

Table of Contents, Part I

1 Theoretical Analysis

Population Coding, Bayesian Inference and Information Geometry	1
<i>Shun-ichi Amari</i>	
One-Bit-Matching ICA Theorem, Convex-Concave Programming, and Combinatorial Optimization	5
<i>Lei Xu</i>	
Dynamic Models for Intention (Goal-Directedness) Are Required by Truly Intelligent Robots	21
<i>Walter J. Freeman</i>	
Differences and Commonalities Between Connectionism and Symbolicism	34
<i>Shoujue Wang and Yangyang Liu</i>	
Pointwise Approximation for Neural Networks	39
<i>Feilong Cao, Zongben Xu, and Youmei Li</i>	
On the Universal Approximation Theorem of Fuzzy Neural Networks with Random Membership Function Parameters	45
<i>Lipo Wang, Bing Liu, and Chunru Wan</i>	
A Review: Relationship Between Response Properties of Visual Neurons and Advances in Nonlinear Approximation Theory	51
<i>Shan Tan, Xiuli Ma, Xiangrong Zhang, and Licheng Jiao</i>	
Image Representation in Visual Cortex and High Nonlinear Approximation	57
<i>Shan Tan, Xiangrong Zhang, Shuang Wang, and Licheng Jiao</i>	
Generalization and Property Analysis of GENET	63
<i>Youmei Li, Zongben Xu, and Feilong Cao</i>	
On Stochastic Neutral Neural Networks	69
<i>Yumin Zhang, Lei Guo, Lingyao Wu, and Chunbo Feng</i>	
Eigenanalysis of CMAC Neural Network	75
<i>Chunshu Zhang</i>	
A New Definition of Sensitivity for RBFNN and Its Applications to Feature Reduction	81
<i>Xizhao Wang and Chunguo Li</i>	

Complexity of Error Hypersurfaces in Multilayer Perceptrons with General Multi-input and Multi-output Architecture	87
<i>Xun Liang</i>	
Nonlinear Dynamical Analysis on Coupled Modified Fitzhugh-Nagumo Neuron Model	95
<i>Deepak Mishra, Abhishek Yadav, Sudipta Ray, and Prem K. Kalra</i>	
Stability of Nonautonomous Recurrent Neural Networks with Time-Varying Delays	102
<i>Haijun Jiang, Jinde Cao, and Zhidong Teng</i>	
Global Exponential Stability of Non-autonomous Neural Networks with Variable Delay	108
<i>Minghui Jiang, Yi Shen, and Meiqin Liu</i>	
A Generalized LMI-Based Approach to the Global Exponential Stability of Recurrent Neural Networks with Delay	114
<i>Yi Shen, Minghui Jiang, and Xiaoxin Liao</i>	
A Further Result for Exponential Stability of Neural Networks with Time-Varying Delays	120
<i>Jun Zhang, Xiaofeng Liao, Chuandong Li, and Anwen Lu</i>	
Improved Results for Exponential Stability of Neural Networks with Time-Varying Delays	126
<i>Deyin Wu, Qingyu Xiong, Chuandong Li, Zhong Zhang, and Haoyang Tang</i>	
Global Exponential Stability of Recurrent Neural Networks with Infinite Time-Varying Delays and Reaction-Diffusion Terms	132
<i>Qiankun Song, Zhenjiang Zhao, and Xuedong Chen</i>	
Exponential Stability Analysis of Neural Networks with Multiple Time Delays . . .	142
<i>Huanguang Zhang, Zhanshan Wang, and Derong Liu</i>	
Exponential Stability of Cohen-Grossberg Neural Networks with Delays	149
<i>Wei Zhang and Jianqiao Yu</i>	
Global Exponential Stability of Cohen-Grossberg Neural Networks with Time-Varying Delays and Continuously Distributed Delays	156
<i>Yi Shen, Minghui Jiang, and Xiaoxin Liao</i>	
Exponential Stability of Stochastic Cohen-Grossberg Neural Networks with Time-Varying Delays	162
<i>Xiaolin Li and Jinde Cao</i>	
Exponential Stability of Fuzzy Cellular Neural Networks with Unbounded Delay	168
<i>Tingwen Huang and Linhua Zhang</i>	

