

**2013 International Conference on Intelligent Control and
Information Processing & 2013 International Conference
on Brain Inspired Cognitive Systems**

FINAL PROGRAM



June 9 – 11, 2013, Beijing, China

2013 International Conference on Intelligent Control and Information Processing & 2013 International Conference on Brain Inspired Cognitive Systems

Greeting from the General Chairs

It is our great honor to welcome you to the 2013 International Conference on Intelligent Control and Information Processing (ICICIP 2013) and the 2013 International Conference on Brain Inspired Cognitive Systems (BICS 2013), held in Beijing, China during June 9–11, 2013. Beijing, as the capital of the People's Republic of China, is the nation's political, economic, and cultural center as well as China's most important center for international trade and communications. All participants of ICICIP/BICS 2013 had a technically rewarding experience as well as memorable experiences in this great city.

ICICIP 2013 aims to provide a broad international forum for scientists, engineers, and educators working in the areas of information and control to discuss state-of-the-art science and technologies, and their applications in diverse areas. ICICIP 2013 received 432 submissions from more than 30 countries and regions. Based on rigorous reviews, 167 papers were selected for publication in the proceedings. The papers collected in the proceedings cover a broad spectrum of fields, ranging from intelligent control theory and applications, neural network control, fuzzy control, learning systems, industrial automation, process control, and power systems to image processing, computer vision, pattern recognition, adaptive filtering, signal processing, bio-imaging, sensor networks, network intelligence, and multimedia communications. BICS 2013, as a sequel of BICS 2004 (Stirling, Scotland, UK), BICS 2006 (Island of Lesbos, Greece), BICS 2008 (Sao Luis, Brazil), BICS 2010 (Madrid, Spain), and BICS 2012 (Shenyang, China), aims to provide a high-level international forum for scientists, engineers, and educators to present the state of the art of brain inspired cognitive systems research and applications in diverse fields. BICS 2013 received a total of 68 submissions from more than 120 authors in 21 countries and regions across four continents. Based on rigorous review process carried out by the Program Committee members and reviewers, 45 high-quality papers were selected for publication in the conference proceedings. In addition to the contributed papers, three distinguished scholars (Frank Lewis, Dan Schonfeld, and Cesare Alippi) were invited to give keynote lectures, providing us with recent hot topics, latest developments and novel applications.

ICICIP 2013 was organized by the Institute of Automation, Chinese Academy of Sciences, Beijing, China, and co-sponsored by the University of Illinois at Chicago and the National Natural Science Foundation of China. We would like to acknowledge technical supports from the IEEE Computational Intelligence Society and the International Neural Network Society. We wish to express our appreciation and gratitude to all the individuals who have contributed to ICICIP 2013 in a variety of ways. Special thanks are extended to our colleagues for their thorough review of all the submissions, which is vital to the success of this conference, and also to the members of the organizing committee and our volunteer students who have dedicated their time and efforts in planning, promoting, organizing and helping the conference. Our special thanks go to distinguished keynote lecturers, as well as all the authors for contributing their latest research work to the conference, and to all the participants in making ICICIP 2013 a memorable event. We would like to express our sincere gratitude to all reviewers of BICS 2013 for the time and efforts they generously gave to the conference. We are very grateful to the Institute of Automation of the Chinese Academy of Sciences, the University of Stirling, the Chinese University of Hong Kong, the University of Illinois at Chicago, and the National Natural Science Foundation of China for their financial support. We would also like to thank the publisher, Springer, for cooperation in publishing the BICS 2013 proceedings in the prestigious series of Lecture Notes in Artificial Intelligence.

Enjoy the conference!

Cesare Alippi and Huaguang Zhang, ICICIP 2013 General Chairs
Derong Liu, BICS 2013 General Chair

