



PROGRAMME

MECO'2021 and CPS'2021

Budva, Montenegro, June 07-10, 2021

<http://embeddedcomputing.meconet.me/programme/>



Link here



#	Authors	Title	Section	Session	Day and Time	Room	ONLINE_LINK	Chairs
Monday, 07 June								
O1		Opening Ceremony		0	0	MON-09:00	ROOM1	Chair: Radovan Stojanovic
K1	Konstantin Novoselov, National University of Singapore	(editorial by V. Milutinovic)		0	1	MON-09:30	ROOM1	
K2	Ioannis Pitas, IEEE fellow, IEEE Distinguished Lecturer, EURASIP fellow, Aristotle University of Thessaloniki	Privacy Protection, Ethics, Robustness and Regulatory Issues in Autonomous Systems		0	1	MON-10:00	ROOM1	
2	Luca Braidotti, Saša Aksentijević, Edvard Tijan and Adis Balota	The use of Bluetooth Beacons in Maritime Emergencies		1	4	MON-11:00	ROOM1	Chair: Sondre Ninive Andersen
12	Sven Ubik, Jiří Melnikov and Petra Svičková	Monitoring of Sensitive Transports Using the Internet of Things		1	4	MON-11:00	ROOM1	
20	Stefan Draskovic and Lothar Thiele	Optimal Power Management for Energy Harvesting Systems with a Backup Power Source		1	4	MON-11:00	ROOM1	
21	Yahya Jan and Lech Jozwiak	Quality-driven Design of Deep Neural Network Accelerators for CPS and IoT Applications		1	4	MON-11:00	ROOM1	
32	Sondre Ninive Andersen, Asbjørn Engmark Espe, Sverre Hendseth and Geir Mathisen	Formalising Nondeterministic Communication in Wireless Sensor Networks Using CSP		1	4	MON-11:00	ROOM1	
43	Mateusz Kosior	A Glimpse into the Methodology of Developing Shell-Based Control Systems for UGVs		1	4	MON-11:00	ROOM1	
46	Muhammad Naeem, Michele Albano, Kim G. Larsen, Brian Nielsen, Anders Høedholt and Christian Ø. Laursen	Battery Aware Analysis of Sensor Networks in UPPAAL SMC		1	4	MON-11:00	ROOM1	
50	Golizheh Mehrooz and Peter Schneider-Kamp	Web Application for Planning, Monitoring, and Controlling Autonomous Inspection Drones		1	4	MON-11:00	ROOM1	
54	Aleksey Efimov	Point Clouds Combination Algorithm with Keypoints Descriptors		1	4	MON-11:00	ROOM1	
56	Ace Dimitrievski, Sonja Filiposka, Betim Cico and Vladimir Trajkovic	Energy conservation using ultra low power timers for sustainable environmental monitoring		1	5	MON-15:00	ROOM1	Chair: Paris Kitsos
61	Stavros Kalapothas, Georgios Flamis and Paris Kitsos	Importing Custom DNN Models on FPGAs		1	5	MON-15:00	ROOM1	
81	Aintzane Mosteiro-Sanchez, Marc Barcelo, Jasone Astorga and Aitor Urbieto	A multi-layered CP-ABE scheme for flexible policy update in Industry 4.0		1	5	MON-15:00	ROOM1	
83	Hassan Saadat, Abdulla Aboumadi, Amr Mohamed, Aiman Erbad and Mohsen Guizani	Hierarchical Federated Learning for Collaborative IDS in IoT Applications		1	5	MON-15:00	ROOM1	
97	Xianjia Yu, Qingqing Li, Jorge Peña Queralt, Tomi Westerlund and Jukka Heikkonen	Applications of UWB Networks and Positioning to Autonomous Robots and Industrial Systems		1	5	MON-15:00	ROOM1	
104	Pavlo Mykytyk, Marcin Brzozowski, Zoya Dyka and Peter Langendoerfer	Jamming Detection for IR-UWB Ranging Technology in Autonomous UAV Swarms		1	5	MON-15:00	ROOM1	
126	Oxana Shamilyan, Ievgen Kabin, Zoya Dyka, Michael Kuba and Peter Langendoerfer	Octopuses: biological facts and technical solutions		1	5	MON-15:00	ROOM1	
132	Wasif Afzal and Amirali Piadehbasmenj	Cloud-Based Architectures for Model-Based Simulation Testing of Embedded Software		1	5	MON-15:00	ROOM1	
133	Jonas Gabriellson, Joseph Bugeja and Bahtijar Vogel	Hacking a Commercial Drone with Open-Source Software: Exploring Data Privacy Violations		1	6	MON-18:00	ROOM1	Chair: Moharram Challenger
142	Somayya Elmhagazy, Elias Yaacoub, Nikhil V. Navkar, Amr Mohamed and Aiman Erbad	Survey of Immersive Techniques for Surgical Care/Telemedicine Applications		1	6	MON-18:00	ROOM1	

146	Ayoosh Bansal, Jayati Singh, Micaela Verucchi, Marco Caccamo and Lui Sha	Risk Ranked Recall: Collision Safety Metric for Object Detection Systems in Autonomous Vehicles	1	6	MON-18:00	ROOM1	MON_ROOM1	
150	Kazim Ergun, Raid Ayoub, Pietro Mercati and Tajana Rosing	Improving Mean Time to Failure of IoT Networks with Reliability-Aware Routing	1	6	MON-18:00	ROOM1	MON_ROOM1	
156	Markus Jung and Martina Zitterbart	Cooperative Congestion Control for Cyber-Physical Systems	1	6	MON-18:00	ROOM1	MON_ROOM1	
161	Vijay Kumar and Kolin Paul	DevFing: Robust LCR Based Device Fingerprinting	1	6	MON-18:00	ROOM1	MON_ROOM1	
164	Ebert Schoofs, Joanna Kisaakye, Burak Karaduman and Moharram Challenger	Software Agent-based Multi-Robot Development: A Case Study	1	6	MON-18:00	ROOM1	MON_ROOM1	
167	Bernd-Holger Schlingloff and Niels Hoppe	A Framework for Cloud-based Testing of Multi-variant Cyber-physical Systems	1	6	MON-18:00	ROOM1	MON_ROOM1	
