

**Progress in Image Processing, Pattern Recognition and Communication Systems  
CORES, IP&C, ACS CONFERENCE PROGRAMME**

<b>Monday 28/06/2021</b>	
09.00 – 09.15	<b>Opening / Welcome</b> <b>[Michał Choraś, Tomasz Hyla, Michał Woźniak]</b>
09.15 – 10.00	<b>PLENARY SESSION:</b> <b>Color Visual Cryptography: Coding in Random Data with Optimized Readability</b> <b>Leszek Chmielewski</b>
	<b>Session: PROGRESS IN ADVANCED COMPUTER SYSTEMS</b> Chair: Tomasz Hyla
10.00 – 10.20	<b>Green IT: Energy Efficient Constructions and Applications for Data Centers and Clusters</b> <i>Andriy Luntovskyy and Tenshi Hara</i>
10.20 – 10.40	<b>Implementation of Nussinov’s RNA folding using the Kokkos library</b> <i>Mateusz Gruzewski, Marek Palkowski</i>
10.40 – 11.00	<b>Ontology-Driven Approach to Research and Educational Organization Information Representation</b> <i>Larysa Globa, Rina Novogradskaya, Maryna Popova, Bohdan Zadoienko, and Yu Junfeng</i>
11.00 – 11.20	<b>Analogy of the degree of interest in a news article by gaze information</b> <i>Takuya Ogawa, Keiichi Endo, Hisayasu Kuroda, and Shinya Kobayashi</i>
11.20 – 11.40	<b>Examination of Water Temperature Interpolation Method for Prediction</b> <i>Yu Agusa, Keiichi Endo, Hisayasu Kuroda and Shinya Kobayashi</i>
	<b>Session: ADVANCES IN PATTERN RECOGNITION AND CLASSIFIERS</b> Chair: Mariusz Flasiński
11.40 – 12.00	<b>Building an Ensemble of Classifiers via Randomized Models of Ensemble Members</b> <i>Pawel Trajdos and Marek Kurzynski</i>
12.00 – 12.20	<b>Hybrid learning model for syntactic pattern recognition</b> <i>Mariusz Flasiński, Janusz Jurek, and Tomasz Peszek</i>
12.20 – 12.40	<b>Distance Metrics in Clustering and Weighted Scoring Algorithm</b> <i>Jakub Klikowski and Robert Burduk</i>
12.40 – 13.00	<b>Exploration of Hardware Acceleration Methods for an XNOR Traffic Signs Classifier</b> <i>Dominika Przewlocka-Rus, Marcin Kowalczyk, and Tomasz Kryjak</i>
13.00 – 13.20	<b>ALEA: An Anonymous Leader Election Algorithm for Synchronous Distributed Systems</b> <i>Deepanjan Mitra, Agostino Cortesi, and Nabendu Chaki</i>
13.20 – 13.40	<i>Coffee Break</i>
	<b>Session: PROGRESS IN IMAGE PROCESSING AND COMPUTER VISION</b> Chair: Leszek Chmielewski
13.40 – 14.00	<b>Comparing concepts of quantum and classical neural network models for image classification task</b> <i>Rafał Potempa and Sebastian Porebski</i>

