

IEEE TRANSACTIONS ON CYBERNETICS

A PUBLICATION OF THE IEEE SYSTEMS, MAN, AND CYBERNETICS SOCIETY

Indexed in PubMed® and MEDLINE®, products of the United States National Library of Medicine



DECEMBER 2016

VOLUME 46

NUMBER 12

ITCEB8

(ISSN 2168-2267)

REGULAR PAPERS

A Fast Adaptive Tunable RBF Network For Nonstationary Systems	<i>H. Chen, Y. Gong, X. Hong, and S. Chen</i>	2683
Edge-Aware Filtering with Local Polynomial Approximation and Rectangle-Based Weighting	<i>X. Tan, C. Sun, and T. D. Pham</i>	2693
An Interpretable Fuzzy System Learned Through Online Rule Generation and Multiobjective ACO With a Mobile Robot Control Application	<i>C.-F. Juang, T.-L. Jeng, and Y.-C. Chang</i>	2706
Prototype Generation Using Multiobjective Particle Swarm Optimization for Nearest Neighbor Classification	<i>W. Hu and Y. Tan</i>	2719
Novel Discretized Weak Estimators Based on the Principles of the Stochastic Search on the Line Problem	<i>A. Yazidi and B. J. Oommen</i>	2732
A Decentralized Event-Triggered Dissipative Control Scheme for Systems With Multiple Sensors to Sample the System Outputs	<i>X.-M. Zhang and Q.-L. Han</i>	2745
Discrimination Between Native and Non-Native Speech Using Visual Features Only	<i>C. Georgakis, S. Petridis, and M. Pantic</i>	2758
New Results on Stability and Stabilization of Networked Control Systems With Short Time-Varying Delay	<i>H. Zhang, Z. Zhang, Z. Wang, and Q. Shan</i>	2772
Identifying Spatial Invasion of Pandemics on Metapopulation Networks Via Anatomizing Arrival History	<i>J.-B. Wang, L. Wang, and X. Li</i>	2782
Inference With Collaborative Model for Interactive Tumor Segmentation in Medical Image Sequences	<i>L. Lin, W. Yang, C. Li, J. Tang, and X. Cao</i>	2796
Event Detection in Twitter Microblogging	<i>N. D. Doulamis, A. D. Doulamis, P. Kokkinos, and E. Varvarigos</i>	2810
Feature Set Evaluation for Offline Handwriting Recognition Systems: Application to the Recurrent Neural Network Model	<i>Y. Chherawala, P. P. Roy, and M. Cheriet</i>	2825
Two Fast Complex-Valued Algorithms for Solving Complex Quadratic Programming Problems	<i>S. Zhang and Y. Xia</i>	2837
Cooperative Differential Evolution With Multiple Populations for Multiobjective Optimization	<i>J. Wang, W. Zhang, and J. Zhang</i>	2848

(Contents Continued on Page 2681)