175	Vasily Pinkevich, Alexey Platonov and Arkady Kluchev	How to Improve IT Specialists Training for Designing Cyber-Physical Systems	1	6	MON-18:00	ROOM1	MON_ROOM1	
14	Ivan Kholopov and Tatyana Kislitsyna	Generalized compass operator for edge detection with the required angular orientation	4	7	MON-11:00	ROOM2	MON_ROOM2	Chair: Vladislav Lesnikov
17	Ivan Rozanov, Alexey Sotnikov, Andrey Proletarsky and Vladimir Suzev	Reverberation signal simulation method in real-time sonar systems	4	7	MON-11:00	ROOM2	MON_ROOM2	
122	Aleksey I. Baranchikov, Nikolay. A. Sumenkov, Nataliy S. Fokina, Ivan I. Yakovlev and Andrey A. Rodionov	Using Data Cleansing Algorithms for Database Reengineering	3	7	MON-11:00	ROOM2	MON_ROOM2	
123	Aleksey I. Baranchikov, Pavel Baranchikov and Nataliy S. Fokina	Fork-join method of decomposing monolithic software products	3	7	MON-11:00	ROOM2	MON_ROOM2	
136	Dmitry Perepelkin and Maria Ivanchikova	Problem of Network Traffic Classification in Multiprovider Cloud Infrastructures Based on Machine Learning Methods	3	7	MON-11:00	ROOM2	MON_ROOM2	
139	Grigory Silkin, Gennady Ovechkin, Oleg Bodrov, Irina Bodrova and Svetlana Baranova	Continuous Testing Maturity Model	3	7	MON-11:00	ROOM2	MON_ROOM2	
148	Aleksandr Penskoï	Synthesis Method for CGRA Processors based on Imitation Model	3	7	MON-11:00	ROOM2	MON_ROOM2	
162	Vladislav Lesnikov, Tatiana Naumovich and Alexander Chastikov	Multiplierless IIR Filter Design Technique	3	7	MON-11:00	ROOM2	MON_ROOM2	
179	Konstantin Zavertkin, Anastasia Panarina, Aleksei Ovinnikov and Evgeny Likhobabin	Efficient BP-based decoding algorithms for QC-LDPC codes	3	7	MON-11:00	ROOM2	MON_ROOM2	
25	Veselin Ivanovic, Nevena Radović and Srdjan Jovanovski	Principles of Functioning of Signal Adaptive Systems for Space/Spatial-Frequency Analysis	4	8	MON-15:00	ROOM2	MON_ROOM2	Chair: Victoria A. Sablina
38	Sergey G. Gurzhin, Vladimir I. Zhulev, Michail B. Kaplan, Viet Linh Nguyen, Evgeniy M. Proshin and Andrey V. Shulyakov	Remote Monitoring of Patient's Breathing Process in Complex Chronomagnetoherapy	4	8	MON-15:00	ROOM2	MON_ROOM2	
40	Evgeniy I. Chernov, Nikolay E. Sobolev, Alexander A. Bondarchuk and Andrey V. Shulyakov	Narrowband Noise Signal Characteristics Corresponding to Their Strong Latent Correlation for Information-Measuring Systems	4	8	MON-15:00	ROOM2	MON_ROOM2	
53	Yury Bulgakov, Tatyana Vitiazeva and Anatoly Mikheev	Research of the Spectrum of a Sequence of Complex Discrete Samples with Sample Rate Variability	4	8	MON-15:00	ROOM2	MON_ROOM2	
55	Veselin Ivanovic, Nevena Radović and Srdjan Jovanovski	Signal Adaptive Systems Used in Analysis and Estimation of Nonstationary 1D Signals: Principles of Functioning and Designing	4	8	MON-15:00	ROOM2	MON_ROOM2	
57	Indrit Enesi and Ledion Liço	Optimizing Parameters of Discrete Wavelet Transform for Noise Reduction in Fingerprint Images	4	8	MON-15:00	ROOM2	MON_ROOM2	
72	Alexander V. Savin, Victoria A. Sablina and Michael B. Nikiforov	Comparison of Facial Landmark Detection Methods for Micro-Expressions Analysis	4	8	MON-15:00	ROOM2	MON_ROOM2	
73	Dina Mahmoud, Beatrice Shokry, Abdallah Elrefaey, Hassanein Amer and Ihab Adly	Runtime Replacement of Machine Learning Modules in FPGA-Based Systems	4	8	MON-15:00	ROOM2	MON_ROOM2	
75	Alexander Parshin and Yury Parshin	Adaptive Filtering of non-Gaussian Flicker Noise in Discrete Time Systems	4	8	MON-15:00	ROOM2	MON_ROOM2	
76	Nevena Radović, Veselin Ivanovic, Igor Djurovic and Marko Simeunović	System for S-transform Realization	4	9	MON-18:00	ROOM2	MON_ROOM2	Chair: Cornel Ioana
79	Igor Kudinov and Ivan Kholopov	Rows Permutation Based Non-uniformity Correction Algorithm for Video Sequences	4	9	MON-18:00	ROOM2	MON_ROOM2	
90	Yi Liu	A Vision-based Target Tracking Robot System for Embedded Platforms	4	9	MON-18:00	ROOM2	MON_ROOM2	
94	Ivan Ivanov, Alexander Baranov, Denis Spirjakin, Saba Akbari, Sergey Mironov and Vladislav Talipov	Advanced Data Processing for Monitoring the Explosiveness of Combustible Gas Mixtures	4	9	MON-18:00	ROOM2	MON_ROOM2	
100	Denis Stanescu, Dragos Nastasiu, Cornel Ioana, Angela Digulescu and Alexandru Serbanescu	Low complexity acoustic imaging system based on time of arrivals dynamic estimation	4	9	MON-18:00	ROOM2	MON_ROOM2	
109	Yury Bekhtin, Yury Filatov, Aleksey Ilyin and Aleksey Lupachev	Analog-to-Digital Converter of Noisy Pulses	4	9	MON-18:00	ROOM2	MON_ROOM2	
112	Ivan Borovkov, Grigory Silkin, Angelina Vyugina and Alexander Bastrychkin	Landscape Images Generation Algorithm Development	4	9	MON-18:00	ROOM2	MON_ROOM2	
