

Paper #	Authors	Title	Streams	Session	Session type
28	Junying Chen, Xiao Xu and Jiangwen Wan	Compressed Data-Gathering Method based on Spatiotemporal Correlation Clustering in Wireless Sensor Networks	IoT and SDN	S9	Standard Session
30	Sadia Qureshi and Robin Braun	Dynamic Light Path Establishment in Switch Fabric using OpenFlow	IoT and SDN	S9	Standard Session
32	Firas Al-Doghman, Zenon Chaczko and Wayne Brookes	Adaptive Consensus-based Aggregation for Edge Computing	IoT and SDN	S9	Standard Session
33	Felician More and Zenon Chaczko	Non-invasive methods in the Detection of Coronary Artery Disease	IoT and SDN	S9	Standard Session
48	Mahmoud Gamal Ahmed Bekhit, Mehran Abolhasan, Justin Lipman, Ren Ping Liu and Wei Ni	Multi Objective Optimization model for mapping and scheduling of Service Function Chains in Network Function Virtualization.	IoT and SDN	S9	Standard Session
52	<u>Pavel Kromer, Michal Prauzek, Martin Stankus and Jaromir Konecny</u>	Adaptive Fuzzy Video Compression Control for Advanced Driver Assistance Systems	IoT and SDN	S9	Standard Session
8	<u>Tomasz Górski, Jakub Bednarski and Zenon Chaczko</u>	Blockchain-based renewable energy exchange management system	Blockchain	S8	Standard Session
13	Antonio Santos and Zenon Chaczko	Blockchain: Status-Quo, Enablers & Inhibitors	Blockchain	S8	Standard Session
86	Abdurrashid Ibrahim Sanka and Ray C.C Cheung	Efficient High Performance FPGA based NoSQL Caching System for Blockchain Scalability and Throughput Improvement	Blockchain	S8	Standard Session
108	Henry Selvaraj and Suman Ghimire	A Survey on Bitcoin Cryptocurrency and its Mining	Blockchain	S8	Standard Session
100	Sunil Mysore Kempegowda and Zenon Chaczko	The optimum number of Principles ideal for Enterprise Architecture practice	Enterprise Architecture and Software Engineering	S8	Standard Session
101	Sunil Mysore Kempegowda and Zenon Chaczko	Essential Skill of Enterprise Architect Practitioners for Digital Era	Enterprise Architecture and Software Engineering	S8	Standard Session
103	Sunil Mysore Kempegowda and Zenon Chaczko	industry 4.0 complemented with EA approach: A proposal for Digital Transformation success	Enterprise Architecture and Software Engineering	Workshop	Standard Session

70	Gad Hakim, Robin Braun and Yakov Zinder	Agent Based Modeling of a Flange Climb Derailment	System Modelling-Performance	S7	Standard Session
74	Msuray Mahunnah and Kuldar Taveter	An Empirical Evaluation of the Guidelines for Modelling Sociotechnical Systems in Coloured Petri Nets Tools	System Modelling-Performance	S7	Standard Session
80	Balume Mburano and Weisheng Si	Evaluation of Web Vulnerability Scanners Based on OWASP Benchmark	Software System Eng	S7	Standard Session
12	Anis Otmame Cherif, Bruno Monsuez and Michel Nakhle	Using HiGraph to define a Formal Integrated System Modeling Framework that ensures Complete System Consistency	Modeling Frameworks and Methods	S7	Standard Session
	<u>Muhammad Zeeshan Baig and Manolya Kavakli</u>	Analyzing Novice and Expert User's Cognitive Load in using a Multi-Modal Interface System	Software Systems	S7	Standard Session
92	Sherif Hassan, Mohammed Abozied, Ahmed Khamis and Dawid Zydek	Non-Linear Modeling and Simulation with 3-D Animation for 6-DOF Autonomous Underwater Vehicle	System Modelling and Simulation	S6	Standard Session
93	Farag Bahr Abd El-Aziz, Ezz El-Deen Abd-El Kawy, Ahmed Khamis and Dawid Zydek	Integrity Performance of Egyptian eLoran System for Maritime Application	System Modelling-Performance	S6	Standard Session
