

Contents – Part II

Applications of Data Science

Exploring Spatial and Social Factors of Crime: A Case Study of Taipei City	3
<i>Nathan Kuo, Chun-Ming Chang, and Kuan-Ta Chen</i>	
A Fuzzy Logic Based Network Intrusion Detection System for Predicting the TCP SYN Flooding Attack	14
<i>Nenekazi Nokuthala Penelope Mkuzangwe and Fulufhelo Vincent Nelwamondo</i>	
Analytical Ideas to Improve Daily Demand Forecasts: A Case Study.	23
<i>Sougata Deb</i>	
Increasing the Detection of Minority Class Instances in Financial Statement Fraud	33
<i>Stephen Obakeng Moepya, Fulufhelo V. Nelwamondo, and Bhekisipho Twala</i>	
Information Technology Services Evaluation Based ITIL V3 2011 and COBIT 5 in Center for Data and Information	44
<i>Firman Hartawan and Jarot S. Suroso</i>	

Artificial Intelligence Applications for E-services

To Solve the TDVRPTW via Hadoop MapReduce Parallel Computing	55
<i>Bo-Yi Li and Chen-Shu Wang</i>	
MapReduce-Based Frequent Pattern Mining Framework with Multiple Item Support	65
<i>Chen-Shu Wang, Shiang-Lin Lin, and Jui-Yen Chang</i>	
Balanced k-Means.	75
<i>Chen-Ling Tai and Chen-Shu Wang</i>	
An Optimal Farmland Allocation E-Service Deployment	83
<i>Wei-Feng Tung and Chun-Liang Pan</i>	

Automated Reasoning and Proving Techniques with Applications in Intelligent Systems

Anticipatory Runway Incursion Prevention Based on Inaccurate Position Surveillance Information	93
<i>Kai Shi, Hai Yu, Zhiliang Zhu, and Jingde Cheng</i>	
The Relation Between Syntax Restriction of Temporal Logic and Properties of Reactive System Specification	105
<i>Noriaki Yoshiura</i>	
Measuring Interestingness of Theorems in Automated Theorem Finding by Forward Reasoning: A Case Study in Peano’s Arithmetic	115
<i>Hongbiao Gao and Jingde Cheng</i>	
A Predicate Suggestion Algorithm for Automated Theorem Finding with Forward Reasoning	125
<i>Yuichi Goto, Hongbiao Gao, and Jingde Cheng</i>	

Collective Intelligence for Service Innovation, Technology Opportunity, E-Learning and Fuzzy Intelligent Systems

Modeling a Multi-criteria Decision Support System for Capital Budgeting Project Selection	137
<i>Kuo-Sui Lin and Jui-Ching Pan</i>	
Innovative Diffusion Chance Discovery	148
<i>Chao-Fu Hong and Mu-Hua Lin</i>	
Chance Discovery in a Group-Trading Model — Creating an Innovative Tour Package with Freshwater Fish Farms at Yilan	157
<i>Pen-Choug Sun, Chao-Fu Hong, Tsu-Feng Kuo, and Rahat Iqbal</i>	
Using Sentiment Analysis to Explore the Association Between News and Housing Prices	170
<i>Hsiao-Fang Yang and Jia-Lang Seng</i>	
Importance-Performance Analysis Based Evaluation Method for Security Incident Management Capability	180
<i>Chih-Chung Chiu and Kuo-Sui Lin</i>	

Intelligent Computer Vision Systems and Applications

Moment Shape Descriptors Applied for Action Recognition in Video Sequences	197
<i>Katarzyna Gościńska and Dariusz Frejlichowski</i>	