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14.00 – 14.20	<b>Can Color Cryptography Be Truly Random?</b> <i>Leszek J. Chmielewski, Mariusz Nieniewski, and Arkadiusz Orłowski</i>
14.20 – 14.40	<b>Description-based Ranking of Visual Instances: Feasibility Study for Keypoints</b> <i>Andrzej Śluzek</i>
14.40 – 15.00	<b>Fuzzy system for lip print identification</b> <i>Przemysław Kudłacik and Tomasz Orczyk</i>
15.00 – 15.20	<b>Assessment of correlations between age and textural features of CT images of thoracic vertebrae</b> <i>Weronika Węgrzyn, Monika Pierzchała, Paulina Bałon, Robert Paweł Banyś, and Adam Piórkowski</i>
15.20 – 15.40	<b>Preprocessing of Document Images Based on the GGD and GMM for Binarization of Degraded Ancient Papyri Images</b> <i>Hubert Michalak, Robert Krupiński, Piotr Lech, and Krzysztof Okarma</i>
15.40 – 16.00	<b>Application of Image Entropy Analysis for the Quality Assessment of Stitched Images</b> <i>Krzysztof Okarma and Mateusz Kopytek</i>
16.00 – 16.20	<i>Coffee Break</i>
	<b>Session: Practical Applications of Computer Recognition Systems</b> Chair: Krzysztof Okarma
16.20 – 16.40	<b>Gyroscope-Based Remote Text Entry Interface</b> <i>Adam Nowosielski and Patryk Krasa</i>
16.40 – 17.00	<b>Comparison of the effects of different preprocessing methods on homogeneity assessment of digital intraoral radiographs of root canal fillings</b> <i>Jagoda Łębska, Barbara Obuchowicz, Rafał Obuchowicz, and Adam Piórkowski</i>
17.00 – 17.20	<b>Impact of software bug report preprocessing and vectorization on bug assignment accuracy</b> <i>Lukasz Chmielowski and Michał Kucharzak</i>
17.20 – 17.40	<b>On Machine Learning for Autism prediction from functional connectivity</b> <i>Moises Silva and Manuel G raña</i>
17.40 – 18.00	<b>The impact of data preprocessing on the accuracy of CNN-based heart segmentation</b> <i>Julia Lasek</i>

**Tuesday 29/06/2021**

09.00 – 09.15	<b>Opening / Welcome</b> <b>[Michał Choraś, Tomasz Hyla, Michał Woźniak]</b>
09.15 – 10.00	<b>PLENARY SESSION:</b> <b>Rafał Leszczyna</b>
	<b>Session: Practical Applications of Computer Recognition Systems</b> Chair: Marcin Iwanowski

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10.00 – 10.20	<p align="center"><b>Comparison of selected acoustic signal parameterization methods in the problem of machine recognition of classical music styles</b> <i>Maciej Walczyński and Jacek Fica</i></p>
10.20 – 10.40	<p align="center"><b>The Influence of Bit-Depth Reduction on Correlation of Texture Features with a Patient's Age</b> <i>Patrycja Mazur</i></p>
10.40 – 11.00	<i>Coffee Break</i>
	<p><b>Session: Advances in ML for Security and Networks</b> Chair: Rafal Kozik</p>
11.00 – 11.20	<p align="center"><b>Deep learning vs. traditional approaches to malware traffic classification – a comparative study</b> <i>Jacek Krupski, Damian Rybicki, Waldemar Graniszewski, and Marcin Iwanowski</i></p>
11.20 – 11.40	<p align="center"><b>Using machine learning to detect the signs of radicalization and hate speech on Twitter</b> <i>Marcin Kuchczyński, Aleksandra Pawlicka, Marek Pawlicki, and Michał Choraś</i></p>
11.40 – 12.00	<p align="center"><b>Clutter-type classification of the telco BTS units with the use of limited input information</b> <i>Lukasz Nowak, Michał Panek, and Ireneusz Jablonski</i></p>
12.00 – 12.20	<p align="center"><b>Cyber-Attack Detection from IoT Benchmark Considered as Data Streams</b> <i>Paweł Zybiewski, Marek Pawlicki, Rafał Kozik, and Michał Choraś</i></p>
12.20 – 12.40	<p align="center"><b>Some Principles of Building Steganographic Communication Networks</b> <i>Jurii Ryabinin and Oleg Finko</i></p>
12.40 – 13.00	<p align="center"><b>SAT-based Cryptanalysis of Salsa20 Cipher</b> <i>Sylwia Stachowiak, Mirosław Kurkowski, and Artur Soboń</i></p>
13.00 – 13.20	<p align="center"><b>Smart Meters Reading Process Improvement by UAV Utilization</b> <i>Piotr Kiedrowski, Łukasz Zabłudowski, and Beata Marciniak</i></p>
13.20 – 13.40	<p align="center"><b>Defuzzification method comparison in real data packets control method for network protection</b> <i>Łukasz Apiecionek</i></p>
13.40 – 14.00	<p align="center"><b>Extending machine learning-based intrusion detection with the imputation method</b> <i>Mikołaj Komisarek, Marek Pawlicki, Piotr Soboński, Aleksandra Pawlicka, Rafał Kozik, and Michał Choraś</i></p>
14.00 – 14.15	<b>Closing</b>