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Advances in Neural Networks – ISNN 2014

11th International Symposium on Neural Networks, ISNN 2014 Hong Kong and Macao, China November 28 – December 1, 2014 Proceedings



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Preface

This volume of Lecture Notes in Computer Science, vol. 8866, constitutes the Proceedings of the 11th International Symposium on Neural Networks (ISNN 2014) held during November 28-December 1, 2014 in Hong Kong and Macao, the twin city, following the successes of previous events. Known as the Special Administrative Regions of China, Hong Kong and Macao are two modern metropolies situated on the southern coast of China by the Pearl River Delta. ISNN is a prestigious annual symposium on neural networks with past events held in Dalian (2004), Chongqing (2005), Chengdu (2006), Nanjing (2007), Beijing (2008), Wuhan (2009), Shanghai (2010), Guilin (2011), Shenyang (2012) and Dalian (2013). Over the past few years, ISNN has matured into a well-established series of international conference on neural networks and their applications to other fields. Following this tradition, ISNN 2014 provided an academic forum for the participants to disseminate their new research findings and discuss emerging areas of research. Also, it created a stimulating environment for the participants to interact and exchange information on future research challenges and opportunities of neural networks and their applications.

ISNN 2014 received submissions from about 218 authors in 14 countries and regions (Belgium, Canada, China, Czech Republic, Hong Kong, India, Japan, Macao, Pakistan, Poland, Republic of Korea, Tunisia, UK and USA). Based on the rigorous peer reviews by the Program Committee members and the reviewers, 71 high-quality papers were selected for publications in the LNCS proceedings. These papers cover all major topics of the theoretical research, empirical study, and applications of neural networks research.

ISNN 2014 would not have achieved its success without the support and contributions of many volunteers and organizations. We would like to express our sincere thanks to The Chinese University of Hong Kong, and University of Macau, to European Neural Network Society, International Neural Network Society, IEEE Computational Intelligence Society, and Asia Pacific Neural Network Assembly for their technical co-sponsorship.

We would also like to sincerely thank the General Chair and General Cochairs for their overall organization of the symposium, members of the Advisory Committee and Steering Committee for their guidance for every aspects of the entire conference, and the members of the Organizing Committee, Special Sessions Committee, Publication Committee, Publicity Committee, Finance Committee, Registration Committee, and Local Arrangements Committee for all their great efforts and time in organizing such an event. We would also like to take this opportunity to express our deepest gratitude to the members of the International Program Committee and all reviewers for their professional review of the papers; their expertise guaranteed the high qualify of the technical program of the ISNN 2014!

VI Preface

Furthermore, we would also like to thank Springer for publishing the proceedings in the prestigious series of Lecture Notes in Computer Science. Meanwhile, we also would like to express our heartfelt appreciations to the plenary and panel speakers for their vision and discussions on the latest research development in the field as well as critical future research directions, opportunities, and challenges.

Finally, we would also like to thank all the speakers, authors, and participants for their great contribution and support that made ISNN 2014 a great success.

November 2014

Zhigang Zeng Yangmin Li Irwin King

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Contents

•		.1.	:	_
A	na	ш	/51	S

A Less Conservative Guaranteed Cost Stabilization of Time-Varying Delayed CNNs	3
Existence and Uniqueness of Almost Automorphic Solutions to Cohen-Grossberg Neural Networks with Delays	12
A Proof of a Key Formula in the Error-Backpropagation Learning Algorithm for Multiple Spiking Neural Networks	19
Anti-Synchronization Control for Memristor-Based Recurrent Neural Networks	27
Adaptive Pinning Synchronization of Coupled Inertial Delayed Neural Networks	35
The Relationship between Neural Avalanches and Neural Oscillations Yan Liu, Jiawei Chen, and Liujun Chen	43
Reinforcement-Learning-Based Controller Design for Nonaffine Nonlinear Systems	51
Multistability and Multiperiodicity Analysis of Complex-Valued Neural Networks	59
Exponential Synchronization of Coupled Stochastic and Switched Neural Networks with Impulsive Effects	69
The Research of Building Indoor Temperature Prediction Based on Support Vector Machine	80
Towards the Computation of a Nash Equilibrium	90