94	Hany Mansour, Ahmed Khamis, Dawid Zydek and Henry Selvaraj	Performance Analysis and Evaluation of Multi-User Coded Hybrid Spread Spectrum System using Improved Chaotic Sequences	System Modelling-Performance	S6	Standard Session
95	Hany Mansour, Ahmed Khamis, Dawid Zydek and Henry Selvaraj	Statistical Analysis and Performance Comparison of Improved and Optimized CSC using Different Chaotic Maps under Different Fading Channels	System Modelling-Performance	S6	Standard Session
98	Grzegorz Chmaj and Henry Selvaraj	Power usage optimization in multi-UAV common-mission cooperative UAS systems	System Modelling-Performance	S6	Standard Session
109	D. Selvathi and Henry Selvaraj	Segmentation of Brain Tumor Tissues in MRI Images Using Multiresolution Transforms and Random Forest Classifier with Adaboost Technique	System Modelling-Performance	S6	Standard Session
79	Naila Mukhtar and Yinan Kong	Hyper-parameter Optimization for Machine-Learning based Electromagnetic Side-Channel Analysis	Algorithms and Computing	S5	Standard Session

99	Iwona Pozniak-Koszalka, Leszek Koszalka, Andrzej Kasprzak, Grzegorz Chmaj and Dawid Zydek	Route Optimization for Drilling Machine: Properties of AI Algorithms and An Experimentation System for the Practical Users	Algorithms and Computing	S5	Standard Session
22	Shaymaa Khamis and Nabil Abbasy	Enhanced Performance of Developed Two-Step (Hybrid/PMU) Linear State Estimator Model	Modelling Computer & Control Systems	S5	Standard Session
2	Marian Blachuta, Robert Bieda and Rafal Grygiel	High Performance PID Regulatory Control for Double Tanks System as an Example for Control Teaching	System Engineering Computer & Control Systems	S5	Standard Session
102	Anas Bashir-U-Din	Characterization of Amorphous Metal Materials for High-Frequency High-Power-Density Transformer	System Engineering Computer & Control Systems	S5	Standard Session
26	Bei Chen, Wenlun Cao, Yuyao He, Zhenhong Jiao, Hong Li and Chongwu Wang	Design of Measurement and Control System in Marine Electric Propulsion	System Engineering Computer & Control Systems	S5	Standard Session
17	Hussain Aldawood and Geoffrey Skinner	A Critical Appraisal of Contemporary Cyber Security Social Engineering Solutions: Measures, Policies, Tools and Applications	Cybersecurity	S4	Standard Session
88	Johannes Harunguan Sianipar, Muhammad Ihsan Haikal Sukmana and Christoph Meinel	Moving Sensitive Data Against Live Memory Dumping, Spectre and Meltdown Attacks	Cybersecurity IoT & Cybersecurity	S4	Standard Session
90	Tanveer Ahmad, Xue Jun Li and Boon-Chong Seet	Fuzzy-Logic Based Localization for Mobile Sensor Networks	Cybersecurity IoT & Cybersecurity	S4	Standard Session
29	John Ronczka	System engineering and logistical UAS corridors	System Modeling Simulation and Signal Processing	S3	Standard Session
35	Jarosław Drapała, Krzysztof Brzostowski and Jerzy Świątek	A simulation study of performance of multiple Kalman filters in non-Gaussian noise	System Modeling Simulation and Signal Processing	S3	Standard Session
6	Walid Allafi, Kotub Uddin, Cheng Zhang, Dinh Quang and James Marco	Parameter Estimation of Hybrid Fractional-Order Hammerstein-Wiener Box-Jenkins Models Using RIVCF Method	System Theory and Modelling	S3	Standard Session
45	Habes A Khawaldeh, Hamzeh Aljarajreh, Mohammad Al-Soeidat, Dylan Lu and Li Li	Performance Investigation of a PV Emulator Using Current Source and Diode String	System Modelling-Performance	S3	Standard Session
18	Takumi Fujimori and Minoru Watanabe	Soft-error tolerance of an optically reconfigurable gate array VLSI	Computer Systems	S3	Standard Session
