workshop on Security and Reliability of IoT Systems (SecRIoT 2019), Santorini, Greece, pp. , 29-31 May 2019.
- D73. M. Sapounaki, A. Kakarountas, "A High-Performance Neuron for Artificial Neural Network based on Izhikevich model", to appear in Proc. of the 29th International Symposium on Power And Timing Modeling, Optimization and Simulation (PATMOS'19), Rhodes, Greece, pp. , 1-3 July 2019.
- **D74.** V. Tsoukas, K. Kolomvatsos, V. Chioktour, A. Kakarountas, "A Comparative Assessment of Machine Learning Algorithms for Events Detection", to appear in Proc. of the 4th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2019), Piraeus, Greece, pp. , 20-22 September 2019.
- D75. S. Papafotikas, A. Kakarountas, "A Machine-Learning Clustering Approach for Intrusion Detection to IoT Devices", to appear in Proc. of the 4th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2019), Piraeus, Greece, pp. -, 20-22 September 2019.
- **D76.** C. Velaora, A. Kakarountas, "Logic Design as an Enabler to Python Programming Language Teaching", to appear in Proc. of the PAnhellenic Conference on Electronics & Telecommunications (PACET 2019), Volos, Greece, pp. , 8-9 November 2019.
- **D77.** A. Gkogkidis, A. Kakarountas, "Exploration Study on Configurable Instruction Set for Bioinformatics' Applications", to appear in Proc. of the PAnhellenic Conference on Electronics & Telecommunications (PACET 2019), Volos, Greece, pp. , 8-9 November 2019.
- **D78.** V. Tsoukas, A. Gkogkidis, A. Kakarountas and G. Giannakas, "Multi-Screen Lock: Visual Passwords from User's Social Data", to appear in Proc. of the 23rd Pan-Hellenic Conference on Informatics (PCI 2019), Nicosia, Cyprus, pp. , 28-30 November 2019.

- D79. E. Boumpa, A. Kakarountas, "Smart system for supporting the elderly in home environment", in Proc. of the 8th EAI International Conference on Wireless Mobile Communication and Healthcare, Mobihealth 2019, Dublin, Republic of Ireland, pp., November 2019.
- V. Kokkinos and A. P. Kakarountas, "Design of Reconfigurable Fault-Tolerant Datapaths", to appear in Proc. of the 5th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2020), Corfu, Greece, pp. , 25-27 September 2020. https://doi.org/10.1109/SEEDA-CECNSM49515.2020.9221789
- D81. A. Kakarountas, G. Spathoulas, P. Trivellas, P. Reklitis and G. Malindretos, "Survey on Routing Services for Smart Delivery in Urban Environments", to appear in Proc. of the 5th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2020), Corfu, Greece, pp. , 25-27 September 2020. https://doi.org/10.1109/SEEDA-CECNSM49515.2020.9221814
- V. Tsoukas, A. Gkogkidis, and A. Kakarountas, "A Survey on Mobile User Perceptions of Sensitive Data and Authentication Methods", in Proc. of the 23rd Pan-Hellenic Conference on Informatics (PCI 2020), Athens, Greece, pp. 346-349, 20-22 November 2020. doi.org/10.1145/3437120.3437337
- **D83.** O. Petroulaki, A. Bicaku, and A. Kakarountas, "A Generalized Tonic-Clonic Seizure Detection Method in a Bathtub using a Natural Language Verification Step", in Proc. of the 23rd Pan-Hellenic Conference on Informatics (PCI 2020), Athens, Greece, pp. 407-410, 20-22 November 2020. doi.org/10.1145/3437120.3437351
- D84. A. Tonacci, L. Billeci, and A. Kakarountas, "Success stories from consumer technology helping and saving lives", in Proc. of 2021 Zooming Innovation in Consumer Technologies Conference (ZINC 2021), Novi Sad, Serbia, pp. -, 26-27 May 2021. doi.org/10.1145/3437120.3437337
- D85. M. Sapounaki, A.P. Kakarountas, "A Novel Low-power Neuromorphic Circuit based on Izhikevich Model", in Proc. of the 2021 International Conference on Modern Circuits and Systems Technologies (MOCAST), Thessaloniki, Greece, pp. , 5-7 July 2021.
- **D86.** G. Spathoulas, S. Tsagiopoulou, and A. Kakarountas, "Secure aggregation of users' privacy preferences in shared IoT environments", accepted in Proc. of the 6th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2021), Preveza, Greece, pp. , 24-26 September 2021.
- **D87.** G. Spathoulas, A. Kakarountas, A. Gkogkidis, V. Tsoukas, and A. Kampa, "Blockchain technology in food supply chain: A state of the art", accepted in Proc. of the 6th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2021), Preveza, Greece, pp. , 24-26 September 2021.