113	Angelina Vyugina, Svetlana Baranova, Grigory Silkin, Natalia Khizrieva and Oleg Bodrov	Research of Spectral Components Structure in Landscape Images Spectrum	4	9	MON-18:00	ROOM2	MON_ROOM2	
127	Vladimir Andrejev and Denis Avramenko	Evaluation of the spectral mode of the photometric signal by the two-sided Prony method	4	9	MON-18:00	ROOM2	MON_ROOM2	
18	Darko Babunski, Emil Zaev, Gerhard Rath, Filip Poposki and Radmila Koleva	Development and Hardware-in-the-Loop Simulation of an Air Purifier Automatic Control System	6	10	MON-11:00	ROOM3	MON_ROOM3	Chair: Darko Babunski
58	Emil Zaev, Darko Babunski, Aleksandar Jovanov, Gerhard Rath and Maximilian Pablo Payr	Hardware-in-the-loop for Simulation and Control of Greenhouse Climate	6	10	MON-11:00	ROOM3	MON_ROOM3	

80	Sergey Kirillov, Alexander Lisnichuk and Andrey Batishchev	OFDM-Signal Multi-Criteria Synthesis to Improve Energy Efficiency and Minimize Bandpass Interference	5	10	MON-11:00	ROOM3	MON_ROOM3	
84	Alexander Mitov, Jordan Kravec, Tsonyo Slavov and Ilcho Angelov	LQG Control of Load-Sensing Electro-hydraulic Servo System	6	10	MON-11:00	ROOM3	MON_ROOM3	
87	Le Hong Quang, Putov Victor Vladimirovich, Sheludko Victor Nikolaevich, Kuznetsov Anton Anatolievich and Chernyshev Maxim Andreevich	Adaptive robust control of a multi-stage elastically deformable electromechanical object and adaptive compensation of disturbances	6	10	MON-11:00	ROOM3	MON_ROOM3	
91	Vyacheslav Rybin, Aleksandra Tutueva, Timur Karimov, Georgii Kolev, Denis Butusov and Ekaterina Rodionova	Optimizing the Synchronization Parameters in Adaptive Models of Rössler system	6	10	MON-11:00	ROOM3	MON_ROOM3	
95	Alexey Meleshko, Vasily Desnitsky, Igor Kotenko, Evgenia Novikova and Anton Shulepov	Combined Approach to Anomaly Detection in Wireless Sensor Networks on Example of Water Management System	5	10	MON-11:00	ROOM3	MON_ROOM3	
118	Natalia Khizrieva, Natalya Grinchenko, Gennady Svetlov and Andrey Rodionov	Model for Landscape Images Transmission Through a Communication Channel	5	10	MON-11:00	ROOM3	MON_ROOM3	
125	Dmitry Dvoryankov, Denis Valuyskiy, Sergey Vityazev and Vladimir Vityazev	The Problem of Debris Detection with Automotive 77-GHz FMCW Radar	5	10	MON-11:00	ROOM3	MON_ROOM3	
8	Anatolii Pulavskiy, Sergey Krivenko, Igor Linskiy, Mykola Posokhov, Stanislav Krivenko and Liudmyla Kryvenko	Determination of the risk of developing diabetes mellitus based on the patterns of symbolic dynamics of the amplitude-time heart rate variability	7	11	MON-15:00	ROOM3	MON_ROOM3	Chair: Liudmyla Kryvenko
44	Georgiy Kukharev, Nazym Kazieva and Nadezhda Shchegoleva	Animation QR-Codes For Facial Biometry Tasks And Its Applications	7	11	MON-15:00	ROOM3	MON_ROOM3	
48	Alexander Kroshilin, Svetlana Kroshilina, Alexander Pylkin and Gennady Ovechkin	Managerial medical decisions and methods of obtaining medical information in conditions of uncertainty	7	11	MON-15:00	ROOM3	MON_ROOM3	
93	Michael Kopichev, Anton Putov and Ekaterina Ilatovskaya	Self-balancing robot autonomous control system	6	11	MON-15:00	ROOM3	MON_ROOM3	
130	Tatiana Tatarnikova and Oleg Kutuzov	Determination of the buffer capacity of the network node when servicing self-similar traffic modeled by the Weibull distribution	6	11	MON-15:00	ROOM3	MON_ROOM3	
131	Tatiana Tatarnikova, Boris Sovetov and Vladislav Cehanovsky	Determining the length of the time series sequence for generating self-similar traffic with the required Hurst index	6	11	MON-15:00	ROOM3	MON_ROOM3	
138	Sherif Sherif, Tsonyo Slavov and Jordan Kravec	Hardware-in-the-loop simulation on linear-quadratic controller for stabilization of a humanoid robot during walking	6	11	MON-15:00	ROOM3	MON_ROOM3	
149	Boris Kostrov, Gennady Ovechkin, Natalya Grinchenko and Gennady Svetlov	The Method for Estimating the Error Probability of Multithreshold Decoder for Self-Orthogonal Codes	6	11	MON-15:00	ROOM3	MON_ROOM3	
163	Grigori Belskii and Elena Serykh	Spherical Robot Remote Control Development	6	11	MON-15:00	ROOM3	MON_ROOM3	
66	Ziran He and Naim Dahnoun	A Contactless Solution for Monitoring Social Distancing: A Stereo Vision Enabled Real-Time Human Distance Measuring System	7	12	MON-18:00	ROOM3	MON_ROOM3	Chairs: Naim Dahnoun Sergey Vityazev
67	Yevgeniy Muratov, Michael B. Nikiforov, Olga Melnik and Aleksandr Loskutov	Heart rate measurements with a web camera based on the facial image moving in the frame	7	12	MON-18:00	ROOM3	MON_ROOM3	
74	Nimai Chandra Das, Anastasia D. Skakun, Md. Ziaul Haque Zim, Mehdi Hasan Rafi and Md. Ahanaf Tamid Akif	PatiCare: Patient Health Care Monitoring System	7	12	MON-18:00	ROOM3	MON_ROOM3	