96	Rabindra Kunwar	Advances in Visible Light Communication (VLC) System.	Communication System	S3	Standard Session
4	Laxmi Gewali and Binay Dahal	Algorithms for Tower Placement on Terrain	Computing & Optimization	S2	Standard Session

10	Zhonghua Shen, Keith Burnham and Leonid Samlov	Comparative Performance of Genetic Algorithm, Simulated Annealing and Ant Colony Optimisation in solving the Job-shop Scheduling Problem	Computing & Optimization	S2	Standard Session
21	Łukasz Falas, Patryk Schauer and Paweł Świątek	IoT service based systems building methodology	IoT and Methodology Modeling	S2	Standard Session
24	Mohammad Noman Hossain Chowdhury, Marc Adam and Geoffrey Skinner	The Impact of Time Pressure on Human Cyber Security Behaviour: An Integrative Framework	Frameworks and Cybersecurity	S2	Standard Session
25	Muhammad Noman Khalid and Talha Alam	Web Application Vulnerability Prediction Using Machine Learning.	Computing & Optimization	S2	Standard Session
81	Piyali Das, Ram Krishna Mehta and Om Prakash Roy	Comparative Performance Analysis for A MIMO System Based On Various Optimization Techniques	Computing & Optimization	S2	Standard Session
3	Tomasz Mazurkiewicz, Grzegorz Borowik and Tadeusz Luba	Construction of index generation unit using probabilistic data structures	Big Data	S1	Standard Session
38	Salman Muther Hussain and Morshed U Chowdhury	A NOVEL MIDDLEWARE FRAMEWORK FOR IMPLEMENTING BIGDATA ANALYTICS IN MULTI CLOUD ENVIRONMENT.	Big Data and Cloud	S1	Standard Session
83	Grzegorz Borowik	Prediction of crime from various time series data-driven models	Analytics and Big Data	S1	Standard Session
87	Zbigniew Wawrzyniak, Stanisław Jankowski, Radosław Pytlak, Zbigniew Szymański, Grzegorz Borowik, Eliza Szczechla and Paweł Michalak	Data-driven models in machine learning for crime prediction	Analytics and ML	S1	Standard Session
89	Radosław Pytlak, Damian Suski, Zbigniew Wawrzyniak and Grzegorz Borowik	The use of dynamic optimization in building System Dynamics models for forecasting criminal activities	Analytics and ML	S1	Standard Session
104	Muhammad Sajjad Akbar and Bogdan Gabrys	Data Analytics Enhanced Data Visualization and Interrogation with Parallel Coordinates Plots	Analytics and ML	S1	Standard Session
9	Tomasz Górski and Ewa Wojtach	Use Case API - design pattern for shared data	Software engineering and Architecture	Video / Skype Session	Poster Presentation
11	Leena Bhole and Maya Ingle	Determining Dominant Frequency bands and Estimating Range of Each Frequency Band for EEG based Emotion Recognition	Bioengineering and Computing	P3.1	Poster Presentation
16	Dr. Padmaja Nimmagadda and Dr. Ch.D.V.Subba Rao	Graphic User Interface Model for Processing Atmospheric Radar Signals	Modelling	P3.1	Poster Presentation

40	Nyamdavaa Dashdeleg	Feasibility study of Beacon technology solutions vs challenges of RFID tagging in the mining operations	IoT	P3.1	Poster Presentation
41	Tsenguunjav Dansran, Gantulga Ulzii and Munkhjargal Lkhagva	Government Service Security and Biometric data	Cybersecurity	P3.1	Poster Presentation
43	Elham Sheikhi Mehrabadi and Swamidoss Sathiakumar	Optimal Scheduling of a CHP-Based Industrial Microgrid	Microgrid System	P3.1	Poster Presentation
55	Baldorj Chimeddorj, Hyung Taek Kim and Li-Hua Xu	Analytical Study of CSP Installation Scenario in Mongolia using an Energy Performance Model	Modelling-Performance	P3.1	Poster Presentation
71	Muthu Manikandan, Nithin Ayyappa and Rahul Murali	Textile Sensor Based Exoskeleton Suits for the Disabled	IoT	P3.2	Poster Presentation