- D88. S. Zagori, A. Kakarountas, "Prototype Haptic Feedback Device for Robot-Assisted Minimally Invasive Surgery", accepted in Proc. of the 6th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2021), Preveza, Greece, pp., 24-26 September 2021.
- D89. M. Kalafati, A. Kakarountas, "A Smart Assistant Nightstand For Hospitals", accepted in Proc. of the 6th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2021), Preveza, Greece, pp., 24-26 September 2021.
- **D90.** A. Fragkou, A. Kakarountas, V. Kokkinos, "Low-Power Electroencephalographic Data Encoding System for Implantable Brain Stimulation Systems", accepted in Proc. of the 6th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2021), Preveza, Greece, pp. , 24-26 September 2021.
- **D91.** C. Velaora, A. Kakarountas, "Game-Based Learning for Engineering Education", accepted in Proc. of the 6th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2021), Preveza, Greece, pp., 24-26 September 2021.
- D92. A. Bicaku, M. Sapounaki, A. Kakarountas, "A low-Complexity bit-Efficient Neuromorphic Astrocyte-Neuron Circuit", accepted in Proc. of the 28th IEEE International Conference on Electronics, Circuits & Systems, Dubai, UAE, pp., November 28 December 1, 2021.
- **D93.** E. Boumpa, V. Tsoukas, A. Gkogkidis, G. Spathoulas, A. Kakarountas, "Security and privacy concerns for healthcare wearable devices and emerging alternative approaches", in Proc. of the 10th EAI International Conference on Wireless Mobile Communication and Healthcare, Mobihealth 2021, Chongqing, People's Republic of China, pp. -, 13-14 November 2021.
- D94. C. Kompogiannis, M. Sapounaki, and A. Kakarountas, "Development of a Neuromorphic Circuit in Reconfigurable Technology for the Simulation of Synapses", in 25th Pan-Hellenic Conference on Informatics (PCI 2021), Volos, Greece, pp. -, 26-28 November 2021. https://doi.org/10.1145/3503823.3503918
- V. Tsoukas, E. Boumpa, G. Giannakas, and A. Kakarountas, "A Review of Machine Learning and TinyML in Healthcare", in 25th Pan-Hellenic Conference on Informatics (PCI 2021), Volos, Greece, pp. -, 26-28 November 2021. https://doi.org/10.1145/3503823.3503836
- **D96.** E. Kokkinou, A. M. Koupparis, G. K. Kostopoulos, A. P. Kakarountas, V. Kokkinos, "Analysis of spectral behavior of individual sleep spindles", in American Clinical Neurophysiology Society (ACNS2022), Orlando, FL, U.S.A., poster, 26-30 January 2022.
- **D97.** V. Tsoukas, A. Gkogkidis and A. P. Kakarountas, "Elements of TinyML on constrained recourse hardware", in 6th International Conference on Advances in Computing and Data Sciences (ICACDS)-2022, GPCET, Kurnool, India, pp. -, 22-23 April 2022.