82	Grigoris Protopsaltis, Maria Krizea and John Gialelis	Continuous Measurement of Respiratory Rate via Single-Wavelength Reflective Photoplethysmography	7	12	MON-18:00	ROOM3	MON_ROOM3	
105	Tatyana Vityazeva, Sergey Vityazev and Anatoly Mikheev	Computationally Efficient Heart Rate Variability Analysis Implementation	7	12	MON-18:00	ROOM3	MON_ROOM3	
128	Mikhail Kaplan, Michael Nikiforov, Olga Melnik, Dmitriy Ustyukov and Andrey Shulyakov	Microprocessor-Based System for Collection and Processing of Biomedical Information	7	12	MON-18:00	ROOM3	MON_ROOM3	
129	Maria Ashapkina, Alexey Alpatov, Victoria A. Sablina and Olga Melnik	Vibro-tactile Portable Device for Home-base Physical Rehabilitation	7	12	MON-18:00	ROOM3	MON_ROOM3	
159	Ivana Ognjanovic, Ramo Šendelj, John Mantas and Milovan Roganović	Development of ICT enhanced person-centred care services for stroke outpatient rehabilitation	7	12	MON-18:00	ROOM3	MON_ROOM3	
177	Irina A. Kondratyeva, Irina I. Shpakovskaya, Dina V. Trotsyuk, Alexander S. Krasichkov, Anastasiya A. Polyakova, Zulfia A. Zaripova and Dmitry S. Medvedev	Statistical Methods to Determine Predictors of Mortality in Older Patients with Airway Cancer	7	12	MON-18:00	ROOM3	MON_ROOM3	
Tuesday, 08 June								
K3	Benoit Dupont de Dinechin, Chief Technology Officer of Kalray	Engineering a Manycore Processor for Edge Computing	0	2	TUES-09:00	ROOM1	TUES_ROOM1	Chair: Lech Jozwiak
K4	Danilo Mandic, Imperial College, London, UK	Hearables: From in-ear recording of vital signs and neural function to doctorless hospitals	0	2	TUES-10:00	ROOM1	TUES_ROOM1	
27	Dmitriy Eremenko	Minimal Algebras of Multioperations	3	13	TUES-11:00	ROOM1	TUES_ROOM1	Chair: Zoya Dyka
68	Marcin Aftowicz, Ievgen Kabin, Zoya Dyka and Peter Langendoerfer	Clustering versus Statistical Analysis for SCA: when Machine Learning is Better	2	13	TUES-11:00	ROOM1	TUES_ROOM1	
71	Daniel Nickalls, Jiacheng Wu and Naim Dahnoun	A Real-time and High Performance Posture Estimation System Based on Millimeter-wave Radar	2	13	TUES-11:00	ROOM1	TUES_ROOM1	
89	Zoya Dyka, Ievgen Kabin, Dan Klann and Peter Langendoerfer	Multiplier as a Mean for Reducing Vulnerability of Atomic Patterns to Horizontal Address-Bit Attacks	2	13	TUES-11:00	ROOM1	TUES_ROOM1	
176	Vahid Khalilpour and Moharram Challenger	A Smart Home Agriculture System Based on Internet of Things	1	13	TUES-11:00	ROOM1	TUES_ROOM1	
180	Ilias Alexopoulos, Stelios Neophytou and Ioannis Kyriakides	Identifying Metrics for an IoT Performance Estimation Framework	1	13	TUES-11:00	ROOM1	TUES_ROOM1	
181	Nikolaos Tzanis, Eleftherios Mylonas, Michael Birbas and Alexios Birbas	Real-Time Transient State Estimation in Smart Grids Utilizing Industrial IoT Data	1	13	TUES-11:00	ROOM1	TUES_ROOM1	

199	Ivan Konatar and Strahinja Jakić	Strahinja Jakić, Ivan Konatar, Real Time Measurement and Analysis of Air and Water Parameters on the Territory of Montenegro, UDG	1	13	TUES-11:00	ROOM1	TUES_ROOM1	
200	Natalija Drekalovic	Raw milk quality monitoring system	1	13	TUES-11:00	ROOM1	TUES_ROOM1	
59	Aleksey Efimov, Anatoly I. Novikov, Dmitry Ustukov and Andrey Tarasov	Algorithms for approximating contours by linear sections	3	14	TUES-15:00	ROOM1	TUES_ROOM1	Chair: Dmitrii Kaplun
60	Elis Pelivani and Betim Cico	A comparative study of automation testing tools for web applications	3	14	TUES-15:00	ROOM1	TUES_ROOM1	
63	Maxim Grachev and Yury Parshin	Analysis of the Clustering Algorithm Effectiveness when an Autonomous Car's Estimating the Angular Coordinates Using the Maximum Likelihood Method	3	14	TUES-15:00	ROOM1	TUES_ROOM1	
64	Jiacheng Wu, Han Cui and Naim Dahnoun	A Novel High Performance Human detection, Tracking and Alarm System Based on millimeter-wave Radar	3	14	TUES-15:00	ROOM1	TUES_ROOM1	
65	Pavel Lyakhov, Maxim Bergerman, Natalia Semyonova, Dmitrii Kaplun and Alexander Voznesensky	Design Reverse Converter for Balanced RNS with Three Low-cost Modules	3	14	TUES-15:00	ROOM1	TUES_ROOM1	
69	Pavel Lyakhov, Maria Valueva, Dmitrii Kaplun and Alexander Voznesensky	A New Method of Sign Detection in RNS Based on Modified Chinese Remainder Theorem	3	14	TUES-15:00	ROOM1	TUES_ROOM1	
70	Pavel Lyakhov, Georgii Valuev, Maria Valueva, Dmitrii Kaplun and Aleksandr Sinitca	Single Image Super-Resolution Method Based on Bilinear Interpolation and U-Net Combination	3	14	TUES-15:00	ROOM1	TUES_ROOM1	
85	Denis Loubach	Fundamental Concepts to Build a Runtime Reconfigurable Virtual Platform Model	3	14	TUES-15:00	ROOM1	TUES_ROOM1	
86	Alexander Antonov	Inferring Custom Synthesizable Kernel for Generation of Coprocessors with Out-of-Order Execution	3	14	TUES-15:00	ROOM1	TUES_ROOM1	