Evolutionary Dynamic Multiobjective Optimization Via Kalman Filter Prediction	2862
.....A. Muruganantham, K. C. Tan, and P. Vadakkepat	
Consensus Under Bounded Noise in Discrete Network Systems: An Algorithm With Fast Convergence and High Accuracy ...	2874
.....J. He, M. Zhou, P. Cheng, L. Shi, and J. Chen	
Extreme Learning Machine With Subnetwork Hidden Nodes for Regression and Classification	2885
.....Y. Yang and Q. M. J. Wu	
Creating Discriminative Models for Time Series Classification and Clustering by HMM Ensembles	2899
.....N. Asadi, A. Mirzaei, and E. Haghshenas	
Promoting Interactions Between Humans and Robots Using Robotic Emotional Behavior	2911
.....M. Ficocelli, J. Terao, and G. Nejat	
Semi-Supervised SVM With Extended Hidden Features	2924
.....A. Dong, F.-I. Chung, Z. Deng, and S. Wang	
Incorporating Objective Function Information Into the Feasibility Rule for Constrained Evolutionary Optimization	2938
.....Y. Wang, B.-C. Wang, H.-X. Li, and G. G. Yen	
A Fuzzy Rule-Based Penalty Function Approach for Constrained Evolutionary Optimization	2953
.....C. Saha, S. Das, K. Pal, and S. Mukherjee	
Hyperspectral Image Classification via Multitask Joint Sparse Representation and Stepwise MRF Optimization	2966
.....Y. Yuan, J. Lin, and Q. Wang	
Good Practices for Learning to Recognize Actions Using FV and VLAD	2978
.....J. Wu, Y. Zhang, and W. Lin	
Perceptual Attributes Optimization for Multivideo Summarization	2991
.....L. Nie, R. Hong, L. Zhang, Y. Xia, D. Tao, and N. Sebe	
Containment Control of Multiagent Systems With Dynamic Leaders Based on a P^m -Type Approach	3004
.....L. Cheng, Y. Wang, W. Ren, Z.-G. Hou, and M. Tan	
Simulating Kinect Infrared and Depth Images	3018
.....M. J. Landau, B. Y. Choo, and P. A. Beling	
Unfalsified Visual Servoing for Simultaneous Object Recognition and Pose Tracking	3032
.....P. Jiang, Y. Cheng, X. Wang, and Z. Feng	
Constraint Co-Projections for Semi-Supervised Co-Clustering	3047
.....S. Huang, H. Wang, T. Li, Y. Yang, and T. Li	
Speeding-Up Association Rule Mining With Inverted Index Compression	3059
.....J. M. Luna, A. Cano, M. Pechenizkiy, and S. Ventura	
Data-Distribution-Aware Fuzzy Rough Set Model and its Application to Robust Classification	3073
.....S. An, Q. Hu, W. Pedrycz, P. Zhu, and E. C. C. Tsang	
Distributed Adaptive Fuzzy Control for Nonlinear Multiagent Systems Via Sliding Mode Observers	3086
.....Q. Shen, P. Shi, and Y. Shi	
Event-Triggered Distributed Average Consensus Over Directed Digital Networks With Limited Communication Bandwidth	3098
.....H. Li, G. Chen, T. Huang, Z. Dong, W. Zhu, and L. Gao	
Robust Perturbed Output Regulation and Synchronization of Nonlinear Heterogeneous Multiagents	3111
.....X. Chen and Z. Chen	
Hyperspectral Anomaly Detection by Graph Pixel Selection	3123
.....Y. Yuan, D. Ma, and Q. Wang	
An Improved Incremental Learning Approach for KPI Prognosis of Dynamic Fuel Cell System	3135
.....S. Yin, X. Xie, J. Lam, K. C. Cheung, and H. Gao	
A Switched System Approach to Exponential Stabilization of Sampled-Data T-S Fuzzy Systems With Packet Dropouts	3145
.....M. Wang, J. Qiu, M. Chadli, and M. Wang	
An Efficient Fine-to-Coarse Wayfinding Strategy for Robot Navigation in Regionalized Environments	3157
.....C. Zhong, S. Liu, Q. Lu, B. Zhang, and S. X. Yang	
A Classification Algorithm for Electroencephalography Signals by Self-Induced Emotional Stimuli	3171
.....D. Iacoviello, A. Petracca, M. Spezialetti, and G. Placidi	
Architecture-Driven Level Set Optimization: From Clustering to Subpixel Image Segmentation	3181
.....S. Balla-Arabé, X. Gao, D. Ginjac, V. Brost, and F. Yang	
A Variational Bayesian Approach to Robust Identification of Switched ARX Models	3195
.....Y. Lu, B. Huang, and S. Khatibisepehr	
Ordered Subspace Clustering With Block-Diagonal Priors	3209
.....F. Wu, Y. Hu, J. Gao, Y. Sun, and B. Yin	
Weakly Supervised Multilabel Clustering and its Applications in Computer Vision	3220
.....Y. Xia, L. Nie, L. Zhang, Y. Yang, R. Hong, and X. Li	
A Novel Diversity-Based Replacement Strategy for Evolutionary Algorithms	3233
.....C. Segura, C. A. Coello Coello, E. Segredo, and A. H. Aguirre	
Learn the Lagrangian: A Vector-Valued RKHS Approach to Identifying Lagrangian Systems	3247
.....C.-A. Cheng and H.-P. Huang	
Infrared Ship Target Segmentation Based on Spatial Information Improved FCM	3259
.....X. Bai, Z. Chen, Y. Zhang, Z. Liu, and Y. Lu	

(Contents Continued from Page 2681)

Multiview Uncorrelated Discriminant Analysis	<i>S. Sun, X. Xie, and M. Yang</i>	3272
Optimal Decision-Making in an Opportunistic Sensing Problem	<i>D. Mikesell and C. Griffin</i>	3285
Robust H_∞ Self-Triggered Control of Networked Systems Under Packet Dropouts	<i>Y. Tang, H. Gao, and J. Kurths</i>	3294
An Orthogonal Evolutionary Algorithm With Learning Automata for Multiobjective Optimization	<i>C. Dai, Y. Wang, M. Ye, X. Xue, and H. Liu</i>	3306
Dynamic IQC-Based Control of Uncertain LFT Systems With Time-Varying State Delay	<i>C. Yuan and F. Wu</i>	3320
Dynamic Parameter-Control Chaotic System	<i>Z. Hua and Y. Zhou</i>	3330
Extending the Capture Volume of an Iris Recognition System Using Wavefront Coding and Super-Resolution	<i>S.-H. Hsieh, Y.-H. Li, C.-H. Tien, and C.-C. Chang</i>	3342
Reinforced Extreme Learning Machines for Fast Robust Regression in the Presence of Outliers ...	<i>B. Frénay and M. Verleysen</i>	3351
Decentralized Patrolling Under Constraints in Dynamic Environments	<i>S. Chen, F. Wu, L. Shen, J. Chen, and S. D. Ramchurn</i>	3364
Synchronization of Delayed Memristive Neural Networks: Robust Analysis Approach	<i>X. Yang and D. W. C. Ho</i>	3377
Optimal Modality Selection for Cooperative Human–Robot Task Completion	<i>M. G. Jacob and J. P. Wachs</i>	3388
Minimal-Approximation-Based Decentralized Backstepping Control of Interconnected Time-Delay Systems	<i>Y. H. Choi and S. J. Yoo</i>	3401
Event-Triggered Fault Detection Filter Design for a Continuous-Time Networked Control System	<i>Y.-L. Wang, P. Shi, C.-C. Lim, and Y. Liu</i>	3414
Learning Linear Representation of Space Partitioning Trees Based on Unsupervised Kernel Dimension Reduction	<i>H. Shan, J. Zhang, and U. Kruger</i>	3427
Adaptive Neural Network Control for the Trajectory Tracking of the Furuta Pendulum	<i>J. Moreno-Valenzuela, C. Aguilar-Avelar, S. A. Puga-Guzmán, and V. Santibáñez</i>	3439

2016 INDEX

Available online at <http://ieeexplore.ieee.org>