Automatic Detection of Singular Points in Fingerprint Images Using Convolution Neural Networks	207
<i>Hong Hai Le, Ngoc Hoa Nguyen, and Tri-Thanh Nguyen</i>	
Vehicle Detection in Hsuehshan Tunnel Using Background Subtraction and Deep Belief Network.	217
<i>Bo-Jhen Huang, Jun-Wei Hsieh, and Chun-Ming Tsai</i>	
Segment Counting Versus Prime Counting in the Ulam Square.	227
<i>Leszek J. Chmielewski, Arkadiusz Orłowski, and Grzegorz Gawdzik</i>	
Improving Traffic Sign Recognition Using Low Dimensional Features.	237
<i>Laksono Kurniangugoro, Wahyono, and Kang-Hyun Jo</i>	
Image Processing Approach to Diagnose Eye Diseases	245
<i>M. Prashasthi, K.S. Shravya, Ankit Deepak, Manjunath Mulimani, and Koolagudi G. Shashidhar</i>	
Weakly-Labelled Semantic Segmentation of Fish Objects in Underwater Videos Using a Deep Residual Network	255
<i>Alfonso B. Labao and Prospero C. Naval Jr.</i>	
A New Feature Extraction in Dorsal Hand Recognition by Chromatic Imaging.	266
<i>Orcan Alpar and Ondrej Krejcar</i>	
Testing the Limits of Detection of the ‘Orange Skin’ Defect in Furniture Elements with the HOG Features	276
<i>Leszek J. Chmielewski, Arkadiusz Orłowski, Grzegorz Wieczorek, Katarzyna Śmiałowska, and Jarosław Górski</i>	
Intelligent Data Analysis, Applications and Technologies for Internet of Things	
Reaching Safety Vehicular Ad Hoc Network of IoT	289
<i>Shu-Ching Wang, Shih-Chi Tseng, Shun-Sheng Wang, and Kuo-Qin Yan</i>	
Short-Term Load Forecasting in Smart Meters with Sliding Window-Based ARIMA Algorithms.	299
<i>Dima Alberg and Mark Last</i>	
Bus Drivers Fatigue Measurement Based on Monopolar EEG.	308
<i>Chin-Ling Chen, Chong-Yan Liao, Rung-Ching Chen, Yung-Wen Tang, and Tzay-Farn Shih</i>	
An Improved Sleep Posture Recognition Based on Force Sensing Resistors.	318
<i>Yung-Fa Huang, Yi-Hsiang Hsu, Chia-Chi Chang, Shing-Hong Liu, Ching-Chuan Wei, Tsung-Yu Yao, and Chuan-Bi Lin</i>	

Remaining Useful Life Estimation-A Case Study on Soil Moisture Sensors. . .	328
<i>Fang-Chien Chai, Chun-Chih Lo, Mong-Fong Horng, and Yau-Hwang Kuo</i>	

Intelligent Algorithms and Brain Functions

Neurofeedback System for Training Attentiveness.	341
<i>Khuan Y. Lee, Emir Eigram Hidzir, and Muhd Redzuan Haron</i>	
Building Classifiers for Parkinson’s Disease Using New Eye Tribe Tracking Method	351
<i>Artur Szymański, Stanisław Szlufik, Dariusz M. Koziorowski, and Andrzej W. Przybyszewski</i>	
Rules Found by Multimodal Learning in One Group of Patients Help to Determine Optimal Treatment to Other Group of Parkinson’s Patients	359
<i>Andrzej W. Przybyszewski, Stanisław Szlufik, Piotr Habela, and Dariusz M. Koziorowski</i>	

Intelligent Systems and Algorithms in Information Sciences

Reasoning in Formal Systems of Extended RDF Networks.	371
<i>Alena Lukášová, Martin Žáček, and Marek Vajgl</i>	
Big Data Filtering Through Adaptive Resonance Theory	382
<i>Adam Barton, Eva Volna, and Martin Kotyřba</i>	
The Effectiveness of the Simplicity in Evolutionary Computation	392
<i>Michał Witold Przewoźniczek, Krzysztof Walkowiak, and Michał Aibin</i>	
Genetic Algorithm for Self-Test Path and Circular Self-Test Path Design. . . .	403
<i>Miłosław Chodacki</i>	

IT in Biomedicine

The Use of Tuned Shape Window for the Improvement of Scars Imaging in Static Renal Scintigraphy in Children.	415
<i>Janusz Paweł Kowalski, Bożena Birkenfeld, Piotr Zorga, Jakub Peksinski, and Grzegorz Mikołajczak</i>	
PCA-SCG-ANN for Detection of Non-structural Protein 1 from SERS Salivary Spectra	424
<i>N.H. Othman, Khuan Y. Lee, A.R.M. Radzol, and W. Mansor</i>	
Prediction of Arterial Blood Gases Values in Premature Infants with Respiratory Disorders	434
<i>Wiesław Wajs, Hubert Wojtowicz, Piotr Wais, and Marcin Ochab</i>	