88	Maxim S. Pestin, Alexander S. Novikov, Alexey Ivutin and Anna Voloshko	Multicriteria optimization problem of data flows in heterogeneous information systems	3	15	TUES-18:00	ROOM1	TUES_ROOM1	Chair: Alla Levina
96	Anna Voloshko, Alexey Ivutin and Alexander S. Novikov	Rules for optimal static tasks scheduling in heterogeneous systems	3	15	TUES-18:00	ROOM1	TUES_ROOM1	
98	Mikhail Kuznetsov and Evgenia Novikova	Towards application of text mining techniques to the analysis of the privacy policies	3	15	TUES-18:00	ROOM1	TUES_ROOM1	
101	Alexei Sychev	Nonlinear function parameters optimization implementation by Python programming language	3	15	TUES-18:00	ROOM1	TUES_ROOM1	
106	Pavel Savenkov and Alexey Ivutin	Heterogeneous text data parallel processing to behavioral anomalies search using machine learning methods and algorithms	3	15	TUES-18:00	ROOM1	TUES_ROOM1	
107	Hyrmet Mydyti and Arbana Kadriu	The Data Mining Approach: A Case Study - Clustering Algorithms for After Sale Service	3	15	TUES-18:00	ROOM1	TUES_ROOM1	
111	Vyacheslav Koryachko, Dmitry Perepelkin, Aleksey Saprykin and Maria Ivanchikova	Development of Cloud Video Conferencing System Based on Two-Phase Routing Networks	3	15	TUES-18:00	ROOM1	TUES_ROOM1	
115	Alla Levina, Ivan Kamnev and Igor Zikratov	Implementation White-Box Cryptography for Elliptic Curve Cryptography	3	15	TUES-18:00	ROOM1	TUES_ROOM1	
120	Flavia Caforio, Michele Paolino, Pierpaolo Iannicelli and Daniel Raho	VOSySmonitoRV: a mixed-criticality solution on Linux-capable RISC-V platforms	3	15	TUES-18:00	ROOM1	TUES_ROOM1	
7	Rebeca P. Díaz-Redondo, Manuel Caeiro Rodríguez, Soledad Torres-Guijarro, Iria Vázquez Silva and Mario Manso Vázquez	A Micro learning approach based on a Telegram bot: a gender-inclusive language experience	8	16	TUES-11:00	ROOM2	TUES_ROOM2	Chair: Rebeca P. Díaz-Redondo Reinhard Haas
9	Anatolijs Zabasta, Nadezda Kunicina, Jasmin Kevric, Aphrodite Ktena, Anastasija Ziravecka and Dejan Jokic	Acquisition of Learning Outcomes Applying Active Learning Approach and Quality Assurance process at ELEMEND project	8	16	TUES-11:00	ROOM2	TUES_ROOM2	
26	Natalia Trifonova, Marina Vlasova and Mikhail Kanavtsev	On-line education as a new industry and market: changing the thematic agenda, demand parameters and leadership principles	8	16	TUES-11:00	ROOM2	TUES_ROOM2	
30	Anatolijs Zabasta, Ansis Avotins, Ricards Porins, Peteris Apse-Apsitis, Janis Bicans and Darja Korabicka	Development of IoT based Monitoring and Control System for Small Industrial Greenhouses	8	16	TUES-11:00	ROOM2	TUES_ROOM2	
41	Adnan Bosović, Ajla Merzić and Mustafa Musić	Practice-Oriented Teaching in Smart Grids	8	16	TUES-11:00	ROOM2	TUES_ROOM2	
77	Ioannis-Christos Dedes, Eleftherios Tsampasis, Charalambos Elias and Panagiotis Gkonis	Energy Storage in Smart Electrical Grids	9	16	TUES-11:00	ROOM2	TUES_ROOM2	
99	Maria Gkaroutsou, Eleftherios Tsampasis, Charalambos Elias and Vassilis Stathopoulos	Thermochemical Energy Storage in Solar Power Plants	9	16	TUES-11:00	ROOM2	TUES_ROOM2	
195	Gordana Lastovicka-Medin, Djordjije Pantovic, Ivona Bozovic and Ivana Doknic	Physics of Fluids generated in the Human Respiratory Cycle and Social Distancing in time of COVID-19	7	16	TUES-11:00	ROOM2	TUES_ROOM2	
103	Sergey Kruglov, Nikolai Vereschagin, Andrei Serezhin, Sergei Shatilov, Kirill Agaltsov and Dmitry Kusakin	Study of the Energy Characteristics a Thyatron-type Gas Discharge Current Interrupter with Sector Hole in the Screen in a Scheme with Inductive Energy Storage	9	17	TUES-15:00	ROOM2	TUES_ROOM2	Chair: Siniša Djurović Amela Ajanovic
134	Sergey Kruglov, Nikolai Vereschagin, Andrei Serezhin, Sergei Shatilov, Kirill Agaltsov and Dmitry Kusakin	Study of the Temperature Effect on Operating Mode of a Thyatron-type Gas-discharge Current Interrupter in a Scheme with Inductive Energy Storage	9	17	TUES-15:00	ROOM2	TUES_ROOM2	
140	Natalia Kopylova	Designing an Electronic System for a Foreign Language Students' Teaching of the Training Program "Information Science and Computer Engineering"	8	17	TUES-15:00	ROOM2	TUES_ROOM2	
166	Asep Andi Suryandi, Inaki Eraso Damian and Siniša Djurović	FBG Magnetostrictive Composite Flux Sensor Response Characterisation for Surface Permanent Magnet Rotor Flux Monitoring	9	17	TUES-15:00	ROOM2	TUES_ROOM2	
169	Jovan Vujašinović, Goran Savić and Milan Prokin	Terminal for Remote Control of Renewable Energy Sources Powered Station for Electric Vehicles Charging	9	17	TUES-15:00	ROOM2	TUES_ROOM2	

170	Dimitris Karadimas, Christos Panagiotou, John Gialelis, Christos Koulamas and Stavros Koubias	Process based Machine Learning for Energy Optimization in Industrial Enterprises	9	17	TUES-15:00	ROOM2	TUES_ROOM2	
