

**CISIM 2020, 16-18.10.2020, Online
Presentation Schedule**

DAY 1 - 16.10.2020

11:00 - 12:00 - Welcome Speech

*prof. Khalid Saeed - General chair of CISIM Conference
prof. Marta Kosior-Kazberuk - Rector, Białystok University of Technology
prof. Marek Krętowski - Vice-Rector for Research, Białystok University of Technology*

12:00 - 13:00 - Keynote #1 - prof. Danuta Rutkowska, University of Social Sciences, Łódź, Poland

"Artificial Intelligence and Image Understanding"

13:00 - 14:00 - Keynote #2 - prof. Michał Woźniak, Wrocław University of Technology, Poland

"Chosen Challenges of Imbalanced Data Classification"

14:00 - 14:30 - Break #1

14:30 - 16:15 - Session #1 - Biometrics and Data analysis

14:30 - 14:45 - Tomasz Boiński, Julian Szymański - "Collaborative data acquisition and learning support"

14:45 - 15:00 - Krzysztof Misztal, Tomasz Służalec, Aleksandra Kubica-Misztal - "Securing data of biotechnological laboratories using blockchain technology"

15:00 - 15:15 - Klaudia Jabłońska, Paweł Czarnul - "Benchmarking deep neural network training using multi- and many-core processors"

15:15 - 15:30 - Sławomir Zieliński - "Improving Classification of Basic Spatial Audio Scenes in Binaural Recordings of Music by Deep Learning Approach"

15:30 - 15:45 - Aleksander Sawicki, Sławomir Zieliński - "Augmentation of segmented motion capture data for improving generalization of deep neural networks"

15:45 - 16:00 - Wojciech Stecz, Tadeusz Nowicki - "Optimisation model of military simulation system maintenance"

16:00 - 16:15 - Krzysztof Trojanowski, Artur Mikitiuk, Jakub Grzeszczak - "Run-time Schedule Adaptation Methods for Sensor Networks Coverage Problem"

16:15 - 17:00 - Break #2

17:00 - 18:00 - Keynote #3 - prof. Marina Gavrilova, University of Calgary, Canada

"Adaptive and Reliable Decision Making for Multi-Modal Biometric Systems"

DAY 2 - 17.10.2020

10:00 - 11:00 - Keynote #4 - prof. Rituparna Chaki, University of Calcutta, India

"NSP and its Application towards increasing Patient Satisfaction in Assisted Living"

11:00 - 11:30 - Break #1

11:30 - 13:00 - Session #2 - Biometrics and Data analysis

11:30 - 11:45 - Rahul Kamakar, Bidyut Biman Sarkar, Nabendu Chaki - "Event Ordering using Graphical Notation for Event-B Models"

11:45 - 12:00 - Marcin Derlatka - "Time Removed Repeated Trials to Test the Quality of a Human Gait Recognition System"

12:00 - 12:15 - Eugenia Luz Arrieta Rodriguez, Juan Carlos Martinez Santos, Fernando Lopez Martinez - "A Machine Learning approach for Severe Maternal Morbidity Prediction at Rafael Calvo Clinic in Caragena-Colombia"

12:15 - 12:30 - Filip Begiełło, Mikhail Tokovarov, Małgorzata Plechawska-Wójcik - "Transfer Learning Approach in classification of BCI Motor Imagery Signal"

12:30 - 12:45 - Monika Kaczorowska, Martyna Wawrzyk, Małgorzata Plechawska - Wójcik - "Binary Classification of Cognitive Workloads Levels with Ocularography Features"

12:45 - 13:00 - Waldemar Karwowski, Marian Rusek, Przemysław Reszke - "Artificial Intelligence System for drivers fatigue detection"

13:00 - 13:30 - Break #2

13:30 - 15:45 - Session #3 - Industrial Applications

13:30 - 13:45 - Tomasz Protasowicki - "Measurement and optimization models of risk management system usability"

13:45 - 14:00 - Przemysław Ignaciuk, Łukasz Wieczorek - "Evolutionary Adaptation of (r,Q) Inventory Management Policy in Complex Distribution Systems"

14:00 - 14:15 - Daniela Borissova, Dilian Korsevov, Nina Keremedchieva - "Generalized Approach to Support Business Group Decision-Making by Using of Different Strategies"

14:15 - 14:30 - Daniela Borissova, Petya Cvetkova, Ivan Garvanov, Magdalena Garvanova - "A Framework of Business Intelligence System for Decision Making in Efficiency Management"

14:30 - 14:45 - Adam Klimowicz - "Combined State Splitting and Merging for Implementation of Fast Finite State Machines in FPGA"

14:45 - 15:00 - Mateusz Kłos, Imed El-Fray - "Securing event logs with blockchain for IoT"

15:00 - 15:15 - Muktar Ahmad, Farooque Azim, Yawar Rasheed, Muhammad Waseem Anwar, Muhammad Waqas Ahmad - "A Multi-Purpose Model Driven Platform for Contingency Planning and Shaping Response Measures"

