Contents

Main Track

The Shapley Value and Consistency Axioms of Cooperative Games Under Incomplete Information ........................................ 3 Satoshi Masuya

Patients’ EEG Data Analysis via Spectrogram Image with a Convolution Neural Network ........................................ 13 Longhao Yuan and Jianting Cao

Decremental Subset Construction ........................................ 22 Gianfranco Lamperti and Xiangfu Zhao

Using Alloy for Verifying the Integration of OLAP Preferences in a Hybrid What-If Scenario Application ..................... 37 Mariana Carvalho and Orlando Belo

Electrohydrodynamic Effect Simulation and Method of Its Optimization ........................................ 48 Jolanta Wojtowicz and Hubert Wojtowicz

Specialized Decision Techniques for Data Mining, Transportation and Project Management

Incremental GEP-Based Ensemble Classifier ........................... 61 Joanna Jedrzejowicz and Piotr Jedrzejowicz

Applying the Intelligent Decision Heuristic to Solve Large Scale Technician and Task Scheduling Problems .................... 71 Amy Khalfay, Alan Crispin, and Keeley Crockett

Manipulability of Majority Relation-Based Collective Decision Rules ................................................................. 82 Fuad Aleskerov, Alexander Ivanov, Daniel Karabekyan, and Vyacheslav Yakuba
Stacking-Based Integrated Machine Learning with Data Reduction  
Ireneusz Czarnowski and Piotr Jędrzejowicz  
92

Intelligent Data Analysis and Applications

A Hybrid Approach to Conceptual Classification and Ranking of Resumes and Their Corresponding Job Posts  
Abeer Zaroor, Mohammed Maree, and Muath Sabha  
107

Chaotic Nature of Eye Movement Signal  
Katarzyna Harezlak and Pawel Kasprowski  
120

Dispersed System with Dynamically Generated Non–disjoint Clusters – Application of Attribute Selection  
Małgorzata Przybyła–Kasperek  
130

Generational Feature Elimination to Find All Relevant Feature Subset  
W. Paja  
140

Optimization of Exact Decision Rules Relative to Length  
Beata Zielosko  
149

Evaluating Importance for Numbers of Bins in Discretised Learning and Test Sets  
Urszula Stańczyk  
159

Decision Support Systems

Decision Making Beyond Pattern Recognition: Classification or Rejection  
Władysław Homenda, Agnieszka Jastrzebska, and Piotr Waszkiewicz  
173

Assessing the Similarity of Situations and Developments by Using Metrics  
Peeter Lorents, Erika Matsak, Ahto Kuuseok, and Daniil Harik  
184

ISS-EWATUS Decision Support System - Overview of Achievements  
Wojciech Froelich and Ewa Magiera  
197

Interval-Valued Intuitionistic Fuzzy Cognitive Maps for Supplier Selection  
Petr Hajek and Ondrej Prochazka  
207

MLEM2 Rule Induction Algorithm with Multiple Scanning Discretization  
Patrick G. Clark, Cheng Gao, and Jerzy W. Grzymala-Busse  
218
Heuristic Method of Air Defense Planning for an Area Object with the Use of Very Short Range Air Defense .......................... 228
Tadeusz Pietkiewicz, Adam Kawalec, and Bronisław Wajszczyk

An Optimization Problem of Air Defense Planning for an Area Object .................................................. 236
Tadeusz Pietkiewicz, Adam Kawalec, and Bronisław Wajszczyk

Forecasting Social Security Revenues in Jordan Using Fuzzy Cognitive Maps ........................................ 246
Ahmad Zyad Alghzawi, Gonzalo Nápoles, George Sammour, and Koen Vanhoof

Fuzzy Cognitive Maps Employing ARIMA Components for Time Series Forecasting ............................. 255
Frank Vanhoenshoven, Gonzalo Nápoles, Samantha Bielen, and Koen Vanhoof

Applying Roughication to Support Establishing Intensive Insulin Therapy at Onset of T1D ......................... 265
Rafał Deja

Tips Service and Water Diary An Innovative Decision Support System for the Efficient Water Usage at Households .................................................. 273
Ewa Magiera, Tomasz Jach, and Łukasz Kurcius

Decision Making Theory for Economics

Strict and Strong Consistency in Pairwise Comparisons Matrix with Fuzzy Elements ................................ 283
Jaroslav Ramík

Adjustment from Inconsistent Comparisons in AHP to Perfect Consistency ........................................ 293
Kazutomo Nishizawa

A Macroeconomic Model for Service Science Capitalism: Thetical and Antithetical Economics ................. 301
Takafumi Mizuno and Eizo Kinoshita

Managerial Decisions Modelling for the Company Development Strategy ........................................... 309
Irina Kalinina, Valery Maslennikov, and Marina Kholod

Super Pairwise Comparison Matrix in the Dominant AHP with Hierarchical Criteria ............................ 321
Takao Ohya and Eizo Kinoshita

Author Index .......................................................... 329
Intelligent Decision Technologies 2017
Proceedings of the 9th KES International Conference on Intelligent Decision Technologies (KES-IDT 2017) - Part I
Czarnowski, I.; Howlett, R.; Jain, L.C. (Eds.)
2018, XVII, 330 p. 79 illus., Hardcover
ISBN: 978-3-319-59420-0