72	Batbold Battogtokh and Dalaitsetseg Dorjkhand	Environmental Reconnaissance of the Shivee-Ovoo Coalmine, Mongolia	Env engineering	P3.2	Poster Presentation
73	Alina Rakhi, Zenon Chaczko, Firas Al_Doghman	An Empirical Analysis of Knowledge Representation & Discovery in Deep Learning Frameworks	Algorithms and Computing	P3.2	Poster Presentation
76	Haitao Tang	Classification Model Selection Using WEKA and Auto-WEKA in Machine Learning	Computing	P3.2	Poster Presentation
77	Shaher Slehat and Zenon Chaczko	Employ Q-learning to Fight the Jamming Attack at Cognitive Radio	Cybersecurity	P3.2	Poster Presentation
82	Supriya Banjade	Study of Bond Behavior of Steel Reinforcement Embedded in Fly-Ash Based Geopolymer Concrete	Env engineering	P3.2	Poster Presentation
105	Yang Zhang, Hong Gao, Hong Chen, Yaping Li and David Tien	EIF-Export: An energy-interference-free data export approach for EH-WSN Networks	IoT and WSN	P2	Poster Presentation
106	Chongrui Tian, David Tien and Ganran Wang	The Design and Implementation of the Workload Management System Based on Cloud Platforms	System management and Signal Processing	P2	Poster Presentation
107	Guangming Yan, David Tien and Xiaojun Sun	A Kind of Distributed Fusion Incremental Kalman Filter	Processing	P2	Poster Presentation
46	Zhenhan Wei, Shuxiang Song and Mingcan Cen	State-of-charge (SOC) estimation using T-S Fuzzy Neural Network for Lithium Iron Phosphate Battery	Algorithms and Computing	P1.1	Poster Presentation
47	Zili Li and Lu Tang	A Study on the Detection of River speedBased on UHF Radar Data	Modelling	P1.1	Poster Presentation
49	Pengfei Tan and Ye Lu	Modified Synchronous Square Prime Code for SAC-OCDMA Systems Using New Partial Balanced Detection Technique	Cybersecurity	P1.1	Poster Presentation

51	Zili Li and Anyun Yin	Hybrid inhibition algorithm for ionospheric clutter mitigation in high frequency surface wave radar	Signal Processing	P1.1	Poster Presentation
54	Fan Gao, Ye Lu and Chuanqi Li	A New Novel Improved Technique for PAPR Reduction in OFDM System	Signal Processing	P1.1	Poster Presentation
57	Yongjian Zhu	Studies on Image Stitching Algorithms in Machine Vision Inspection of Solar Panel	Computing System Engineering	P1.1	Poster Presentation
58	Xue Ouyang, Yuling Luo and Junxiu Liu	Period Analysis of Chaotic Systems under Finite Precisions	Engineering	P1.1	Poster Presentation
59	Zhanwei Wu	An Energy-aware Routing for Optimizing Control and Data Traffic in SDN	SDN Algorithms and Computing	P1.2	Poster Presentation
60	Qiaosong Chen and Wen Li	An Improved Supervised Descent Method based Face Alignment Algorithm	Algorithms and Computing	P1.2	Poster Presentation
61	Senhui Qiu and Yexiu Zhong	A Relay Routing Algorithm for Remote Concentrated Ammeter Reading based on Ant Colony Optimization	Algorithms and Computing	P1.2	Poster Presentation
62	Xiang Feng Li and Du Qu Wei	Synchronization of chaotic permanent magnet synchronous motor system via sliding mode control	Computer Systems	P1.2	Poster Presentation
63	Mufeng Wang and Du Qu Wei	Adaptive Synchronization of Chaotic Brushless DC Motors with Uncertain System Parameters Based on Lyapunov Stability theory	Computer Systems System	P1.2	Poster Presentation
65	Zaihui Deng and Sha Ding	Optimal Design of Degree Distribution in LT Codes Based on Evolution Strategy	Modelling-Performance	P1.2	Poster Presentation
66	Yongjian Zhu	An Improved Fringe-reflection Measurement Method for Rotational Symmetric Surface	Algorithms and Computing System	P1.2	Poster Presentation
67	Changgeng Yu	Research on Model for Verifying the Integrity of Software Based on API Hook	Modelling-Performance	P1.2	Poster Presentation