Global Exponential Stability of Reaction-Diffusion Hopfield Neural Networks with Distributed Delays	174
<i>Zhihong Tang, Yiping Luo, and Feiqi Deng</i>	
Global Exponential Stability of Delayed Impulsive Hopfield Type Neural Networks	181
<i>Bingji Xu, Qun Wang, Yi Shen, and Xiaoxin Liao</i>	
Global Exponential Stability of Hopfield Neural Networks with Impulsive Effects	187
<i>Zhichun Yang, Jinan Pei, Daoyi Xu, Yumei Huang, and Li Xiang</i>	
Global Exponential Stability of Discrete Time Hopfield Neural Networks with Delays	193
<i>Qiang Zhang, Wenbing Liu, and Xiaopeng Wei</i>	
Stability Analysis of Uncertain Neural Networks with Linear and Nonlinear Time Delays	199
<i>Hanlin He, Zhongsheng Wang, and Xiaoxin Liao</i>	
Robust Stability for Delayed Neural Networks with Nonlinear Perturbation	203
<i>Li Xie, Tianming Liu, Jilin Liu, Weikang Gu, and Stephen Wong</i>	
Robust Stability Analysis of a Class of Hopfield Neural Networks with Multiple Delays	209
<i>Huaguang Zhang, Ce Ji, and Derong Liu</i>	
Robust Stability of Interval Delayed Neural Networks	215
<i>Wenlian Lu and Tianping Chen</i>	
Impulsive Robust Control of Interval Hopfield Neural Networks	222
<i>Yinping Zhang and Jitao Sun</i>	
Global Attractivity of Cohen-Grossberg Model with Delays	229
<i>Tao Xiang, Xiaofeng Liao, and Jian Huang</i>	
High-Order Hopfield Neural Networks	235
<i>Yi Shen, Xiaojun Zong, and Minghui Jiang</i>	
Stability Analysis of Second Order Hopfield Neural Networks with Time Delays	241
<i>Jinan Pei, Daoyi Xu, Zhichun Yang, and Wei Zhu</i>	
Convergence Analysis of Genetic Regulatory Networks Based on Nonlinear Measures	247
<i>Hongtao Lu, Zhizhou Zhang, and Lin He</i>	
Stability Conditions for Discrete Neural Networks in Partial Simultaneous Updating Mode	253
<i>Runnian Ma, Shengrui Zhang, and Sheping Lei</i>	

Dynamic Behavior Analysis of Discrete Neural Networks with Delay	259
<i>Runnian Ma, Sheping Lei, and Shengrui Zhang</i>	
Existence and Stability of Periodic Solution in a Class of Impulsive Neural Networks	265
<i>Xiaofan Yang, David J. Evans, and Yuanyan Tang</i>	
Globally Attractive Periodic Solutions of Continuous-Time Neural Networks and Their Discrete-Time Counterparts	271
<i>Changyin Sun, Liangzhen Xia, and Chunbo Feng</i>	
Globally Stable Periodic State of Delayed Cohen-Grossberg Neural Networks . . .	276
<i>Chaojin Fu, Hanlin He, and Xiaoxin Liao</i>	
Globally Attractive Periodic State of Discrete-Time Cellular Neural Networks with Time-Varying Delays	282
<i>Zhigang Zeng, Boshan Chen, and Zengfu Wang</i>	
An Analysis for Periodic Solutions of High-Order BAM Neural Networks with Delays	288
<i>Jianlong Qiu and Jinde Cao</i>	
Periodic Oscillation and Exponential Stability of a Class of Competitive Neural Networks	294
<i>Boshan Chen</i>	
Synchronous Behaviors of Two Coupled Neurons	302
<i>Ying Wu, Jianxue Xu, and Wuyin Jin</i>	
Adaptive Synchronization of Delayed Neural Networks Based on Parameters Identification	308
<i>Jin Zhou, Tianping Chen, and Lan Xiang</i>	
Strength and Direction of Phase Synchronization of Neural Networks	314
<i>Yan Li, Xiaoli Li, Gaoxiang Ouyang, and Xinping Guan</i>	
Hopf Bifurcation in a Single Inertial Neuron Model: A Frequency Domain Approach	320
<i>Shaorong Li, Shaowen Li, Xipeng Sun, and Jie Li</i>	
Hopf Bifurcation in a Single Inertial Neuron Model with a Discrete Delay	327
<i>Shaowen Li and Shaorong Li</i>	
Stability and Bifurcation of a Neuron Model with Delay-Dependent Parameters . .	334
<i>Xu Xu and Yanchun Liang</i>	
Stability and Chaos of a Neural Network with Uncertain Time Delays	340
<i>Shangbo Zhou, Hua Li, and Zhongfu Wu</i>	
Chaotic Synchronization of Delayed Neural Networks	346
<i>Fenghua Tu, Xiaofeng Liao, and Chuandong Li</i>	