- **D98.** A. Gkogkidis, V. Tsoukas, S. Papafotikas, E. Boumpa and A.P. Kakarountas, "A TinyML-based system for gas leakage detection", accepted for inclusion in Proc. of the 2022 International Conference on Modern Circuits and Systems Technologies (MOCAST), Bremen, Germany, pp. -, 8-10 June 2022.
- **D99.** A. Gkogkidis, V. Tsoukas, S. Papafotikas, E. Boumpa and A.P. Kakarountas, "A TinyML-based system for gas leakage detection", in Proc. of 2022 International Conference on Modern Circuits and Systems Technologies (MOCAST), Bremen, Germany, pp. , 8-10 June 2022.
- D100. A. Gkogkidis, V. Tsoukas, A. Kakarountas, "A TinyML-based Alcohol Impairment Detection System For Vehicle Accident Prevention", in Proc. of 2022 7th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2022), IEEE. Ioannina, Greece, pp. -, 23-25 September 2022.
- **D101.** I. Dimos, C. Velaora, A. P. Kakarountas, "Computational Thinking in Greek Educational System for K-12: towards the future teaching approach", in Proc. of 2022 Panhellenic Conference on Electronics & Telecommunications (PACET), Tripoli, Greece, pp. , 2-3 December 2022.
- **D102.** V. Tsoukas, A. Gkogkidis and A. P. Kakarountas, "A TinyML-based System For Smart Agriculture", in Proc. of 26th Pan-Hellenic Conference on Informatics (PCI 2022), Athens, Greece, pp. 207-212, 25-27 November 2022.
- D103. E. Boumpa, V. Tsoukas, V. Chioktour, M. Kalafati, G. Spathoulas and A. P. Kakarountas, "Smart Delivery for Goods Exploiting ML Algorithms", in Proc. of 26th Pan-Hellenic Conference on Informatics (PCI 2021), Athens, Greece, pp. 304-408, 25-27 November 2022. https://doi.org/10.1145/3575879.3576009
- **D104.** A. Karageorgopoulou, V. Tsoukas, G. Spathoulas, A. Kakarountas, and M. Koziri, "Paillier Algorithm Implementation for Edge Computing", in Proc. of IEEE 41st International Conference on Consumer Electronics (ICCE 2023), Las Vegas, NV, U.S.A. pp. 1-5, 6-8 January 2023.
- D105. V. Tsoukas, A. Gkogkidis, and A. Kakarountas, "Internet of Things challenges and the emerging technology of TinyML", in Proc. of 4th International Workshop on Security and Reliability of IoT Systems, of 19th Annual International Conference on Distributed Computing in Smart Systems and the Internet of Things (DCOSS-IoT 2023), Coral Bay, Pafos, Cyprus June 19-21, 2023.
- D106. I. Arvanitakis, G. Kranas, M. Dossis, A. Dadaliaris and A. Kakarountas, "Assessing Swapping Policies as a Detailed Placement Approach", in Proc. of 2023 8th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2023), IEEE. Piraeus, Greece, pp. -, 10-12 November 2023.

- **D107.** K. Kalovrektis, I. Dimos, A. Xenakis and A. Kakarountas, "Nanotechnology as a Tool for Computational Thinking Skills using Open Hardware, Embedded Systems and Repository Platform, in Industry 4.0 Era", in Proc. of 2023 8th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2023), IEEE. Piraeus, Greece, pp. -, 10-12 November 2023.
- **D108.** F. Roumpies and A. Kakarountas, "Cybersecurity and Democracy: A Review", in Proc. of 2023 8th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2023), IEEE. Piraeus, Greece, pp. -, 10-12 November 2023.
- **D109.** A. Katsika, K. Papageorgiou, A. Fakis, A. Kakarountas, F. Andritsopoulos, V. Plagianakos and G. Spathoulas, "Compressing time series towards lightweight integrity commitments", in Proc. of 2023 8th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2023), IEEE. Piraeus, Greece, pp. -, 10-12 November 2023.
- **D110.** G. Giannakas, M. Sapounaki, V. Tsoukas, A. Kakarountas, "Exploring Pytorch's capabilities through autograd exploitation: A Reward Modulated Spiked Timing Depended Plasticity inspired algorithm applied on a MultiLayer Perceptron", in Proc. of 27th Pan-Hellenic Conference on Informatics (PCI 2023), Lamia, Greece, pp. -, 24-26 November 2023.
- **D111.** F. Roumpies, A. Kakarountas, "A Review of Homomorphic Encryption and its Contribution to the Sector of Health Services", in Proc. of 27th Pan-Hellenic Conference on Informatics (PCI 2023), ACM, Lamia, Greece, pp. -, 24-26 November 2023.