178	Florina Besnea Petcu, Stefan-Irinel Cismaru, Andrei-Costin Trasculescu, Ionut-Cristian Resceanu, Cristina Pana, Marius Niculescu and Nicu-George Bizdoaca	Brain-Computer Interface System for Monitoring Biomedical Parameters Integrated in Virtual Reality	7	17	TUES-15:00	ROOM2	TUES_ROOM2	
198	Lamir Shkurti, Jaumin Ajdari, Faton Kabashi and Varol Fuşa	PlagAL: Plagiarism detection system for Albanian texts	8	17	TUES-15:00	ROOM2	TUES_ROOM2	
16	Mikhail Kuptsov, Vladimir Minaev, Sergei Yablochnikov, Irina Yablochnikova and V Dzubelova	Analysis of the Implementation of Information Exchange Algorithms in Social Networks	11	18	TUES-18:00	ROOM2	TUES_ROOM2	Chair: John Tasloglou
19	John Tasloglou, Nikos Frantzis, George Bertolis, John Konstantaras, John Koutsoubis and Christos Manasis	Switching Speed Evaluation of Commercially Available IGBTs for Sub-microsecond Pulsed Power Applications	11	18	TUES-18:00	ROOM2	TUES_ROOM2	
29	Nikolay Safyannikov, Aleksandr Chepasov and Pavel Bondarenko	Functional Organization of Elements of Stream Converters with Actualization of States	11	18	TUES-18:00	ROOM2	TUES_ROOM2	
49	Vigan Raca, Goran Velinov, Betim Cico and Margita Kon-Popovska	Measuring the Government Openness using an Assessment Tool: Case study of Six Western Balkan Countries	11	18	TUES-18:00	ROOM2	TUES_ROOM2	
110	Nickolay Vasiliev, Alexander Yashin and Sergei Dovzhikov	Integration of business process definition, analysis and execution tools based on block-structured approach	11	18	TUES-18:00	ROOM2	TUES_ROOM2	
116	Anna Voloshko and Oleg Kryukov	Method of Development of the Automated System for Formulation of Recommendations for the Optimal Organization of the Production Process	11	18	TUES-18:00	ROOM2	TUES_ROOM2	
141	Peter Okeme, Anastasia Skakun and Muzalevskii Aleksandr	The Implementation of Smart Factory for Product Inspection and Validation	11	18	TUES-18:00	ROOM2	TUES_ROOM2	
157	Igor Ognjanovic, Livia Maglič and Bojana Tošić	IT Enhanced Process Management in ports: Comprehensive Evaluation Framework	11	18	TUES-18:00	ROOM2	TUES_ROOM2	
158	Damir Nozica, Tomislav Keser and Damir Blažević	Unmanned Aerial Vehicle Swarm Uses Wi-Fi to Search for Stranded People in Remote Areas	11	18	TUES-18:00	ROOM2	TUES_ROOM2	
3	Lidia Poceru Fraile, Apostolos Fourmaris and Christos Koulamas	Design and Performance Evaluation of an Embedded EDHOC Module	13	19	TUES-11:00	ROOM3	TUES_ROOM3	Chair: Steve Pearce
4	Tomáš Balihar and Martin Novotný	Influence of Synthesis Parameters on Vulnerability to Side-Channel Attacks	13	19	TUES-11:00	ROOM3	TUES_ROOM3	
11	Kai-Uwe Basener, Stefan Scharoba, Hans-Werner Wiesbrock, Jens Bielefeldt, Mzhdeh Massah, Siddique Reza Khan and Michael Hübner	DeepTest: How Machine Learning can improve the test of Embedded Systems	13	19	TUES-11:00	ROOM3	TUES_ROOM3	
13	Sergey M. Morozov	Neuro-fuzzy Approach for the Calibration of High-Precision Embedded Systems	13	19	TUES-11:00	ROOM3	TUES_ROOM3	
22	Olga Bureneva, Alena Pustovoitova and Daniil Sobolev	Hardware module for pulse interference mitigation in digital signal streams	13	19	TUES-11:00	ROOM3	TUES_ROOM3	
160	Steve Pearce	Digitally enabled interactions: Designing for Customer Agency, Control and Customization	11	19	TUES-11:00	ROOM3	TUES_ROOM3	
172	Sanja Bauk and Radoje Dzankic	Model of Tracking Radioactive Cargo in Sea Transport	11	19	TUES-11:00	ROOM3	TUES_ROOM3	
173	Evgeny Kozlov, Andrey Trubitsyn, Andrey Fefelov and Evgeny Grachev	Modeling the Process of Heat Transfer from the Surface of Liquid Metals	11	19	TUES-11:00	ROOM3	TUES_ROOM3	
185	Dimitris Karadimas, Christos Panagiotou, Orestis Akrivopoulos and Ioannis Chatziagiannakis	Architecture & System Design of TERRA+: The wine production use case	11	19	TUES-11:00	ROOM3	TUES_ROOM3	
23	Viacheslav Oliinyk, Vladimir Lukin and Igor Djurovic	Time Delay Estimation for Noise-Like Signals Embedded in Non-Gaussian Noise Using Robust Similarity Measures	13	20	TUES-15:00	ROOM3	TUES_ROOM3	Chair: Marika Apostolova
28	Sergey Nikolaevich Kirillov and Vladimir Timurovich Dmitriev	Construction of primary speech signal codecs with the ability to mask and protect phonograms from falsification	13	20	TUES-15:00	ROOM3	TUES_ROOM3	
34	Eugene Larkin, Tatiana Akimenko and Tatiana Kuznetsova	ESTIMATION OF EMBEDDED SYSTEM SYNCHRONIZED SOFT EFFECTIVENESS	13	20	TUES-15:00	ROOM3	TUES_ROOM3	
36	Vladimir Ruchkin, Boris Kostrov and Ekaterina Ruchkina	Management of Micro and Macro Architectures For With Goal Of Universality, Scalability and Energy Efficiency	13	20	TUES-15:00	ROOM3	TUES_ROOM3	