Chaos Synchronization for Bi-directional Coupled Two-Neuron Systems with Discrete Delays	351
<i>Xiaohong Zhang and Shangbo Zhou</i>	
Complex Dynamics in a Simple Hopfield-Type Neural Network	357
<i>Qingdu Li and Xiaosong Yang</i>	
Adaptive Chaotic Controlling Method of a Chaotic Neural Network Model	363
<i>Lidan Wang, Shukai Duan, and Guangyuan Liu</i>	

2 Model Design

Modeling Cortex Network: A Spatio-temporal Population Approach	369
<i>Wentao Huang, Licheng Jiao, Maoguo Gong, and Chuang Guo</i>	
A Special Kind of Neural Networks: Continuous Piecewise Linear Functions	375
<i>Xusheng Sun and Shuning Wang</i>	
A Novel Dynamic Structural Neural Network with Neuron-Regeneration and Neuron-Degeneration Mechanisms	380
<i>Yingtung Hsiao, Chenglong Chuang, Joeair Jiang, Chiang Wang, and Chengchih Chien</i>	
A New Adaptive Ridgelet Neural Network	385
<i>Shuyuan Yang, Min Wang, and Licheng Jiao</i>	
Designing Neural Networks Using Hybrid Particle Swarm Optimization	391
<i>Bo Liu, Ling Wang, Yihui Jin, and Dexian Huang</i>	
A New Strategy for Designing Bidirectional Associative Memories	398
<i>Gengsheng Zheng, Sidney Nascimento Givigi, and Weiyu Zheng</i>	
Genetically Optimized Hybrid Fuzzy Neural Networks Based on TSK Fuzzy Rules and Polynomial Neurons	404
<i>Sungkwun Oh, Byoungjun Park, and Hyunki Kim</i>	
Genetically Optimized Self-organizing Fuzzy Polynomial Neural Networks Based on Information Granulation	410
<i>Hosung Park, Daehee Park, and Sungkwun Oh</i>	
Identification of ANFIS-Based Fuzzy Systems with the Aid of Genetic Optimization and Information Granulation	416
<i>Sungkwun Oh, Keonjun Park, and Hyungsoo Hwang</i>	
Design of Rule-Based Neurofuzzy Networks by Means of Genetic Fuzzy Set-Based Granulation	422
<i>Byoungjun Park and Sungkwun Oh</i>	