Extraction of Optical Disc Geometrical Parameters with Using of Active Snake Model with Gradient Directional Information	445
<i>Jan Kubicek, Juraj Timkovic, Marek Penhaker, Martin Augustynek, Iveta Bryjova, and Vladimir Kasik</i>	
Segmentation of Vascular Calcifications and Statistical Analysis of Calcium Score	455
<i>Jan Kubicek, Iveta Bryjova, Jan Valosek, Marek Penhaker, Martin Augustynek, Martin Cerny, and Vladimir Kasik</i>	
Rough Hypercuboid and Modified Kulczynski Coefficient for Disease Gene Identification	465
<i>Ekta Shah and Pradipta Maji</i>	
Detection of Raynaud's Phenomenon by Thermographic Testing for Finger Thermoregulation	475
<i>Orcan Alpar and Ondrej Krejcar</i>	
Intelligent Technologies in the Smart Cities in the 21st Century	
Enhancing Energy Efficiency of Adaptive Lighting Control	487
<i>Adam Sędziwy, Leszek Kotulski, and Artur Basiura</i>	
Comparative Analysis of Selected Algorithms in the Process of Optimization of Traffic Lights	497
<i>K. Małecki, P. Pietruszka, and S. Iwan</i>	
Knowledge Representation Framework for Agent-Based Economic Systems in Smart City Context	507
<i>Martina Husáková and Petr Tučník</i>	
The Principles of Model Building Concepts Which Are Applied to the Design Patterns for Smart Cities	517
<i>Katarzyna Ossowska, Liliana Szewc, and Cezary Orłowski</i>	
Assessment and Optimization of Air Monitoring Network for Smart Cities with Multicriteria Decision Analysis	531
<i>Aleksander Orłowski, Mariusz Marć, Jacek Namieśnik, and Marek Tobiszewski</i>	
Urban Air Quality Forecasting: A Regression and a Classification Approach . . .	539
<i>Kostas Karatzas, Nikos Katsifarakis, Cezary Orłowski, and Arkadiusz Sarzyński</i>	

Analysis of Image, Video and Motion Data in Life Sciences

Ethnicity Distinctiveness Through Iris Texture Features Using Gabor Filters . . .	551
<i>Gugulethu Mabuza-Hocquet, Fulufhelo Nelwamondo, and Tshilidzi Marwala</i>	
Diminishing Variant Illumination Factor in Object Recognition.	561
<i>Ardian Yunanto and Iman Herwidiana Kartowisastro</i>	
Fast Moving UAV Collision Avoidance Using Optical Flow and Stereovision	572
<i>Damian Pęszor, Marzena Wojciechowska, Konrad Wojciechowski, and Marcin Szender</i>	
Towards the Notion of Average Trajectory of the Repeating Motion of Human Limbs.	582
<i>Sven Nömm, Aaro Toomela, and Ilia Gaichenja</i>	
Interfered Seals and Handwritten Characters Removal for Prescription Images.	592
<i>Wen-Hong Zhang, Teng-Hui Tseng, and Chun-Ming Tsai</i>	
Neuromuscular Fatigue Analysis of Soldiers Using DWT Based EMG and EEG Data Fusion During Load Carriage	602
<i>D.N. Filzah P. Damit, S.M.N. Arossha Senanayake, Owais A. Malik, and Nor Jaidi Tuah</i>	
Manifold Methods for Action Recognition	613
<i>Agnieszka Michalczuk, Kamil Wereszczyński, Jakub Segen, Henryk Josiński, Konrad Wojciechowski, Artur Bąk, Sławomir Wojciechowski, Aldona Drabik, and Marek Kulbacki</i>	
Optical Flow Based Face Anonymization in Video Sequences	623
<i>Kamil Wereszczyński, Agnieszka Michalczuk, Jakub Segen, Magdalena Pawlyta, Artur Bąk, Jerzy Paweł Nowacki, and Marek Kulbacki</i>	
An Analysis of the Centre of Mass Behavior During Treadmill Walking	632
<i>Henryk Josiński, Adam Świtoński, Agnieszka Michalczuk, Konrad Wojciechowski, and Jerzy Paweł Nowacki</i>	
A Bayesian Framework for Chemical Shift Assignment	641
<i>Adam Gonczarek, Piotr Klukowski, Maciej Drwał, and Paweł Świątek</i>	