37	Alla Levina and Victor Kadykov	Homomorphic Properties Within Lattice-Based Encryption Systems	13	20	TUES-15:00	ROOM3	TUES_ROOM3	
39	Roza Fatkueva and Yulya Shichkina	Detection of network attacks using of growing pyramid networks	13	20	TUES-15:00	ROOM3	TUES_ROOM3	
42	Khalid Ammar, Abdullah Al-Emami and Amir Baher	Real-time Vehicle Speed Enforcement System	13	20	TUES-15:00	ROOM3	TUES_ROOM3	
45	Alexey Subbotin, Nataly Zhukova and Man Tianxing	Architecture of the intelligent video surveillance systems for fog environments based on embedded computers	13	20	TUES-15:00	ROOM3	TUES_ROOM3	
51	Stefan Kostoski and Marika Apostolova	Payatron – Secure Electronic Transaction Processing System	13	20	TUES-15:00	ROOM3	TUES_ROOM3	
52	Gehad Alkady, Ihab Adly, Ramez Daoud, Yves Sallez, Hany Elsayed, Hassanein Amer and Hani Ragai	Dynamic Swapping of Fault-Tolerant Architectures Based on FPGAs for Flexible Manufacturing Systems	13	21	TUES-18:00	ROOM3	TUES_ROOM3	Chair: Gehad Alkady
62	Eugenie Mamontov, Alexandr Dyagilev, Roman Dyatlov and Olga Melnik	The Modeling of Ion Oscillations in Rapidly Oscillating Quadrupole Fields when Crossing the Mathieu Diagram Stability Boundaries	13	21	TUES-18:00	ROOM3	TUES_ROOM3	
78	Kevin Hutto and Vincent Mooney	Sensing with Random Encoding for Enhanced Security in Embedded Systems	13	21	TUES-18:00	ROOM3	TUES_ROOM3	
102	Miroslav Hagara, Oldřich Ondráček, Peter Kubinec and Radovan Stojanović	FPGA Implementation of Unimodal Thresholding	13	21	TUES-18:00	ROOM3	TUES_ROOM3	
119	Mirko Sajic, Zlatko Bundalo, Dusanka Bundalo, Prof. Radovan Stojanovic, Dejan Lalić and Zeljko Vidovic	Smart Digital Terminal Devices with Speech Recognition and Speech Control	13	21	TUES-18:00	ROOM3	TUES_ROOM3	

135	Vittoriano Muttillio and Vincenzo Stoico	Model-Based HW/SW Co-Design Methodology for UAV Systems Development	13	21	TUES-18:00	ROOM3	TUES_ROOM3	
143	Norbert Englisch, René Bergelt and Wolfram Hardt	An AUTOSAR-specific Static Testing Strategy for Educational Automotive Software Engineering	13	21	TUES-18:00	ROOM3	TUES_ROOM3	
165	Milan Prokin, Dragana Prokin, Györf Fülöp and Gábor Tárnok	Range Optimized Navigation for E-Bikes	13	21	TUES-18:00	ROOM3	TUES_ROOM3	
187	Anastasiia Sochenkova and Natalia Podzharaya	People with Disabilities and AR/VR Usage Trends: Overview, Estimation, Forecasts	11	21	TUES-18:00	ROOM3	TUES_ROOM3	
WEDNESDAY, 09 June								
K5	Hui Cao, Head of Policy and Strategy of Huawei's EU office	5G Connectivity: the Key to Success for European Industry	0	3	WED-09:20	ROOM1	WED_ROOM1	Chair: Betim Cico
K6	Yannis Manolopoulos, Open University of Cyprus, Aristotle University of Thessaloniki.	Recommending POIs in LBSNs with Deep Learning	0	3	WED-10:00	ROOM1	WED_ROOM1	PC PASS: mBürKRPP363 Mob: 62875777
24	Miroslav Kosanic and Veljko Milutinovic	A Survey on Mathematical Aspects of Machine Learning in GeoPhysics: The Cases of Weather Forecast, Wind Energy, Wave Energy, Oil and Gas Exploration	12	22	WED-12:30	ROOM1	WED_ROOM1	Chair: Georgios Keramidas
47	Veljko Milutinovic, Miljan Đorđević, Erfan Sadeqi Azer, Kristy Yoshimoto, Ivan Ratković, Gerhard Klimeck, Milos Kotlar, Miroslav Bojovic, Bozidar Miladinovic, Nenad Korolija, Stevan Stankovic, Nenad Filipović, Zoran Babović, Miroslav Kosanic, Akira Tsuda, Mateo Valero, Massimo de Santo, Erich Neuhold, Jelena Skoručak and Laura Dipietro	The Ultimate DataFlow for Ultimate SuperComputers-on-a-Chip, for Scientific Computing, Geo Physics, Complex Mathematics, and Information Processing	12	22	WED-12:30	ROOM1	WED_ROOM1	
154	Lejla Gurbeta Pokvić, Amar Deumić, Budimir Lutovac and Almir Badnjević	Possibility of Managing Medical device Post-market Surveillance using Artificial Intelligence and Standardized Methodology	12	22	WED-12:30	ROOM1	WED_ROOM1	
191	Alexandros Spourmias, Panagiotis Bountas, Evanthia Faliagka, Dimitris Kontargiris, Christos Antonopoulos, Georgios Keramidas and Nikolaos Voros	Smart health monitoring using AI techniques in AAL environments	12	22	WED-12:30	ROOM1	WED_ROOM1	Pass for PC: pcKtUjGZ344 Pass for Mobile-Video: 72548449
193	Gordana Lastovicka-Medin and Vanja Backović	From Contactless Disinfection Intelligent Hand Sanitizer Dispenser for Public & Home towards IoT Based Assistive Technologies for Visually Impaired Users	12	22	WED-12:30	ROOM1	WED_ROOM1	
202	Radovan Stojanovic, Vesna Maraš, Sanja Radonjić, Anita Martić, Jovan Đurković, Katarina Pavićević, Vasilije Mirović and Miljan Cvetković	A Feasible IoT-Based System for Precision Agriculture	12	22	WED-12:30	ROOM1	WED_ROOM1	