Design of Genetic Fuzzy Set-Based Polynomial Neural Networks with the Aid of Information Granulation	428
<i>Sungkwun Oh, Seokbeom Roh, and Yongkab Kim</i>	
A Novel Self-organizing Neural Fuzzy Network for Automatic Generation of Fuzzy Inference Systems	434
<i>Meng Joo Er and Rishikesh Parthasarathi</i>	
Constructive Fuzzy Neural Networks and Its Application	440
<i>Lunwen Wang, Ying Tan, and Ling Zhang</i>	
A Novel CNN Template Design Method Based on GIM	446
<i>Jianye Zhao, Hongling Meng, and Daoheng Yu</i>	
A Novel Generalized Congruence Neural Networks	455
<i>Yong Chen, Guoyin Wang, Fan Jin, and Tianyun Yan</i>	
A SOM Based Model Combination Strategy	461
<i>Cristofer Englund and Antanas Verikas</i>	
Typical Sample Selection and Redundancy Reduction for Min-Max Modular Network with GZC Function	467
<i>Jing Li, Baoliang Lu, and Michinori Ichikawa</i>	
Parallel Feedforward Process Neural Network with Time-Varying Input and Output Functions	473
<i>Shisheng Zhong, Gang Ding, and Daizhong Su</i>	
A Novel Solid Neuron-Network Chip Based on Both Biological and Artificial Neural Network Theories	479
<i>Zihong Liu, Zhihua Wang, Guolin Li, and Zhiping Yu</i>	
Associative Memory Using Nonlinear Line Attractor Network for Multi-valued Pattern Association	485
<i>Ming-Jung Seow and Vijayan K. Asari</i>	
Associative Chaotic Neural Network via Exponential Decay Spatio-temporal Effect	491
<i>Shukai Duan and Lidan Wang</i>	
On a Chaotic Neural Network with Decaying Chaotic Noise	497
<i>Tianyi Ma, Ling Wang, Yingtao Jiang, and Xiaozong Yang</i>	
Extension Neural Network-Type 3	503
<i>Manghui Wang</i>	
Pulsed Para-neural Networks (PPNN) Based on MEXORs and Counters	509
<i>Junquan Li and Yixin Yin</i>	

Using Ensemble Information in Swarming Artificial Neural Networks	515
<i>Jian Tang, Zengqi Sun, and Jihong Zhu</i>	
Negatively Correlated Neural Network Ensemble with Multi-population Particle Swarm Optimization	520
<i>Zheng Qin, Yu Liu, Xingchen Heng, and Xianhui Wang</i>	
Wrapper Approach for Learning Neural Network Ensemble by Feature Selection	526
<i>Haixia Chen, Senmiao Yuan, and Kai Jiang</i>	
Constructive Ensemble of RBF Neural Networks and Its Application to Earthquake Prediction	532
<i>Yue Liu, Yuan Li, Guozheng Li, Bofeng Zhang, and Genfeng Wu</i>	

3 Learning Methods

The Bounds on the Rate of Uniform Convergence for Learning Machine	538
<i>Bin Zou, Luoqing Li, and Jie Xu</i>	
Supervised Learning on Local Tangent Space	546
<i>Hongyu Li, Li Teng, Wenbin Chen, and I-Fan Shen</i>	
Study Markov Neural Network by Stochastic Graph	552
<i>Yali Zhao, Guangcheng Xi, and Jianqiang Yi</i>	
An Efficient Recursive Total Least Squares Algorithm for Training Multilayer Feedforward Neural Networks	558
<i>Nakjin Choi, JunSeok Lim, and KoengMo Sung</i>	
A Robust Learning Algorithm for Feedforward Neural Networks with Adaptive Spline Activation Function	566
<i>Lingyun Hu and Zengqi Sun</i>	
A New Modified Hybrid Learning Algorithm for Feedforward Neural Networks . .	572
<i>Fei Han, Deshuang Huang, Yuming Cheung, and Guangbin Huang</i>	
Robust Recursive TLS (Total Least Square) Method Using Regularized UDU Decomposed for FNN (Feedforward Neural Network) Training	578
<i>JunSeok Lim, Nakjin Choi, and KoengMo Sung</i>	
An Improved Backpropagation Algorithm Using Absolute Error Function	585
<i>Jiancheng Lv and Zhang Yi</i>	
An Improved Relative Criterion Using BP Algorithm	591
<i>Zhiyong Zhang, Jingang Liu, and Zhongzhi Shi</i>	