Modern Applications of Machine Learning for Actionable Knowledge Extraction

Traditional vs. Machine Learning Techniques: Customer Propensity	653
<i>Mamta A. Rajnayak, Snigdha Moitra, and Charu Nahata</i>	
Analytics on the Impact of Leadership Styles and Leadership Outcome	664
<i>Waseem Ahmad and Muhammad Akhtaruzamman</i>	
An Investigation into the Relationship of Strategic Planning Practices and Organizational Performance Using Advanced Data Mining Techniques. . . .	676
<i>Philip Bright, Waseem Ahmad, and Uswa Zahra</i>	

Mathematics of Decision Sciences and Information Science

A Ranking Procedure with the Shapley Value.	691
<i>Aleksei Kondratev and Vladimir Mazalov</i>	
Optimal Design of Robust Combinatorial Mechanisms for Substitutable Goods	701
<i>Maciej Drwal</i>	
Communication and KP-Model.	711
<i>Takashi Matsuhisa</i>	

Scalable Data Analysis in Bioinformatics and Biomedical Informatics

Orchestrating Task Execution in Cloud4PSi for Scalable Processing of Macromolecular Data of 3D Protein Structures	723
<i>Dariusz Mrozek, Artur Kłapciński, and Bożena Małyśiak-Mrozek</i>	
Probabilistic Neural Network Inferences on Oligonucleotide Classification Based on Oligo: Target Interaction	733
<i>Abdul Rahiman Anusha and S. S. Vinodchandra</i>	
Scalability of a Genomic Data Analysis in the BioTest Platform	741
<i>Krzysztof Psiuk-Maksymowicz, Dariusz Mrozek, Roman Jaksik, Damian Borys, Krzysztof Fajarewicz, and Andrzej Swierniak</i>	
Quantifying the Effect of Metapopulation Size on the Persistence of Infectious Diseases in a Metapopulation.	753
<i>Cam-Giang Tran-Thi, Marc Choisy, and Jean Daniel Zucker</i>	

Large-Scale Data Classification System Based on Galaxy Server and Protected from Information Leak.	765
<i>Krzysztof Fajarewicz, Sebastian Student, Tomasz Zielański, Michał Jakubczak, Justyna Pieter, Katarzyna Pojda, and Andrzej Świerniak</i>	
Technological Perspective of Agile Transformation in IT organizations	
Agents of RUP Processes Model for IT Organizations Readiness to Agile Transformation Assessment	777
<i>Włodzimierz Wysocki, Cezary Orłowski, Artur Ziółkowski, and Grzegorz Bocewicz</i>	
Evaluation of Readiness of IT Organizations to Agile Transformation Based on Case-Based Reasoning	787
<i>Cezary Orłowski, Tomasz Deręgowski, Miłosz Kurzawski, and Artur Ziółkowski</i>	
Building Dedicated Project Management Process Basing on Historical Experience	798
<i>Cezary Orłowski, Tomasz Deręgowski, Miłosz Kurzawski, and Artur Ziółkowski</i>	
Describing Criteria for Selecting a Scrum Tool Using the Technology Acceptance Model.	811
<i>Gerard Wagenaar, Sietse Overbeek, and Remko Helms</i>	
Author Index	823

Contents – Part I

Knowledge Engineering and Semantic Web

The Knowledge Increase Estimation Framework for Ontology Integration on the Instance Level	3
<i>Adrianna Kozierkiewicz-Hetmańska, Marcin Pietranik, and Bogumiła Hnatkowska</i>	
Online Integration of Fragmented XML Documents.	13
<i>Handoko and Janusz R. Getta</i>	
Merging Possibilistic Belief Bases by Argumentation	24
<i>Thi Hong Khanh Nguyen, Trong Hieu Tran, Tran Van Nguyen, and Thi Thanh Luu Le</i>	
Towards Common Vocabulary for IoT Ecosystems—preliminary Considerations	35
<i>Maria Ganzha, Marcin Paprzycki, Wiesław Pawłowski, Paweł Szmeja, and Katarzyna Wasielewska</i>	
Graphical Interface for Ontology Mapping with Application to Access Control	46
<i>Michał Drozdowicz, Motasem Alwazir, Maria Ganzha, and Marcin Paprzycki</i>	
Influence of Group Characteristics on Agent Voting	56
<i>Marcin Maleszka</i>	
Collective Knowledge: An Enhanced Analysis of the Impact of Collective Cardinality	65
<i>Van Du Nguyen</i>	
A New Ontology-Based Approach for Construction of Domain Model	75
<i>Bogumiła Hnatkowska, Zbigniew Huzar, Lech Tuzinkiewicz, and Iwona Dubielewicz</i>	

