Contents – Part II

Learning Algorithms and Classification Systems (Continued)

Motor Imagery Task Classification Using a Signal-Dependent Orthogonal Transform Based Feature Extraction

Mostefa Mesbah, Aida Khorshidtalab, Hamza Baali, and Ahmed Al-Ani

Robust Ensemble Classifier Combination Based on Noise Removal with One-Class SVM

Ferhat Özgür Çatak

Soil Property Prediction: An Extreme Learning Machine Approach

Dina Masri, Wei Lee Woon, and Zeyar Aung

Recent Advances in Improving the Memory Efficiency of the TRIBE MCL Algorithm

László Szilágyi, Lajos Loránd Nagy, and Sándor Miklós Szilágyi

Weighted ANN Input Layer for Adaptive Features Selection for Robust Fault Classification

Muhammad Amar, Iqbal Gondal, and Campbell Wilson

Neural Network with Evolutionary Algorithm for Packet Matching

Zelin Wang, Zhijian Wu, Xinyu Zhou, Ruimin Wang, and Peng Shao

Trading Optimally Diversified Portfolios in Emerging Markets with Neuro-Particle Swarm Optimisation

Pascal Khoury and Denise Gorse

Generalized Kernel Normalized Mixed-Norm Algorithm: Analysis and Simulations

Shujian Yu, Xinge You, Xiubao Jiang, Weihua Ou, Ziqi Zhu, Yixiao Zhao, C.L. Philip Chen, and Yuanyan Tang

A Parallel Sensitive Area Selection-Based Particle Swarm Optimization Algorithm for Fast Solving CNOP

Shijin Yuan, Feng Ji, Jinghao Yan, and Bin Mu

Realization of Fault Tolerance for Spiking Neural Networks with Particle Swarm Optimization

Ruibin Feng, Chi-Sing Leung, and Peter Tsang

Parallel Cooperative Co-evolution Based Particle Swarm Optimization Algorithm for Solving Conditional Nonlinear Optimal Perturbation

Shijin Yuan, Li Zhao, and Bin Mu
Discovery of Interesting Association Rules Using Genetic Algorithm with Adaptive Mutation ......................................................... 96  
Mir Md. Jahangir Kabir, Shuxiang Xu, Byeong Ho Kang, and Zongyuan Zhao

Semi-supervised Non-negative Local Coordinate Factorization .............. 106  
Cherong Zhou, Xiang Zhang, Naiyang Guan, Xuhui Huang, and Zhigang Luo

A Strength Pareto Evolutionary Algorithm for Live Migration of Multiple Interdependent Virtual Machines in Data Centers ..................... 114  
Tusher Kumer Sarker and Maolin Tang

A Survey of Applying Machine Learning Techniques for Credit Rating: Existing Models and Open Issues .............................................. 122  
Xiang Wang, Min Xu, and Özgür Toğra Pusatlı

A New Evolutionary Algorithm for Extracting a Reduced Set of Interesting Association Rules ............................................................. 133  
Mir Md. Jahangir Kabir, Shuxiang Xu, Byeong Ho Kang, and Zongyuan Zhao

Non-negative Spectral Learning for Linear Sequential Systems ............... 143  
Hadrien Glaude, Cyrille Enderli, and Olivier Pietquin

Optimism in Active Learning with Gaussian Processes ........................ 152  
Timothé Collet and Olivier Pietquin

A Penalty-Based Genetic Algorithm for the Migration Cost-Aware Virtual Machine Placement Problem in Cloud Data Centers .......... 161  
Tusher Kumer Sarker and Maolin Tang

Frequency Decomposition Based Gene Clustering .............................. 170  
Md Abdur Rahman, Madhu Chetty, Dieter Bulach, and Pramod P. Wangikar

Using Genetic Algorithm in Profile-Based Assignment of Applications to Virtual Machines for Greener Data Centers ....................... 182  
Meera Vasudevan, Yu-Chu Tian, Maolin Tang, Erhan Kozan, and Jing Gao

EDL: An Extended Delay Learning Based Remote Supervised Method for Spiking Neurons ............................................................ 190  
Aboozar Taherkhani, Ammar Belatreche, Yuhua Li, and Liam P. Maguire
Enhanced Genetic Algorithm Applied for Global Optimization

Fadzil Ahmad, Nor Ashidi Mat Isa, Zakaria Hussain, Saiful Zainy Yahaya, Rozan Boudville, Mohamad Faizal Abdul Rahman, Aini Hafiza Mohd Saod, and Zuraidi Saad