Longhu Quan, Zhanshan Wang, Xiuchong Liu, and Mingguo Zheng	100
Neural-Network-Based Adaptive Fault Estimation for a Class of Interconnected Nonlinear System with Triangular Forms	110
Big Data Matrix Singular Value Decomposition Based on Low-Rank Tensor Train Decomposition	121
CSP-Based EEG Analysis on Dissociated Brain Organization for Single-Digit Addition and Multiplication	131
Lazy Fully Probabilistic Design of Decision Strategies	140
Memristive Radial Basis Function Neural Network for Parameters Adjustment of PID Controller	150
Finite-Time Stability of Switched Static Neural Networks	159
Fixed-Priority Scheduling Policies and Their Non-utilization Bounds Guangyi Chen and Wenfang Xie	167
Modeling Dynamic Hysteresis of Smart Actuators with Fuzzy Tree Yongxin Guo, Zhen Zhang, Jianqin Mao, Haishan Ding, and Yanhua Ma	175
Neurodynamics-Based Model Predictive Control for Trajectory Tracking of Autonomous Underwater Vehicles	184
Feedback-Dependence of Correlated Firing in Globally Coupled Networks Jinli Xie, Zhijie Wang, and Jianyu Zhao	192
Wilcoxon-Norm-Based Robust Extreme Learning Machine	200
Modeling	
An Artificial Synaptic Plasticity Mechanism for Classical Conditioning with Neural Networks	213

Contents	АШ
An Application of Dynamic Regression Model and Residual Auto-Regressive Model in Time Series	222
Reweighted l_2 -Regularized Dual Averaging Approach for Highly Sparse Stochastic Learning	232
Perceptual Learning Model on Recognizing Chinese Characters Jiawei Chen, Yan Liu, Xiaomeng Li, and Liujun Chen	243
Hierarchical Solving Method for Large Scale TSP Problems	252
Gaussian Process Learning: A Divide-and-Conquer Approach	262
A Kernel ELM Classifier for High-Resolution Remotely Sensed Imagery Based on Multiple Features	270
Early-Stopping Regularized Least-Squares Classification	278
Z-Type Model for Real-Time Solution of Complex ZLE	286
A Dynamic Generation Approach for Ensemble of Extreme Learning Machines	294
Saliency Detection: A Divisive Normalization Approach	303
A Novel Neural Network Based Adaptive Control for a Class of Uncertain Strict-Feedback Nonlinear Systems	312
Rough Sets Theory Approch to Extenics Risk Assessment Model in Social Risk	321
Kernel Parameter Optimization for KFDA Based on the Maximum Margin Criterion	330

A Polynomial Time Solvable Algorithm to Binary Quadratic Programming Problems with Q Being a Seven-Diagonal Matrix and Its Neural Network Implementation	338
A New Nonlinear Neural Network for Solving QP Problems	347
Untrained Method for Ensemble Pruning and Weighted Combination Bartosz Krawczyk and Michał Woźniak	358
An Improved Learning Algorithm with Tunable Kernels for Complex-Valued Radial Basis Function Neural Networks	366
Combined Methodology Based on Kernel Regression and Kernel Density Estimation for Sign Language Machine Translation	374
Adaptive Intelligent Control for Continuous Stirred Tank Reactor with Output Constraint	385
Applications	
Modeling and Application of Principal Component Analysis in Industrial Boiler	395
An Orientation Column-Inspired Contour Representation and Its Application in Shape-Based Recognition	405
Region Based Image Preprocessor for Feed-Forward Perceptron Based Systems	414
Image Denoising with Signal Dependent Noise Using Block Matching and 3D Filtering	423
Different-Level Simultaneous Minimization with Aid of Ma Equivalence for Robotic Redundancy Resolution	431
Content-Adaptive Rain and Snow Removal Algorithms for Single Image Shujian Yu, Yixiao Zhao, Yi Mou, Jinghui Wu, Lu Han, Xiaopeng Yang, and Baojun Zhao	439

Contents

XV

XVI Contents

Patterns	558
Fast and Effective Image Segmentation via Superpixels and Adaptive Thresholding	568
Diagonal Log-Normal Generalized RBF Neural Network for Stock Price Prediction	576
Design of a Greedy V2G Coordinator Achieving Microgrid-Level Load Shift	584
PolSAR Image Segmentation Based on the Modified Non-negative Matrix Factorization and Support Vector Machine	594
Solving Path Planning of UAV Based on Modified Multi-Population Differential Evolution Algorithm	602
Consensus for Higher-Order Multi-agent Networks with External Disturbances	611
The Research of Document Clustering Topical Concept Based on Neural Networks	621
The Research of Reducing Misregistration Based on Image Mosaicing Yi Ding and Xian Fu	629
A Parallel Image Segmentation Method Based on SOM and GPU with Application to MRI Image Processing	637
Author Index	647