## XI. REVIEWER

#### **Peer reviewed journals:**

i) IEEE Transactions on Computers, ii) IEEE Transactions on Parallel and Distributed Systems, iii) IEEE Transactions on Circuits and Systems-II, v) IEEE Transactions on Circuits and Systems-II, v) IEEE Transactions on Circuits and Systems-II, v) IEEE Transactions on Dependable and Secure Computing, vii) IEEE Computer, viii) International Journal of Computational Intelligence (IJCI), ix) International Journal of Signal Processing (IJSP), x) Journal of Computers (JCP), xi) International Journal of Computer Aided Engineering and Technology (IJCAET), xii) International Journal of Sensor Networks (IJSNET), xiii) Information Security Journal: A Global Perspective (ISJ), xiv) Elsevier, Microprocessors and Microsystems (MICPRO), xv) Elsevier, Microelectronics Journal (MEJ), xvi) Elsevier, Integration, the VLSI Journal (VLSI), xvii) IEEE Consumer Electronics Magazine, xviii) SPIE, Journal of Applied Remote Sensing (JARS), xix) Springer, Journal of Real-Time Image Processing (JRTIP), xx) Elsevier, Scientia Iranica (SCIENTIA), xxi) IEEE, Access, xxi) IEEE, Systems Journal, xxii) IEEE Transactions on Information Forensics & Security (TIFS), xxiii) SPIE, Journal of Electronic Imaging, xxiv) Springer, Studies in Computational Intelligence, xxv) Wiley, Security and Communications Network (SCN), xxvi) ACM Transactions on Reconfigurable Technology and

Systems (TRETS), xxvi) IEEE Potentials, xxvii) MDPI Sensors, xxiix) MDPI Electronics, xxix) MDPI Energies, xxx) MDPI Technology, xxxi) IET Wireless Sensor Systems, xxxii) IET Image Processing, xxxiii) IET Computers & Digital Techniques, xxxiv) MDPI Journal of Low Power Electronics and Applications, xxxv) TELKOMNIKA, xxxvi) MDPI Information, xxxvii) Elsevier Technovation, xxxvii) MDPI Computers, xxxviii) MDPI Algorithms, xxxix) IEEE Transactions on Intelligent Transportation Systems (T-ITS).

## **Conferences:**

i) IEEE Int. Symp. on Circuits and Systems, (ISCAS), ii) IEEE International Workshop on Power and Timing Modeling, Optimization and Simulation (PATMOS), iii) IEEE Int. Conf. on Electronics, Circuits, and Systems (ICECS), iv) IEEE Mediterranean Electrotechnical Conference (MELECON 2004, 2010, 2012), v) IFIP/IEEE Conference on Very Large Scale Integration (VLSI-SOC 2008,2009,2010), vi) International Workshop on Systems, Architectures, Modeling, and Simulation, (SAMOS 2007, 2009), vii) IEEE International Conference on Computer as a Tool (EUROCON 2005,2010,2011), viii) ACM International Conference on Compilers, architecture and synthesis (CASES 2006,2007), ix) 6th International conference on Design & Technology of Integrated Systems in nanoscale era (DTIS 2011), x) IEEE International Symposium on Wireless Communication Systems (ISWCS 2007), xi) IEEE International Conference on Digital Signal Processing (DSP 2009,2011), xii) IEEE International Conference on Emerging Technologies and Factory Automation (ETFA 2008), xiii) IEEE International Conference on Circuits and Systems for Communications (ICCSC 2008), xiv) IEEE 30th Annual Northeast Bioengineering, xv) IEEE International Symposium on Consumer Electronics (ISCE 2009, 2012, 2013), xvi) IEEE Wireless Communications and Networking Conference (WCNC 2009), xvii) International Conference on Computer Design (CDES 2005), xviii) IEEE Int. Conf. on Innovations in Information Technology (IIT 2007), xviii) International Conference on Network Computing and Information Security (NCIS 2011), xix) International Conference on Multimedia and Signal Processing (CMSP 2011), xx) IEEE Vehicular Technology Conference (VTC 2010, 2012), xxi) 7th International Conference on Embedded and Multimedia Computing (EMC 2012), xxii) IEEE International Symposium on Computers and Communications (ISCC 2011,2013,2014,2015), xxiii) IEEE Business, Engineering & Industrial Applications Colloquium (BEIAC 2013), xxiv) IEEE Colloquium on Humanities, Science and Engineering Research (CHUSER 2012, 2014), xxv) Design Automation Conference (DAC 2013, 2014), xxvi) International Conference Field Programmable Logic and Applications (FPL 2014), xxvii) IEEE/SAE International Conference on Connected Vehicles (ICCVE 2013), xxviii) IEEE Colloquium on Humanities, Science and Engineering Research (CHUSER 2012, 2014), xxix) IEEE International Symposium on VLSI (ISVLSI 2013), xxx) IEEE Symposium on Industrial Electronics and Applications (ISIEA 2013), xxxi) Pan-Hellenic Conference on Informatics (PCI 2012, 2014), xxxii) International Symposium on Reconfigurable Communication-centric Systems-on-Chip (ReCoSoC 2012,2013,2014), xxxiii) Jordanian International Electrical and Electronics Engineering Conference (JIEEEC 2013), xxxiv) ICST Conference on Wireless Mobile Communication and Healthcare (MobiHealth 2011), xxxv) IEEE Symposium on Humanities, Science and Engineering Research (SHUSER 2013), xxvi) IEEE International Conference on Microelectronics (ICM 2012, 2013, 2014), xxvii) IEEE International Workshop on Quality of Multimedia Experience (QoMEX 2015).

