

Thursday 19/10/2023 – DAY 1

09:00 – 09:30	Registrations + Welcome coffee			
09:30 – 10:00	Opening   Main HALL (II)			
	Dr. Manolis ZERVAKIS   President, Hellenic Emerging Technologies Association			
	Athanasios KIRIAZIS   General Secretary for Research and Innovation			
	Prof. Eustratios STILIANIDIS   Vice Rector for Research & Development, University of Thessaloniki			
10:00 – 10:45	Prof. Spyridon NIKOLAIDIS   Conference Overview			
	<b>Keynote Speech   Main HALL (II)</b> <b>Tom KATSIIOULAS</b>   Member of the IoT Advisory Board for the U.S. Department of Commerce   President and CEO Archon Design Solutions, Inc. <b>Title: "Trusted Value Chains and Digital Business Ecosystems from CHIPS to Edge"</b> Moderator: <b>John KIKIDIS</b>   Global Ecosystem Lead, Renesas			
10:45 – 11:45	<b>Special Session   Main HALL (II)</b> <b>RENESAS: "The Powerful Convergence of AI &amp; IoT"</b>			
	10:45 – 11:30	<b>Keynote by Kaushal Vora</b>   Sr. Director of Business Acceleration & Ecosystem   Renesas Q&A		
	10:30 – 11:45	<b>Georgios FLAMIS</b>   Sr Staff Engineer, AIoT   Renesas Title: "AI IoT applications are here!" Moderator: <b>John KIKIDIS</b>   Global Ecosystem Lead, Renesas		
11:45 – 12:00	Coffee Break			
12:00 - 14:30	<b>Parallel Sessions</b>			
	<b>Main HALL (II)</b>		<b>Foyer</b>	
12:00 – 13:15	<b>Paper Presentations</b>		<b>Poster Presentations</b>	
	<b>S1.1   Smart applications   Session Chair: Minas DASYGENIS</b>			
12:00 – 12:15	3360	Autonomous Unmanned Ground Vehicle (UGV) In Smart Farming With A* Algorithm	1864	The Smart Fridge Project
			2051	Ground-based cloud observation using wide-view optical and thermal representations
12:15 – 12:30	8374	Comparing the Performance of Cameras and SW packets for the Cloud Coverage Process in Photovoltaic (PV) Parks	2309	An OTA-based power sensing integrated circuit for MPPT in photovoltaic energy harvesting applications
			2550	Prediction of Analog Circuit Sizing Using an Artificial Neural Network
12:30 – 12:45	1160	Advanced Monitoring System of Industrial Refrigeration (ADMOSIR)	2735	Classification of Fetal Images using Deep Learning Methodologies: The Smart Embryo Project
			2870	Estimation of pedestrian trajectory using LSTM network architecture
12:45 – 13:00	6373	Implementation of a Beehive Health Monitoring System Based on Sound	3392	A deep learning approach for detecting defects in melt pool images in DED-AM process
			3584	Machine learning methods for the discrimination of refrigerant gases
13:00 – 13:15	9471	An Audio Fingerprinting Approach based on the 2DFT for Byzantine Hymn Recognition	4149	Design of an Autonomous, Multi-functional Stress Assessment Sensor for Naval Applications: The AMSA project
			4363	A unified framework for object and person 3D-pose estimation with application in ancient drama
13:15 – 14:30	<b>Paper Presentations</b>			
	<b>S1.2   Novel applications   Session Chair: Nikolaos KONOFAOS</b>			
13:15 – 13:30	1139	IDEAN Neurosciences Education Platform	4922	An IoT System for Innovative Cultural Experience
13:30 – 13:45	3726	SmartGlove Cloud Platform for Parkinson's Patients Data Collection & Analysis	4933	An Improved Algorithm for Equalization and Energy Support for Lithium-ion Battery Storage Systems in Electric Motor Drive Applications
13:45 – 14:00	4929	Rapid virtual prototyping of battery storage systems	6288	Design of an Autonomous Wireless Electric Field sensor for maritime applications: the EFOS project
14:00– 14:15	9053	S2W-Med Health Status Monitoring	6895	Area Allocation for Coverage Path Planning Using Affinity Propagation Clustering
14:15– 14:30	8723	Fish Shape Alignment Based on Deformable Shape Tracking Suite of Tools	9101	Crosstalk exploration between PA and LNA inductors
			9465	Auditory Scene Profile Adaptation for ANC Headphones
14:30 – 15:15	Lunch Break			
15:15 – 16:00	<b>Keynote Speech   Main HALL (II)</b> <b>Dimitrios Kyritsis</b>   EPFL & University of Oslo <b>Title: "Cognitive Digital Twins for Sustainable Value Chains"</b> Moderator: <b>Asst. Prof. Gregory DOUMENIS</b>   Informatics & Telecommunications, University of Ioannina			