A New Heuristic Based on the Cuckoo Search for Cryptanalysis of Substitution Ciphers

Ashish Jain and Narendra S. Chaudhari

Spectral Clustering Through Topological Learning for Large Datasets

Nicoleta Rogovschi, Nistor Grozavu, and Lazhar Labiod

A Recommendation System Based on Unsupervised Topological Learning

Issam Falih, Nistor Grozavu, Rushed Kanawati, and Younès Bennani

Online Training of an Opto-Electronic Reservoir Computer

Piotr Antonik, François Duport, Anteo Smerieri, Michiel Hermans, Marc Haelterman, and Serge Massar

Spike Train Pattern Discovery Using Interval Structure Alignment

Taro Tezuka

Distant Supervision for Relation Extraction via Group Selection

Yang Xiang, Xiaolong Wang, Yaoyun Zhang, Yang Qin, and Shixi Fan

SpikeComp: An Evolving Spiking Neural Network with Adaptive Compact Structure for Pattern Classification

Jinling Wang, Ammar Belatreche, Liam P. Maguire, and T. Martin McGinnity

Formation of Momentum and Learning Rate Profile for Online Training and Testing of HMLP with ALRPE

Zuraidi Saad, Mohd Yusoff Mashor, and Wan Khairunizam Wan Ahmad

Using Growing Neural Gas in Prototype Generation for Nearest Neighbor Classifiers

Jussara Dias, Marcos G. Quiles, and Ana Carolina Lorena

Orthogonal Extreme Learning Machine Based P300 Visual Event-Related BCI

Yakup Kutlu, Apdullah Yayik, Esen Yildirim, and Serdar Yildirim

A Neural Network Based Approach for Semantic Service Annotation

Supannada Chotipant, Farookh Khadeer Hussain, Hai Dong, and Omar Khadeer Hussain

Neural Network-Aided Adaptive UKF for Integrated Underwater Navigation

Meng Wu and Ying Weng
A Stochastic Approximation Algorithm for Quantile Estimation A. George Joseph and Shalabh Bhatnagar

Reinforcement Learning in Continuous Spaces by Using Learning Fuzzy Classifier Systems Gang Chen, Colin Douch, Mengjie Zhang, and Shaoning Pang

A Malware Classification Method Based on Generic Malware Information. Jiyeon Choi, HeeSeok Kim, Jangwon Choi, and Jungsuk Song

Secure Multi-party Computation Based Privacy Preserving Extreme Learning Machine Algorithm Over Vertically Distributed Data Ferhat Özgür Çatak

A Hybrid Model of Fuzzy ARTMAP and the Genetic Algorithm for Data Classification. Manjeevan Seera, Wei Shiung Liew, and Chu Kiong Loo

Is DeCAF Good Enough for Accurate Image Classification? Yajuan Cai, Guoqiang Zhong, Yuchen Zheng, Kaizhu Huang, and Junyu Dong


Continuous Summarization for Microblog Streams Based on Clustering. Qunhui Wu, Jianghua Lv, and Shilong Ma

Versatile English Learning System Using Webpages as Learning Materials. Yuki Oikawa, Kozo Mizutani, and Masayuki Arai

A Fast Algorithm for Local Rank Distance: Application to Arabic Native Language Identification. Radu Tudor Ionescu

Human Perception-Based Washout Filtering Using Genetic Algorithm. Houshyar Asadi, Shady Mohamed, Kyle Nelson, Saeid Nahavandi, and Delpak Rahim Zadeh

Conjugate Gradient Algorithms for Complex-Valued Neural Networks. Călin-Adrian Popa

XaIBO: An Extension of aIB for Trajectory Clustering with Outlier Yuejun Guo, Qing Xu, Sheng Liang, Yang Fan, and Mateu Sbert
A Model of Motor Impairment After Stroke for Predicting Muscle Activation Patterns ................................. 432  
Yuki Ueyama

Cost Reduction in Thyroid Diagnosis: A Hybrid Model with SOM and C4.5 Decision Trees .................................................. 440  
Ahmet Cumhur Kinaci and Sait Can Yucebas

Webcam Based Real-Time Robust Optical Mark Recognition .............................. 449  
Huseyin Atasoy, Esen Yildirim, Yakup Kutlu, and Kadir Tohma

Webcam-Based Visual Gaze Estimation Under Desktop Environment ................. 457  
Shujian Yu, Weihua Ou, Xinge You, Xiubao Jiang, Yun Zhu, Yi Mou, Weigang Guo, Yuanyan Tang, and C.L. Philip Chen