Solving Hard Local Minima Problems Using Basin Cells for Multilayer Perceptron Training	597
<i>Youngui Yoon and Jaewook Lee</i>	
Enhanced Fuzzy Single Layer Perceptron	603
<i>Kwangbaek Kim, Sungshin Kim, Younghoon Joo, and Am-Sok Oh</i>	
A New Training Algorithm for a Fuzzy Perceptron and Its Convergence	609
<i>Jie Yang, Wei Wu, and Zhiqiong Shao</i>	
Stochastic Fuzzy Neural Network and Its Robust Parameter Learning Algorithm	615
<i>Junping Wang and Quanshi Chen</i>	
Applying Neural Network to Reinforcement Learning in Continuous Spaces	621
<i>Dongli Wang, Yang Gao, and Pei Yang</i>	
Multiagent Reinforcement Learning Algorithm Using Temporal Difference Error	627
<i>SeungGwan Lee</i>	
A Foremost-Policy Reinforcement Learning Based ART2 Neural Network and Its Learning Algorithm	634
<i>Jian Fan and Gengfeng Wu</i>	
A Reinforcement Learning Based Radial-Basis Function Network Control System	640
<i>Jianing Li, Jianqiang Yi, Dongbin Zhao, and Guangcheng Xi</i>	
Structure Pruning Strategies for Min-Max Modular Network	646
<i>Yang Yang and Baoliang Lu</i>	
Sequential Bayesian Learning for Modular Neural Networks	652
<i>Pan Wang, Zhun Fan, Youfeng Li, and Shan Feng</i>	
A Modified Genetic Algorithm for Fast Training Neural Networks	660
<i>Dongsun Kim, Hyunsik Kim, and Duckjin Chung</i>	
Immunity Clonal Synergetic Learning of Unbalanced Attention Parameters in Synergetic Network	666
<i>Xiuli Ma and Licheng Jiao</i>	
Optimizing Weights of Neural Network Using an Adaptive Tabu Search Approach	672
<i>Yi He, Yuhui Qiu, Guangyuan Liu, and Kaiyou Lei</i>	
Semi-supervised Learning for Image Retrieval Using Support Vector Machines . . .	677
<i>Ke Lu, Jidong Zhao, Mengqin Xia, and Jiazhi Zeng</i>	

A Simple Rule Extraction Method Using a Compact RBF Neural Network	682
<i>Lipo Wang and Xiuju Fu</i>	
Automatic Fuzzy Rule Extraction Based on Fuzzy Neural Network	688
<i>Li Xiao and Guangyuan Liu</i>	

4 Optimization Methods

Neural Networks for Nonconvex Nonlinear Programming Problems:	
A Switching Control Approach	694
<i>Changyin Sun and Chunbo Feng</i>	
Deterministic Global Optimization with a Neighbourhood	
Determination Algorithm Based on Neural Networks	700
<i>Weitao Sun, Jiwu Shu, and Weimin Zheng</i>	
A Neural Network Methodology of Quadratic Optimization	
with Quadratic Equality Constraints	706
<i>Yongqing Yang, Jinde Cao, and Daqi Zhu</i>	
A Hopfield Neural Network for Nonlinear Constrained Optimization Problems	
Based on Penalty Function	712
<i>Zhiqing Meng and Chuangyin Dang</i>	
A Neural Network Algorithm for Second-Order Conic Programming	718
<i>Xuewen Mu, Sanyang Liu, and Yaling Zhang</i>	
Application of Neural Network to Interactive Physical Programming	725
<i>Hongzhong Huang and Zhigang Tian</i>	
Application of the “Winner Takes All” Principle	
in Wang’s Recurrent Neural Network for the Assignment Problem	731
<i>Paulo Henrique Siqueira, Sergio Scheer, and Maria Teresinha Arns Steiner</i>	
Theoretical Analysis and Parameter Setting of Hopfield Neural Networks	739
<i>Hong Qu, Zhang Yi, and XiaoLin Xiang</i>	
Solving Optimization Problems Based on Chaotic Neural Network	
with Hysteretic Activation Function	745
<i>Xiuhong Wang, Qingli Qiao, and Zhengqu Wang</i>	
An Improved Transiently Chaotic Neural Network	
for Solving the K-Coloring Problem	750
<i>Shenshen Gu</i>	
A Sweep-Based TCNN Algorithm for Capacity Vehicle Routing Problem	756
<i>Huali Sun, Jianying Xie, and Yaofeng Xue</i>	