## **Projects as expert Evaluator**

- 1. Expert for Horizon 2020 (2020, 2023), E.U.
- 2. Expert for CHIST-ERA (2020), E.U.
- 3. Expert for National research projects for Hellenic Foundation for Research and Innovation H.F.R.I. (2020,2023), Greece
- 4. Evaluator for National research projects for Hellenic Foundation for Research and Innovation H.F.R.I. (2017, 2019- 2020, 2022-2023), Greece
- 5. Expert for RESEARCH 2016-2020 (2018), Cyprus
- 6. Expert for COST EU (2017), E.U.

#### **Book reviews:**

 William Stallings, "Computer Organization and Architecture", 10<sup>th</sup> edition, Pearson, 2014 (edition of 2015).

#### XII. SCIENTIFIC EVENTS ORGANIZER

#### **Organizing Committee Chair (Co-Chair)**

- i. 4th International Workshop on Security and Reliability of IoT Systems, Abu Dhabi, UAE, 29Apr-1 May. 2024.
- ii. 3rd International Workshop on Security and Reliability of IoT Systems, Preveza, Greece, 24-26 Sep. 2021.
- 2nd International Workshop on Security and Reliability of IoT Systems, Corfu, Greece,
   25-27 September 2020.
- iv. 1st International Workshop on Security and Reliability of IoT Systems, Santorini, Greece,29-31 May 2019.

## Organizing committee member

i) IEEE International Symposium on Circuits and Systems (ISCAS) 2006, ii) IEEE International Conference on Emerging Technologies and Factory Automation (ETFA) 2007, iii) IEEE International Symposium on Wireless Pervasive Computing (SWPC) 2008, iv) IEEE International Conference on Circuits, Electronics, and Systems (ICECS 2010), v) 2nd International ICST Conference on Wireless Mobile Communication and Healthcare (MobiHealth 2012), vi) IEEE MELECON 2012, vii) IEEE 18th International Conference on Digital Signal Processing (DSP 2013), viii) 2nd International ICST Conference on Wireless Mobile Communication and Healthcare (MobiHealth 2014), ix) 6th International Symposium on Communications, Control, and Signal Processing (ISCCSP 2014), x) Scientix Panhellenic Conference (Scientix 2018), xi) Panhellenic Open Technologies Robotics Contest (ELLAK Robotics 2018, 2019), xii) International Workshop on Security and Reliability of IoT Systems (SecRIoT 2019-2024), xiii) FOSSCOMM 2019, xiv) 30th

IFIP/IEEE International Conference on Very Large Scale Integration (VLSI-SoC 2022), xv) 8th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2023), xvi) 2024 IEEE International Conference on Synthesis, Modeling, Analysis and Simulation Methods, and Applications to Circuit Design (SMACD 2024)