15:15 - 15:30 - Romuald Hoffmann - "Stochastic Model of the Simple Cyber Kill Chain: Cyber Attack Process as a Regenerative Process"

15:30 - 15:45 - Jerzy Balicki, Honorata Balicka, Piotr Dryja, Maciej Tyszka - "Multi-criteria Differential Evolution for Optimization of Virtual Machine Resources in Smart City Cloud"

15:45 - 16:00 - Break #3

16:00 - 17:00 - Keynote #5 - prof. Witold Pedrycz, University of Alberta, Canada

"Explainable AI: From Data to Symbols and Information Granules"

DAY 3 - 18.10.2020

10:15 - 13:00 - Session #4 - Industrial Applications / Pattern Recognition

10:15 - 10:30 - Valery Salauyou, Damian Borecki, Tomasz Grześ - "The Synthesis Method of High-Speed Finite State Machines in FPGA"

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| 10:30 - 10:45 - Paulina Heda, Izabela Rojek, Robert Burduk - "Dynamic Ensemble Selection - application to classification of cutting tools" |
| 10:45 - 11:00 - Janusz Rafałko, Andrzej Czyżewski - "Automatic marking of allophone boundaries in isolated English spoken words" |
| 11:00 - 11:15 - Joanna Olbryś, Adrian Oleszczak - "Intraday Patterns in Trading Volume. Evidence from High Frequency Data on the Polish Stock Market" |
| 11:15 - 11:30 - Sławomir Wierzchoń, Mieczysław Kłopotek - "Spectral Cluster Maps versus Spectral Clustering" |
| 11:30 - 11:45 - Karol Antczak - "Representation Learning for Diagnostic Data" |
| 11:45 - 12:00 - Krzysztof Ostrowski - "An efficient metaheuristic for the Time-Dependent Team Orienteering Problems with Time Windows" |
| 12:00 - 12:15 - Anita Rybiatek, Łukasz Jeleń - "Application of DenseNets for Classification of Breast Cancer Mammograms" |
| 12:15 - 12:30 - Joanna Karbowska-Chilińska, Kacper Chociey - "Genetic Algorithm for Generation Multistage Tourist Route" |
| 12:30 - 12:45 - Muhammad Waqas Ahmad, Muhammad Waseem Anwar, Farooque Azam, Yawar Rasheed, Usman Ghani, Mukhtar Ahmad - "AutoNet: Meta-Model for Seamless Integration of Timed Automata and Colored Petri nets" |
| 12:45 - 13:00 - Jarosław Stepaniuk - "Imbalanced Data: Rough Set Methods in Approximation of Minority Classes" |
| 13:00 - 13:30 - Break #1 |
| 13:30 - 15:15 - Session #5 - Industrial Applications / Pattern Recognition |
| 13:30 - 13:45 - Jairo R Coronado-Hernandez, Alfonso R Romero-Conrado, Olmedo Ochoa-Gonzalez, Humberto Quintero-Arango, Ximena Vargas, Gustavo Gatica - "A Generic Materials and Operations Planning Approach for Inventory Turnover Optimization in the Chemical Industry" |
| 13:45 - 14:00 - Margarita Gamarra, Eduardo Zurek, Wilson Nieto, Miguel Jimeno, Deibys Sierra - "Spiral-Based Model for Software Architecture in Bioimage analysis: a case study in RSV cell infection" |
| 14:00 - 14:15 - Olmedo Ochoa-Gonzalez, Jairo R Coronado-Hernandez, Mayra A Macias-Jimenez, Alfonso R Romero-Conrado - "Quality improvement in ammonium nitrate production using six sigma methodology" |
| 14:15 - 14:30 - Miguel Jimenez Barros, Diana Ramirez-Rios, Carlo Juio Ardilla Hernandez, Lauren Julieth Castro Bolano, Dionicio Neira Rodado - "Design of decision support system for multiobjective activity planning and programming using global bacteria optimization" |
| 14:30 - 14:45 - Jorge Restrepo, Dionicio Neira Rodado, Amelec Vilorio Silva - "Multicriteria strategic approach for the selection of concrete suppliers in a construction company in Colombia" |
| 14:45 - 15:00 - Luis E. Ramirez Polo, Alcides R Santander-Mercado, Miguel A Jimenez-Barros - "Development methodology to share vehicles optimizing the variability of the mileage" |
| 15:00 - 15:15 - Alexandra Leon Jacobus, Paola Patricia Ariza Colpas, Marlon Alberto Pineres Melo, Roberto Ceasr Morales Ortega, David Alfredo Ovallos Gazabon, Ernesto Barcelo Martinez - "Machine learning approach applied to the prevalence analysis of ADHD Symptoms in young adults of Barranquilla, Colombia" |
| 15:15 - 16:00 - Closing Ceremony |
| prof. Khalid Saeed - General Chair of CISIM Conference |