Social Networks and Recommender Systems

A Power-Graph Analysis of Non-fast Information Transmission	89
<i>Jacek Mercik</i>	

Group Recommendation Based on the Analysis of Group Influence and Review Content	100
<i>Chin-Hui Lai and Pei-Ru Hong</i>	
On Rumor Source Detection and Its Experimental Verification on Twitter . . .	110
<i>Dariusz Król and Karolina Wiśniewska</i>	
Topic Preference-based Random Walk Approach for Link Prediction in Social Networks	120
<i>Thiamthep Khamket, Arnon Rungsawang, and Bundit Manaskasemsak</i>	
Level of Education and Previous Experience in Acquiring ICT/Smart Technologies by the Elderly People.	130
<i>Ivana Simonova and Petra Poulova</i>	
The Effect of Presentation in Online Advertising on Perceived Intrusiveness and Annoyance in Different Emotional States	140
<i>Kaveh Bakhtiyari, Jürgen Ziegler, and Hafizah Husain</i>	
Runtime Verification and Quality Assessment for Checking Agent Integrity in Social Commerce System	150
<i>Najwa Abu Bakar, Mohd Hafiz Selamat, and Ali Selamat</i>	
Evaluation of Tensor-Based Algorithms for Real-Time Bidding Optimization	160
<i>Andrzej Szwabę, Paweł Misiorek, and Michał Ciesielczyk</i>	
A Consensus-Based Method to Enhance a Recommendation System for Research Collaboration	170
<i>Dinh Tuyen Hoang, Van Cuong Tran, Tuong Tri Nguyen, Ngoc Thanh Nguyen, and Dosam Hwang</i>	
International Business Matching Using Word Embedding.	181
<i>Didier Gohourou, Daiki Kurita, Kazuhiro Kuwabara, and Hung-Hsuan Huang</i>	
Mixture Seeding for Sustainable Information Spreading in Complex Networks	191
<i>Jarosław Jankowski</i>	
Complex Networks in the Epidemic Modelling	202
<i>Tomasz Biegus and Halina Kwasnicka</i>	

Text Processing and Information Retrieval

Identification of Biomedical Articles with Highly Related Core Contents	217
<i>Rey-Long Liu</i>	
An Efficient Hybrid Model for Vietnamese Sentiment Analysis	227
<i>Thanh Hung Vo, Thien Tin Nguyen, Hoang Anh Pham, and Thanh Van Le</i>	
Simple and Accurate Method for Parallel Web Pages Detection	238
<i>Alibi Jangel din and Zhenisbek Assylbekov</i>	
Combining Latent Dirichlet Allocation and K-Means for Documents Clustering: Effect of Probabilistic Based Distance Measures	248
<i>Quang Vu Bui, Karim Sayadi, Soufian Ben Amor, and Marc Bui</i>	
A Hybrid Method for Named Entity Recognition on Tweet Streams	258
<i>Van Cuong Tran, Dinh Tuyen Hoang, Ngoc Thanh Nguyen, and Dosam Hwang</i>	
A Method for User Profile Learning in Document Retrieval System Using Bayesian Network	269
<i>Bernadetta Maleszka</i>	

Intelligent Database Systems

Answering Temporal Analytic Queries over Big Data Based on Precomputing Architecture.	281
<i>Nigel Franciscus, Xuguang Ren, and Bela Stantic</i>	
Functional Querying in Graph Databases	291
<i>Jaroslav Pokorný</i>	
Online Transaction Processing (OLTP) Performance Improvement Using File-Systems Layer Transparent Compression	302
<i>Suhajito and Adrianus B. Kurnadi</i>	
A Multi-database Access System with Instance Matching.	312
<i>Thanapol Phungtua-Eng and Suphamit Chittayasothorn</i>	

Intelligent Information Systems

Enhancing Product Innovation Through Smart Innovation Engineering System.	325
<i>Mohammad Maqbool Waris, Cesar Sanin, and Edward Szczerbicki</i>	

