

9:00 – 9:10	Invitation and opening (Michał Choraś, Michał Woźniak)
9:10 – 10:00	Keynote talk (chair: Prof. Michał Woźniak) Prof. Michal Choras "Current challenges in ML/AI: security, explainability and fairness"
10:20-12:00	Session 1 (chair: Prof. Olgierd Unold) 97 Paweł Teisseyre, Jan Mielniczuk and Małgorzata Łazęcka. Different strategies of fitting logistic regression for positive and unlabelled data 132 Dariusz Sychel, Przemysław Kłęsk and Aneta Bera. Branch-and-Bound Search for Training Cascades of Classifiers 516 Mariusz Topolski. Application of the stochastic gradient method in the construction of the main components of PCA in the task diagnosis of multiple sclerosis in children 128 Wojciech Wieczorek , Olgierd Unold , Łukasz Strąg and Arkadiusz Nowakowski. Grammatical Inference by Answer Set Programming 192 Magda Friedjungová , Daniel Vašata, Maksym Balatsko and Marcel Jiřina. Missing Features Reconstruction Using a Wasserstein Generative Adversarial Imputation Network
12:20-14:00	Session 2 (chair: Dr. Paweł Ksieniewicz) 184 Paweł Zyblewski and Michał Woźniak . Dynamic Classifier Selection for data with skewed class distribution using Imbalance Ratio and Euclidean distance 237 Jan Brabec, Tomas Komarek, Vojtech Franc and Lukas Machlica. On Model Evaluation under Non-constant Class Imbalance 347 Paweł Trajdos and Marek Kurzynski. A Correction Method of a Base Classifier Applied to Imbalanced Data Classification 359 Paweł Ksieniewicz. Standard Decision Boundary in a support-domain of fuzzy classifier prediction for the task of imbalanced data classification 559 Jakub Klikowski and Michał Woźniak . Employing One-class SVM Classifier Ensemble for Imbalanced Data Stream Classification
14:20-16:00	Session 3 (chair: Prof. Tomasz Andrysiak) 629 Paweł Ksieniewicz and Robert Burduk. Clustering and Weighted Scoring in Geometric Space Support Vector Machine Ensemble for Highly Imbalanced Data Classification 661 Michał Żak and Michał Woźniak. Performance Analysis of Binarization Strategies for Multi-Class Imbalanced Data Classification 639 Paweł Ksieniewicz, Róża Goścień, Mirosław Klinkowski and Krzysztof Walkowiak. Pattern recognition model to aid the optimization of Dynamic Spectrally-Spatially Flexible Optical Networks 490 Tomasz Andrysiak and Łukasz Saganowski. Maintenance and Security System for PLC Railway LED Sign Communication Infrastructure 522 Jakub Nowak, Taras Holotyak, Marcin Korytkowski, Rafał Scherer and Sviatsolav Voloshynovskiy . Behavioral Biometric User Authentication from URL Logs
16:20-18:00	Session 4 (chair: Prof. Michał Choraś) 99 Marek Pawlicki, Rafał Kozik and Witold Holubowicz. On the impact of network data balancing in cybersecurity applications 362 Sebastian Kula, Michał Choraś, Rafał Kozik, Paweł Ksieniewicz and Michał Woźniak, Sentiment Analysis for Fake News Detection by Means of Neural Networks 25 Roman Englert and Jörg Muschiot, Syntactic and Semantic Bias Detection and Countermeasures 90 Amir Ebrahimi Fard, Majid Mohammadi and Bartel van de Walle, Detecting Rumours in Disasters: An Imbalanced Learning Approach