16:00 – 17:45	<b>Paper Presentations   S1.3   Hardware design   Session Chair: Gregory DOUMENIS</b>	
16:00 – 16:15	7941	Design and Implementation of Bone Wax Application Device
16:15 – 16:30	6794	Towards a modular IoT device design and prototyping for the Sports domain
16:30 – 16:45	9301	High-Performance Design of SRT IP Blocks
17:00 – 17:15	1120	Fractional-N Phase Locked Loop for Wi-Fi 6/6E With 135 mW Power Consumption and Spur Reduction Techniques
17:15 – 17:30	5815	Enhanced Safety Architecture with Fault Preventive Mechanisms for Automotive Li-ion Battery Management Systems
17:30 – 17:45	838	Energy Efficient ML Accelerator using a Decoupled Vector Engine and a Systolic Array attached to a Low-Cost RISC-V Scalar Core
17:45 – 19:00	<b>Paper Presentations   S1.4   AI - Edge AI and ML   Session Chair: Kostas Siozos</b>	
17:45 – 18:00	8081	Light Bulb control with DNN based voice user interface – the journey to design it
18:00 – 18:15	9736	Enabling Grid Resilience and Efficiency - EDGE Device for Power Grid analysis and Asset Monitoring
18:15 – 18:30	9653	Federated transformers for non-intrusive load monitoring in heat pumps
18:30 – 18:45	5311	AI-assisted Serious Games: Dialogue Management with Generative AI
18:45 – 19:00	4607	Transforming the Path Towards Automation of Monitoring and Management for Edge Computing
19:00 – 19:15	102	Intelligence Functions Placement in B5G / 6G wireless networks
20:00 – 21:30	<b>Networking Cocktail at Allegro   Thessaloniki Concert Hall</b> Only for Paper Presenters - Sponsors - Speakers	

Friday 20/10/2023 – DAY 2	
09:00 – 09:30	Welcome coffee
09:30 – 11:00	Paper Presentations   S1.5   Circuits and Systems   Session Chair: Vasilis PAVLIDIS
09:30 – 09:45	8700   Analysis of SQRL strengths and weaknesses compared to other authentication mechanisms
09:45 – 10:00	1994   Fault Detection in Analog Circuits by utilizing the Current Supply Transients
10:00 – 10:15	4126   Aging alleviation technique for 8T IMC SRAMs
10:15 – 10:30	3841   Reduction of large-scale RLCK models via low-rank balanced truncation
10:30 – 10:45	7520   MORCIC: Model Order Reduction Techniques for Electromagnetic Models of Integrated Circuits
10:45 – 11:00	4978   Design and implementation of a compact RISC-V based Machine Learning accelerator on Low End FPGA
11:00 – 11:40	<p><b>Keynote Speech   Main HALL (II)</b>  <b>Prof. Kostas DORIS</b>   NXP Semiconductors, The Netherlands  <b>Title: “The pathway to higher resolution in mm-wave automotive radar”</b>  <b>Moderator: Prof. St. Siskos</b>   Electronics Lab. Section of Electronics and Computers Physics Dept.   AUTH</p>
<b>Career Day</b>	
<b>Companies Presentations</b>	
11:40 - 11:50	<p><b>Invited Speaker: Katerina PAPAKOTA</b>   Career Counselor, Career Office of AUTH  <b>Title: “The Career Office of Aristotle University of Thessaloniki”</b></p>
11:40 - 14:00	RENESAS   Stella TSAMPOUKOU
	KENOTOM   Stefanos GIANNOPOULOS
	ANSYS   Manolis FOTAKIS & Ioannis GEORGAKIS
	DELOITTE   Pierrina MONASTIRIOTI & Eirini PAPAGIANNIDOU
	INACCESS, by POWER FACTORS   Ioannis SAPOUNADELIS
	THESS IC   Thrassos AXIOTIS
	THINK SILICON, an APPLIED MATERIALS Company   Georgios KERAMIDAS
	CHIPGLOBE   Max MERGANTHALER & Lia ELEFThERiADOU
	ES SYSTEMS   Theodoros ATHANASOPOULOS
	OLYMPIA ELECTRONICS   Sophia CHATZIFOTI
	U-BLOX   Panos PAGRATIS
	MEICSI   Savvas SGOURENAS
<b>Moderator: Prof. Alkis CHATZOPOULOS</b>   Dept. of Electrical and Computer Engineering   AUTH	
14:00 – 14:10	Snack coffee break
14:10 – 14:50	<p><b>Keynote Speech   Main HALL (II)</b>  <b>Vasileios CHATZIKOS</b>   CEO Siemens A.E., Greece  <b>Title: “Industry 4.0: Unlocking the Future of Digital Transformation”</b>  <b>Moderator: Tilemachos MATIAKIS</b>   KENOTOM Technical director</p>
<b>Invited Speakers</b>	
14:50 – 15:00	<p><b>Invited Speaker: Byron CHRYSOVERGIS</b>   Technology Transfer and Innovation   Manager at Aristotle University of Thessaloniki  <b>Title: “Technology Transfer and Innovation at Aristotle University of Thessaloniki”</b></p>
15:00 – 15:15	<p><b>Invited Speaker: Spyros KIARTZIS</b>   HELLENiQ ENERGY Holdings S.A.  <b>Title: “Applying emerging technologies to address the challenges of energy transition”</b>  <b>Moderator: Prof. Spyridon NIKOLAIDIS</b>   Physics Department, Aristotle University of Thessaloniki</p>
14:50 – 16:00	<p><b>Round table: “Connecting industry to academia”</b></p>
15:15 – 15:40	<p><b>Participants: RENESAS</b>   George FLAMIS, <b>KENOTOM</b>   Tilemachos MATIAKIS, AUTH   Prof. St. SISKOS),  <b>ACCADEMIA</b>   Georgios SAVVIDIS, <b>PROGRESSIVE ROBOTICS</b>   Marios KIATOS  <b>Moderator: Prof. Alkis CHATZOPOULOS</b>   Dept. of Electrical and Computer Engineering   AUTH</p>
15:40 – 16:00	<p><b>Closing Day 2 remarks</b>  Prof. Spyridon NIKOLAIDIS   Prof. Dimitris MOURZTIS</p> <p><b>Edge Intelligence 2024 announcement:</b>  Dr. Manolis ZERVAKIS   Prof. George STAMOULIS</p>
16:00– 17:00	Late Lunch