Analyses of Aspects of Knowledge Diffusion Based on the Example of the Green Supply Chain	335
<i>Anna Maryniak and Łukasz Strąk</i>	
Comparative Evaluation of Bluetooth and Wi-Fi Direct for Tablet-Oriented Educational Applications	345
<i>Keiichi Endo, Ayame Onoyama, Dai Okano, Yoshinobu Higami, and Shinya Kobayashi</i>	
Comparing TPC-W and RUBiS via PCA	355
<i>Markus Lumpe and Quoc Bao Vo</i>	
Analysis and Solution Model of Distributed Computing in Scientific Calculations	367
<i>Josef Horalek and Vladimír Soběslav</i>	

Decision Support Control Systems

Failures in Discrete Event Systems and Dealing with Them by Means of Petri Nets.	379
<i>František Čapkovič</i>	
Defining Deviation Sub-spaces for the A*W Robust Planning Algorithm	392
<i>Igor Wojnicki and Sebastian Ernst</i>	
Creative Expert System: Comparison of Proof Searching Strategies	400
<i>Bartłomiej Sniezynski, Grzegorz Legien, Dorota Wilk-Kołodziejczyk, Stanisława Kluska-Nawarecka, Edward Nawarecki, and Krzysztof Jaśkowiec</i>	
Spatial Planning as a Hexomino Puzzle	410
<i>Marcin Cwiek and Jakub Nalepa</i>	
Ramp Loss Support Vector Data Description	421
<i>Vo Xuanthanh, Tran Bach, Hoai An Le Thi, and Tao Pham Dinh</i>	
The Temporal Supplier Evaluation Model Based on Multicriteria Decision Analysis Methods	432
<i>Jarosław Wątróbski, Wojciech Sałabun, and Grzegorz Ladorucki</i>	

Machine Learning and Data Mining

A Novel Entropy-Based Approach to Feature Selection	445
<i>Chia-Hao Tu and Chunshien Li</i>	
An Artificial Player for a Turn-Based Strategy Game	455
<i>Filip Maly, Pavel Kriz, and Adam Mrazek</i>	

Recognizing the Pattern of Binary Hermitian Matrices by a Quantum Circuit	466
<i>Joanna Wiśniewska and Marek Sawerwain</i>	
Fuzzy Maximal Frequent Itemset Mining Over Quantitative Databases.	476
<i>Haifeng Li, Yue Wang, Ning Zhang, and Yuejin Zhang</i>	
A Method for Early Pruning a Branch of Candidates in the Process of Mining Sequential Patterns	487
<i>Bac Le, Minh-Thai Tran, and Duy Tran</i>	
Analyzing Performance of High Frequency Currency Rates Prediction Model Using Linear Kernel SVR on Historical Data	498
<i>Chanakya Serjam and Akito Sakurai</i>	
Unsupervised Language Model Adaptation by Data Selection for Speech Recognition	508
<i>Yerbolat Khassanov, Tze Yuang Chong, Benjamin Bigot, and Eng Siong Chng</i>	
Metaheuristic Optimization on Conventional Freeman Chain Code Extraction Algorithm for Handwritten Character Recognition	518
<i>Muhammad A. Mohamad, Habibollah Haron, and Haswadi Hasan</i>	
A Novel Learning Vector Quantization Inference Classifier	528
<i>Chakkraphop Maisen, Sansanee Auephanwiriyaikul, and Nipon Theera-Umpon</i>	
Mining Periodic High Utility Sequential Patterns.	545
<i>Tai Dinh, Van-Nam Huynh, and Bac Le</i>	
Mining Class Association Rules with Synthesis Constraints	556
<i>Loan T.T. Nguyen, Bay Vo, Hung Son Nguyen, and Sinh Hoa Nguyen</i>	
Towards Auto-structuring Harmony Transcription	566
<i>Marek Kopel</i>	

Computer Vision Techniques

Boosting Detection Results of HOG-Based Algorithms Through Non-linear Metrics and ROI Fusion.	577
<i>Darius Malysiak, Anna-Katharina Römhild, Christoph Nieß, and Uwe Handmann</i>	
Automatic Interactive Video Authoring Method via Object Recognition.	589
<i>Ui-Nyoung Yoon, Myung-Duk Hong, and Geun-Sik Jo</i>	