#### **TPC Chair**

IEEE SEEDA-CECNSM 2019, Athens

#### **TPC Member**

i) International Conference on Computer Design (CDES-2005), ii) International Conference on Computational Intelligence (ICCI 2005), iii) International Conference on Information Security (ICIS 2005), iv) International Conference on Artificial Intelligence (ICAI 2005), v) International Conference on Image Analysis (ICIA 2005), vi) International Conference on Data Analysis (ICDA 2005), vii) International Conference on Machine Intelligence (ICMI 2005), viii) International Conference on Automation Technology (ICAT 2005), ix) International Conference on Communication Technology (ICCT 2006), x) International Conference on Pattern Analysis (ICPA 2006), ix) International Conference on Neural Networks (ICNN 2006), xi) IEEE International Conference on Wireless Communications, Networking and Information Security (WCNIS 2010,2011), xii) IEEE Mediterranean Electrotechnical Conference (MELECON 2010), xiii) International Workshop on Components and Services for IoT platforms (WCS-IOT 2015), xiv) 6th International conference on Design & Technology of Integrated Systems in nanoscale era (DTIS 2011), xv) International Conference on Network Computing and Information Security (NCIS 2011), xvi) International Conference on Microelectronics (ICM 2011,2013,2014), xvii) IEEE International Conference Dependable Systems, Services and Technologies (DESSERT 2022-2023), xviii) AI in Education Workshop: Innovations and Applications (AIeIA 2012), xix) International Symposium on Consumer Electronics (ISCE 2012,2015,2016), xx) International Conference on Embedded and Multimedia Computing (EMC 2012), xxi) International Conference on Connected Vehicles & Expo (ICCVE 2014,2015,2019), xxii) IEEE Symposium on Computers and Communication (ISCC 2011,2014,2015,2019,2024), xxiii) International Conference on Field Programmable Logic and Applications (FPL2014), xxiv) International Workshop on Reconfigurable and Communication-centric Systems-on-Chip (ReCoSoC 2012-2019), xxv) International Symposium on Communications, Control, and Signal Processing (ISCCSP 2014), xxvi) Panhellenic Conference on Informatics (PCI 2010,2012,2014-2023), xxvii) 4th special session on Mobile Device & Web Software Development - Small Systems Development (in conjunction with PCI 2014), xxviii) International Conference on Modern Circuits and Systems Technologies (MOCAST 2016-2022), xxix) PAnhellenic Conference on Electronics and Telecommunications (PACET 2015-2019), xxx) South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2018-2023), xxxi) International Symposium for ICS & SCADA Cyber Security Research (ICS-CSR 2019), xxxii) International Workshop on Security and Reliability of IoT Systems (SecRIoT 2019-2023), xxxiii)

International Symposium on Power and Timing Modeling, Optimization and Simulation (PATMOS 2019), xxxiv) International Conference on Omni-Layer Intelligent Systems (COINS 2019), xxxv) National Scientix Conference for STEM Education (Scientix 2018), xxxvi) IEEE/IFIP International Conference on VLSI and System-On-Chip (VLSI-SoC 2010), xxxvii) Conference on Digital Signal Processing (DSP 2011), xxxviii) IEEE International Conference on Electronics Circuits and Systems (ICECS 2010), xxxix) IEEE Symposium Series on Computational Intelligence (SSCI 2016), XL) International Conference on Information, Intelligence, Systems and Applications (CIISA 2014,2019), XLI) International Conference on Consumer Electronics (ICCE 2021), XLII) International Conference on Cognitive Computing and Cyber Physical Systems (EAI IC4S 2020-2021), XLIII) 2021 IEEE CSR Workshop on Maritime Cyber Security (MCS), XLIV) 2021 IEEE International Conference on Consumer Electronics – Berlin (2021-2022), XLV) 6th International Conference on Advances in Computing and Data Sciences (ICACDS 2022), XLVI) IFIP Networking 2024), XLVI) International Scientific Committee of the Edge Intelligence (2023, 2024).