Transient Chaotic Discrete Neural Network for Flexible Job-Shop Scheduling . . . 762
Xinli Xu, Qiu Guan, Wanliang Wang, and Shengyong Chen

Integration of Artificial Neural Networks and Genetic Algorithm
for Job-Shop Scheduling Problem 770
Fuqing Zhao, Yi Hong, Dongmei Yu, Xuhui Chen, and Yahong Yang

An Effective Algorithm Based on GENET Neural Network Model
for Job Shop Scheduling with Release Dates and Due Dates 776
Xin Feng, Hofung Leung, and Lixin Tang

Fuzzy Due Dates Job Shop Scheduling Problem Based on Neural Network 782
Yuan Xie, Jianying Xie, and Jie Li

Heuristic Combined Artificial Neural Networks to Schedule Hybrid Flow Shop
with Sequence Dependent Setup Times 788
Lixin Tang and Yanyan Zhang

A Neural Network Based Heuristic
for Resource-Constrained Project Scheduling 794
Yongyi Shou

Functional-Link Net Based Multiobjective Fuzzy Optimization 800
*Ping Wang, Hongzhong Huang, Ming J. Zuo, Weidong Wu,
and Chunsheng Liu*

Optimizing the Distributed Network Monitoring Model
with Bounded Bandwidth and Delay Constraints by Neural Networks 805
Xianghui Liu, Jianping Yin, Zhiping Cai, Xicheng Lu, and Shiming Chen

Stochastic Nash Equilibrium with a Numerical Solution Method 811
Jinwu Gao and Yankui Liu

5 Kernel Methods

Generalized Foley-Sammon Transform with Kernels 817
Zhenzhou Chen and Lei Li

Sparse Kernel Fisher Discriminant Analysis 824
Hongjie Xing, Yujiu Yang, Yong Wang, and Baogang Hu

Scaling the Kernel Function to Improve Performance
of the Support Vector Machine 831
Peter Williams, Sheng Li, Jianfeng Feng, and Si Wu

Online Support Vector Machines with Vectors Sieving Method 837
Liangzhi Gan, Zonghai Sun, and Youxian Sun

Least Squares Support Vector Machine Based on Continuous Wavelet Kernel	843
<i>Xiangjun Wen, Yunze Cai, and Xiaoming Xu</i>	
Multiple Parameter Selection for LS-SVM Using Smooth Leave-One-Out Error . .	851
<i>Liefeng Bo, Ling Wang, and Licheng Jiao</i>	
Trajectory-Based Support Vector Multicategory Classifier	857
<i>Daewon Lee and Jaewook Lee</i>	
Multi-category Classification by Least Squares Support Vector Regression	863
<i>Jingqing Jiang, Chunguo Wu, and Yanchun Liang</i>	
Two-Map Support Vector Machine for Multi-classification Problems	869
<i>Zhifeng Hao, Bo Liu, Xiaowei Yang, Yanchun Liang, and Feng Zhao</i>	
Fuzzy Multi-class SVM Classifier Based on Optimal Directed Acyclic Graph Using in Similar Handwritten Chinese Characters Recognition	875
<i>Jun Feng, Yang Yang, and Jinsheng Fan</i>	
A Hierarchical and Parallel Method for Training Support Vector Machines	881
<i>Yimin Wen and Baoliang Lu</i>	
Task Decomposition Using Geometric Relation for Min-Max Modular SVMs	887
<i>Kaian Wang, Hai Zhao, and Baoliang Lu</i>	
A Novel Ridgelet Kernel Regression Method	893
<i>Shuyuan Yang, Min Wang, Licheng Jiao, and Qing Li</i>	
Designing Nonlinear Classifiers Through Minimizing VC Dimension Bound	900
<i>Jianhua Xu</i>	
A Cascaded Mixture SVM Classifier for Object Detection	906
<i>Zejian Yuan, Nanning Zheng, and Yuehu Liu</i>	
Radar High Range Resolution Profiles Feature Extraction Based on Kernel PCA and Kernel ICA	913
<i>Hongwei Liu, Hongtao Su, and Zheng Bao</i>	
Controlling Chaotic Systems via Support Vector Machines Without Analytical Model	919
<i>Meiying Ye</i>	
Support Vector Regression for Software Reliability Growth Modeling and Prediction	925
<i>Fei Xing and Ping Guo</i>	
SVM-Based Semantic Text Categorization for Large Scale Web Information Organization	931
<i>Peng Fu, Deyun Zhang, Zhaofeng Ma, and Hao Dong</i>	