Target Object Tracking-Based 3D Object Reconstruction in a Multiple Camera Environment in Real Time	599
<i>Jinjoo Song, Heeryon Cho, and Sang Min Yoon</i>	

Boosting Discriminative Models for Activity Detection Using Local Feature Descriptors	609
<i>Van-Huy Pham, My-Ha Le, and Van-Dung Hoang</i>	

Highlights Extraction in Sports Videos Based on Automatic Posture and Gesture Recognition	619
<i>Kazimierz Choroś</i>	

Advanced Data Mining Techniques and Applications

A High-Performance Algorithm for Mining Repeating Patterns	631
<i>Ja-Hwung Su, Tzung-Pei Hong, Chu-Yu Chin, Zhi-Feng Liao, and Shyr-Yuan Cheng</i>	

Recognition of Empathy Seeking Questions in One of the Largest Woman CQA in Japan.	641
<i>Tatsuro Shimada and Akito Sakurai</i>	

A Content-Based Image Retrieval Method Based on the Google Cloud Vision API and WordNet.	651
<i>Shih-Hsin Chen and Yi-Hui Chen</i>	

A Personalized Recommendation Method Considering Local and Global Influences	663
<i>Hendry, Rung-Ching Chen, and Lijuan Liu</i>	

Virtual Balancing of Decision Classes	673
<i>Marzena Kryszkiewicz</i>	

Evaluation of Speech Perturbation Features for Measuring Authenticity in Stress Expressions	685
<i>Branimir Dropuljić, Leo Mršić, Robert Kopal, Sandro Skansi, and Andrijana Brkić</i>	

Intelligent and Context Systems

Context Injection as a Tool for Measuring Context Usage in Machine Learning	697
<i>Maciej Huk</i>	

An Approach for Multi-Relational Data Context in Recommender Systems. . .	709
<i>Nguyen Thai-Nghe, Mai Nhut-Tu, and Huu-Hoa Nguyen</i>	

A Hybrid Feature Selection Method Based on Symmetrical Uncertainty and Support Vector Machine for High-Dimensional Data Classification	721
<i>Yongjun Piao and Keun Ho Ryu</i>	
Selecting Important Features Related to Efficacy of Mobile Advertisements . .	728
<i>Goutam Chakraborty, L.C. Cheng, L.S. Chen, and Cedric Bornand</i>	
A Comparative Study of Evolutionary Algorithms with a New Penalty Based Fitness Function for Feature Subset Selection	738
<i>Atsushi Kawamura and Basabi Chakraborty</i>	
A Context-Aware Fitness Function Based on Feature Selection for Evolutionary Learning of Characteristic Graph Patterns.	748
<i>Fumiya Tokuhara, Tetsuhiro Miyahara, Tetsuji Kuboyama, Yusuke Suzuki, and Tomoyuki Uchida</i>	
Multiple Model Approach to Machine Learning	
Authenticating ANN-NAR and ANN-NARMA Models Utilizing Bootstrap Techniques	761
<i>Nor Azura Md. Ghani, Saadi bin Ahmad Kamaruddin, Norazan Mohamed Ramli, and Ali Selamat</i>	
Method for Aspect-Based Sentiment Annotation Using Rhetorical Analysis. . .	772
<i>Łukasz Augustyniak, Krzysztof Rajda, and Tomasz Kajdanowicz</i>	
On Quality Assesement in Wikipedia Articles Based on Markov Random Fields	782
<i>Rajmund Kleminski, Tomasz Kajdanowicz, Roman Bartusiak, and Przemysław Kazienko</i>	
Is a Data-Driven Approach Still Better Than Random Choice with Naive Bayes Classifiers?.	792
<i>Piotr Szymański and Tomasz Kajdanowicz</i>	
An Expert System to Assist with Early Detection of Schizophrenia	802
<i>Sonya Rapinta Manalu, Bahtiar Saleh Abbas, Ford Lumban Gaol, Lukas, and Bogdan Trawiński</i>	
Author Index	813

Intelligent Information and Database Systems

9th Asian Conference, ACIIDS 2017, Kanazawa, Japan,

April 3-5, 2017, Proceedings, Part II

Nguyen, N.-T.; Tojo, S.; Nguyen, L.M.; Trawiński, B. (Eds.)

2017, XLIII, 827 p. 286 illus., Softcover

ISBN: 978-3-319-54429-8