#### **Session Chair**

IEEE ICECS 2010, IEEE DSP 2011, IOLTS 2017

# **Special Session Organizer**

IEEE ICECS 2010 "Tools, Techniques & Circuits for low-power consumer electronics"

#### Track co-chair

- i. "Circuits and Systems for Signal Processing" in 16th International Conference on Computer as a Tool (IEEE EUROCON 2015)
- ii. "Architectures and VLSI Systems" in International Conference on Microelectronics (ICM 2011)

## XIII. EDITORIAL RECORD

#### **Editorial Board member:**

- ii) IEEE Potentials, Editor-in-Chief (2024)
- ii) IEEE Potentials, Associate editor (2015 2018, 2021-2023)
- iii) IEEE Potentials, Corresponding editor (2019 2021)
- iv) Journal of VLSI Design Tools and Technology (JoVDT)
- v) Journal of Applied Mathematics and Bioinformatics (JAMB)

#### **Special Issue Guest Editorial Board:**

- i) Circuits, Systems, and Design Methodologies for Safety Critical Applications, VLSI Design, Hindawi (2016 – 2017)
- ii) Security and Reliability of IoT---Selected Papers from SecRIoT 2019, Future Internet, MDPI (2019)
- iii) The Internet of Things: Trends, Threats, and Applications, IEEE Potentials Magazine, IEEE (2019)

- iv) Big Data and Data Science, IEEE Potentials Magazine, IEEE (2020)
- v) Computer Architecture and Embedded Systems, Future Internet, MDPI (2021)
- vi) VLSI Circuits & Systems Design, Electronics, MDPI (2021)

## XIV. AWARDS AND RECOGNITION

- International Grant €40.000 for «Practical security in the quantum era», Nokia Corporation (Bell Labs). (2022)
- Mentor of InnoTech, 2<sup>nd</sup> position in EIT Health. (2022)
- Mentor of DriveProTech, 2nd place in Re-startup Patras. (2019)
- Recipient of the "2018 ICCE Berlin Outstanding Paper Award" for the paper titled "Anomaly Detection in IoT devices via monitoring supply current", at the 2018 ICCE-Berlin 2018 Conference, 2-4 Sep., Berlin, Germany. (2018)
- Mentor of Smart Parking, 2<sup>nd</sup> place in innovation lab of the Municipality of Lamiafor National Crowd Hackathon. (2018)
- Mentor of Interseeing, 1<sup>st</sup> place in innovation lab of the Municipality of Lamiafor National Crowd Hackathon. (2018)
- Winner of the IEEE Region 8 Educational Activities Acceleration Program στην κατηγορία
  University program, με την πρόταση A. Kakarountas and S. Tsagiopoulou, "Piece of Game".
  (2017)
- Mentor of Audi-o-Mentia, 3<sup>rd</sup> place in National StartUp Pitch Contest, ΣΦΗΜΜΥ 10. (2017)
- International Grant €30.000 for «Research on IoT Security based on Bio-informatics», Nokia Corporation (Bell Labs). (2017)
- Mentor of Audi-o-Mentia, 1<sup>st</sup> place to Mind the Gap, IEEE Region 8 contest (prize of \$750 and funding of \$10.000). (2017)
- Mentor of Audi-o-Mentia, finalist at the national Imagine Cup, Microsoft. (2017)
- Mentor of Drone Aid, finalist (8th place) in NASA World Wind Europa Challenge. (2016)
- 3<sup>rd</sup> prize of Best Thesis in Greece from Greece IEEE EMBS Chapter, for Efthymia Arvaniti (supervisor). (2015)
- «IEEE Outstanding Branch Counselor and Advisor Award Recognition Program», University of Central Greece IEEE Student Branch Counselor. (2012)
- BrainArk (3<sup>rd</sup> place), «Development of a support device for people with speaking disabilities due to neurological causes », Hellenic Startup BioMed. (2012)
- Award from EUROPRACTICE for the research results of COSAFE #28593 "Low Power Hardware-Software Co-Design for Safety-Critical Applications", after a European Design Contest, which took place in the bounds of Design Automation and Testing in Europe (DATE) Conference, 4-8 March 2003, Paris, France.
- International Award in two categories from Mentor Graphics and SUN Microsystems for the research results of COSAFE #28593 "Low Power Hardware-Software Co-Design for Safety-Critical Applications".