Fuzzy Support Vector Machine and Its Application
to Mechanical Condition Monitoring 937
Zhousuo Zhang, Qiao Hu, and Zhengjia He

6 Component Analysis

Guided GA-ICA Algorithms 943
*Juan Manuel Górriz, Carlos García Puntonet, Angel Manuel Gómez,
and Oscar Pernía*

A Cascaded Ensemble Learning for Independent Component Analysis 949
Jian Cheng, Kongqiao Wang, and Yenwei Chen

A Step by Step Optimization Approach to Independent Component Analysis ... 955
Dengpan Gao, Jinwen Ma, and Qiansheng Cheng

Self-adaptive FastICA Based on Generalized Gaussian Model 961
Gang Wang, Xin Xu, and Dewen Hu

An Efficient Independent Component Analysis Algorithm
for Sub-Gaussian Sources 967
Zhilin Zhang and Zhang Yi

ICA and Committee Machine-Based Algorithm
for Cursor Control in a BCI System 973
Jianzhao Qin, Yuanqing Li, and Andrzej Cichocki

Fast Independent Component Analysis for Face Feature Extraction 979
Yiqiong Xu, Bicheng Li, and Bo Wang

Affine Invariant Descriptors for Color Images
Based on Independent Component Analysis 985
Chengming Liu, Xuming Huang, and Liming Zhang

A New Image Protection and Authentication Technique Based on ICA 991
Linhua Zhang, Shaojiang Deng, and Xuebing Wang

Locally Spatiotemporal Saliency Representation:
The Role of Independent Component Analysis 997
Tao Jiang and Xingzhou Jiang

A Multistage Decomposition Approach
for Adaptive Principal Component Analysis 1004
Dazheng Feng

A New Kalman Filtering Algorithm
for Nonlinear Principal Component Analysis 1010
Xiaolong Zhu, Xianda Zhang, and Ying Jia

An Improvement on PCA Algorithm for Face Recognition	1016
<i>Vo Dinh Minh Nhat and Sungyoung Lee</i>	
A Modified PCA Neural Network to Blind Estimation of the PN Sequence in Lower SNR DS-SS Signals	1022
<i>Tianqi Zhang, Xiaokang Lin, Zhengzhong Zhou, and Aiping Mu</i>	
A Modified MCA EXIN Algorithm and Its Convergence Analysis	1028
<i>Dezhong Peng, Zhang Yi, and XiaoLin Xiang</i>	
Robust Beamforming by a Globally Convergent MCA Neural Network	1034
<i>Mao Ye</i>	
Author Index	1043

Advances in Neural Networks - ISNN 2005
Second International Symposium on Neural Networks,
Chongqing, China, May 30 - June 1, 2005, Proceedings,
Part I
Wang, J.; Liao, X.; Yi, Z. (Eds.)
2005, XLIX, 1055 p., Softcover
ISBN: 978-3-540-25912-1