Influence of Previous Choice and Outcome in a Two-Alternative Decision-Making Task .................................................. 467  
Manisha Chawla and Krishna P. Miyapuram

Using Modern Neural Networks to Predict the Decisions of Supreme Court of the United States with State-of-the-Art Accuracy ................................. 475  
Ranti Dev Sharma, Sudhanshu Mittal, Samarth Tripathi, and Shrinivas Acharya

Analysis of Mixed-Rule Cellular Automata Based on Simple Feature Quantities .................................................. 484  
Naoki Tada and Toshimichi Saito

Depth Map Upsampler Using Common Edge Detection .................................. 492  
Soo-Yeon Shin and Jae-Won Suh

Application of Mathematical Morphology in Diesel Vibration Signals ............... 500  
Hongxia Pan, An Dong, and Manliang Cao

On the Discovery of Time Distance Constrained Temporal Association Rules .................................................. 510  
Heitor Murilo Gomes, Deborah Ribeiro de Carvalho, Lourdes Zubieta, Jean Paul Barddal, and Andreia Malucelli

Software Clone Detection Using Clustering Approach .................................. 520  
Bikash Joshi, Puskar Budhathoki, Wei Lee Woon, and Davor Svetinovic

Bilingual Lexicon Extraction with Forced Correlation from Comparable Corpora .................................................. 528  
Chunyue Zhang and Tiejun Zhao

Enhancing the Mongolian Historical Document Recognition System with Multiple Knowledge-Based Strategies ................................. 536  
Xiangdong Su, Guanglai Gao, Hongxi Wei, and Feilong Bao
Empirical Analysis of Sampling Based Estimators for Evaluating RBMs .......................... 545
Vidyadhar Upadhya and P.S. Sastry

Autonomous Depth Perception of Humanoid Robot Using Binocular Vision
System Through Sensorimotor Interaction with Environment ............................. 554
Yongsik Jin, Mallipeddi Rammohan, Giyoung Lee, and Minho Lee

An Effective Resolution Method of Chinese Multi-category Words
with Conditional Random Field in Electronic Commerce ................................. 562
Fan Fei, Yanqin Yang, Wenchao Xu, and Yanfeng Yang

A Novel Hybrid Modelling for Aggregate Production Planning
in a Reconfigurable Assembly Unit for Optoelectronics ................................. 571
Francesco G. Sisca, Maurizio Fiasch, and M. Taisch

Design of Distributed Adaptive Neural Traffic Signal Timing Controller
by Cuckoo Search Optimization ................................................................. 583
Sahar Araghi, Abbas Khosravi, and Douglas Creighton

A Causal Model Using Self-Organizing Maps ............................................. 591
Younjin Chung and Masahiro Takatsuka

In-Attention State Monitoring Based on Integrated Analysis of Driver’s
Headpose and External Environment .......................................................... 601
Seonggyu Kim, Mallipeddi Rammohan, and Minho Lee

Item Category Aware Conditional Restricted Boltzmann Machine
Based Recommendation .................................................................................. 609
Xiaomeng Liu, Yuanxin Ouyang, Wenge Rong, and Zhang Xiong

Figure-Ground Segregation by a Population of V4 Cells: A Computational
Analysis on Distributed Representation ....................................................... 617
Masaharu Hasuike, Shuto Ueno, Dai Minowa, Yukako Yamane,
Hiroshi Tamura, and Ko Sakai

Weighted Probabilistic Opinion Pooling Based on Cross-Entropy ..................... 623
Vladimíra Sečkárová

Tailgating Enforcement based on Back-Tracking in Intersection ......................... 630
Su-Hyoung Choi, Jong-Pil Ahn, Jee-Hyung Rheu, and Young-Mo Kim

Virtual Reality Based GIS Analysis Platform ............................................... 638
Weixi Wang, Zhihan Lv, Xiaoming Li, Weiping Xu, Baoyun Zhang,
and Xiaolei Zhang

Hierarchical Nearest Neighbor Graphs for Building Perceptual Hierarchies ....... 646
Gi Hyun Lim, Miguel Oliveira, S. Hamidreza Kasaei,
and Luis Seabra Lopes

Author Index ................................................................................................. 657
Neural Information Processing
22nd International Conference, ICONIP 2015, Istanbul, Turkey, November 9-12, 2015, Proceedings, Part II
Arik, S.; Huang, T.; Lai, W.K.; Liu, Q. (Eds.)
2015, XVI, 666 p. 229 illus., Softcover
ISBN: 978-3-319-26534-6