203	Radovan Stojanovic and Andrej Škraba	Simplified open hardware-software pulse oximetry interface for purpose of COVID-19 symptoms detection and monitoring	12	22	WED-12:30	ROOM1	WED_ROOM1	
205	Goran Devedžić, Saso Koceski and Suzana Petrović Savić	A Brief Overview of the Enabling Technologies for Digital Medicine and Smart Healthcare	12	22	WED-12:30	ROOM1	WED_ROOM1	
P1	SMART4ALL	Self-sustained Cross Border Customized Cyberphysical System Experiments For Capacity Building Among European Stakeholders	0	25	WED-11:00	ROOM2	WED_ROOM2	Chair: Marko Simeunovic
P2	ELEMEND	Electrical Energy Markets And Engineering Education	0	25	WED-11:00	ROOM2	WED_ROOM2	
P3	VIRAL	Vitalising Ict Relevance In Agricultural Learning	0	25	WED-11:00	ROOM2	WED_ROOM2	
P4	SI4SEC	Strengthening Industry 4.0 By Semantically Enhanced Cyber Security	0	25	WED-11:00	ROOM2	WED_ROOM2	
P5	AI4NEUROPPC	Artificial Intelligence To Support A Concept Of Person-Centred Care In Neurosurgery	0	25	WED-11:00	ROOM2	WED_ROOM2	
P6	ECOMON	Internet of Things Laboratory for Real-Time Ecological Monitoring	0	25	WED-11:00	ROOM2	WED_ROOM2	
P7	MARDS	Reforming doctoral studies in Montenegro and Albania – good practice paradigm	0	25	WED-11:00	ROOM2	WED_ROOM2	
P8	TRINITY	Transmission system enhancement of regional borders by means of Intelligent market technology	0	25	WED-11:00	ROOM2	WED_ROOM2	
P9	KEIT	Internet of Things system for non-contact temperature monitoring	0	25	WED-11:00	ROOM2	WED_ROOM2	
137	Aleksey I. Baranchikov, Nikolay A. Sumenkov, Sergey I. Babaev, Aleksandr Bastrychkin and Aleksandr E. Zverev	The issues of orthogonal basis dimension selection in embedded image processing systems	4	26	WED-15:00	ROOM2	WED_ROOM2	Chair: Giovanni Burresti
153	Giovanni Burresti, Martino Lorusso, Lisa Graziani, Alice Comacchio, Federico Trotta and Antonio Rizzo	Image-Based Defect Detection in Assembly Line with Machine Learning.	4	26	WED-15:00	ROOM2	WED_ROOM2	
174	Hamid Alshareefi, Ciprian Lupu, Lich Duc Luu and Laith Ismail	Real-Time Implementation of Adaptive Neural Controller by LabVIEW Software	4	26	WED-15:00	ROOM2	WED_ROOM2	
182	Giovanni Burresti and Victoria A. Sablina	Micro-Facial Movement Detection Using LBP-TOP Descriptors for Landmark Based Regions	4	26	WED-15:00	ROOM2	WED_ROOM2	
186	Vladimir Gazivoda, Luka Filipović and Miloš Daković	Comparative Analysis of Regression and Neural Network Models on Students' Grades	4	26	WED-15:00	ROOM2	WED_ROOM2	
189	Hamid Alshareefi, Ciprian Lupu, Laith Ismail and Lich Duc Luu	Ratio control and fault handling of aero-naval traction systems using neural network theory	4	26	WED-15:00	ROOM2	WED_ROOM2	
190	Panagiotis Mousoulis, Stavros Zogas, Panagiotis Christakos, Georgios Keramidas, Nikos Petrellis, Christos Antonopoulos and Nikolaos Voros	Exploiting Vitis Framework for Accelerating Sobel Algorithm	4	26	WED-15:00	ROOM2	WED_ROOM2	

201	Efstratios Tiganourias, Michail Mavropoulos, Georgios Keramidas, Vasilios Kelefouras, Christos Antonopoulos and Nikolaos Voros	A Hierarchical Profiler of Intermediate Representation Code based on LLVM	4	26	WED-15:00	ROOM2	WED_ROOM2	
204	Marković Nenad, Jelena Rajovic and Nenad Stanojević	Potential of Use of the Republic of Serbia Renewable Energy Sources - WiP Session	9	28	WED-11:00	ROOM3	WED_ROOM3	Chair: Gordana Lastovicka-Medin
117	João Pedro Furriel, Eliseu Pereira, João Reis and Gil Gonçalves	Jurassic Park - A centralized software modules repository for IoT devices	1	28	MON-15:00	ROOM1	WED_ROOM3	
194	Gordana Lastovicka-Medin and Rajka Pejanovic	Utilization of Low-Cost Sound Sensor with Microphone built in as a Respiratory Sound Patterns Indicator - WiP Session	7	28	WED-11:00	ROOM3	WED_ROOM3	
197	Vedat Apuk and Krenare Pireva	Classification of pedagogical content using conventional machine and deep learning model - WiP Session	8	28	WED-11:00	ROOM3	WED_ROOM3	
37	Alla Levina and Victor Kadykov	Homomorphic Properties Within Lattice-Based Encryption Systems - WiP Session	13	28	WED-11:01	ROOM3	WED_ROOM3	
RES1	SESSION23	RESERVE session			WED-15:00	ROOM1	WED_ROOM1	
RES2	SESSION29	RESERVE session			WED-15:00	ROOM3	WED_ROOM3	
	SMART4ALL Workshop	SMART4ALL 1st Joint Workshop with other DIH and SAE Initiatives			WED-09:00-16:00		SMART4ALL	PC PASS: mBUrKRPP363 Mob. PASS: 62875777
	SMART4ALL Workshop parallel session 1	SMART4ALL Funded Experiments Session	0	24	WED-12:30-15:00		S4A FE SESSION	PC PASS: kYCuJSC89y3 Mob. PASS: 59285728
WS1	SMART4ALL Workshop parallel session 2	SMART4ALL Scientific Papers Session	0	24	WED-12:30-15:00		S4A SP SESSION	PC PASS: pcKilUIGZ344 Mob. PASS: 72548449
C1	Closing Ceremony		0	24	WED-18:00	ROOM1	WED_ROOM1	



Location: Hotel Budva; Budva, Montenegro