ICICIP 2013 Organization

General Chairs

Cesare Alippi, Italy
Huaguang Zhang, China

Advisory Committee Chairs

Ruwei Dai, China
Fei-Yue Wang, China
Gary Yen, USA

Steering Committee Chairs

Marios Polycarpou, Cyprus
Jun Wang, China

Organizing Committee Chair

Derong Liu, China

Program Chairs

Dongbin Zhao, China
Robert Kozma, USA

Plenary Sessions Chairs

Bhaskar DasGupta, USA
Zeng-Guang Hou, China
Amir Hussain, UK

Special Sessions Chairs

El-Sayed El-Alfy, S. Arabia
Stefano Squartini, Italy
Zhigang Zeng, China

Finance Chair

Qinglai Wei, China

Publicity Chairs

Haibo He, USA
Erik Cambria, Singapore

Publications Chairs

Jinhu Lv, China
Sanqing Hu, China

Registration Chair

Ding Wang, China

Local Arrangements Chair

Xiaolin Hu, China

Conference Secretariat

Hongliang Li, China

International Program Committee Members

Sabri Arik
Humberto Sossa Azuela
Waqas Haider Khan Bangyal
Giacomo Boracchi
Erik Cambria
M. Emre Celebi
Jonathan Hoyin Chan
Long Cheng
Xiaochun Cheng
Yuhu Cheng
Zheru Chi
Sung-Bae Cho
Chuangyin Dang
Mingcong Deng
Haibin Duan
El-Sayed El-Alfy
Andries Engelbrecht
Wai-Keung Fung
Junbin Gao
Xiao-Zhi Gao
Erol Gelenbe
Chengan Guo
Ping Guo

Abdenour Hadid
Qing-Long Han
Haibo He
Zhongsheng Hou
Ting Huang
Tingwen Huang
Gianluca Ippoliti
Danchi Jiang
Kwang-Baek Kim
Mario Koeppen
H. K. Kwan
Edmund M K Lai
Chengdong Li
Chuandong Li
Hongliang Li
Kang Li
Li Li
Shutao Li
Yangmin Li
Aristidis Likas
Guoping Liu
Ju Liu
Jiancheng Lu

Jinhu Lu
Wenlian Lu
Jinwen Ma
Duoqian Miao
Valeri Mladenov
Dianwei Qian
Junfei Qiao
Jianlong Qiu
Manuel Roveri
Tomasz Rutkowski
Sattar Sadkhan
Daming Shi
Stefano Squartini
John Sum
Norikazu Takahashi
Manchun Tan
Ying Tan
Michel Verleysen
Bing Wang

Dan Wang
Ding Wang
Wenwu Wang
Zhanshan Wang
Qinglai Wei
Chang-Hee Won
Kevin Wong
Songyun Xie
Yingjie Yang
Ikinci Yazar
Jianqiang Yi
Wenwu Yu
Xiao-Hua Yu
Xiaoqin Zeng
Jie Zhang
Kai Zhang
Liqing Zhang
Liang Zhao
Mingjun Zhong

BICS 2013 Organization

General Chair

Derong Liu, China

Advisory Committee Chairs

Ruwei Dai, China

Aike Guo, China

Organizing Committee Chairs

Bhaskar DasGupta, USA

Jun Wang, Hong Kong

Program Chairs

Vladimir Bajic, Saudi Arabia

Amir Hussain, UK

Robert Kozma, USA

Liang Zhao, Brazil

Special Sessions Chairs

Erik Cambria, Singapore

Sanqing Hu, China

Dongbin Zhao, China

Finance Chair

Huaguang Zhang, China

Publicity Chairs

Song Ci, USA

El-Sayed El-Alfy, Saudi Arabia

European Liaisons

Mohamed Chetouani, France

Anna Esposito, Italy

Giacomo Indiveri, Switzerland

Mufti Mahmud, Italy

Stefan Wermter, Germany

Publications Chairs

Zeng-Guang Hou, China

Stefano Squartini, Italy

Registration Chair

Qinglai Wei, China

Local Arrangements Chair

Ding Wang, China

Conference Secretariat

Hongliang Li, China

International Program Committee Members

Peter Andras

Joao Bertini Jr.

Fabricio Breve

Zengqiang Chen

Mohamed Chetouani

Song Ci

Bhaskar DasGupta

El-Sayed El-Alfy

Peter Erdi

Anna Esposito

Marcos Faundez-Zanuy

Takeshi Furuhashi

Michele Giugliano

Stephen Grossberg

Haibo He

Giacomo Indiveri

Xuelong Li

Hongliang Li

Haihua Liu

Mufti Mahmud

Marcos Quiles

Nicla Rossini

Juergen Schmidhuber

Bjoern Schuller

Stefano Squartini

Jianhua Tao

Isabel Trancoso

Stefano Vassanelli

David Vernon

Ding Wang

Zhanshan Wang

Qinglai Wei

Luda Werbos

Stefan Wermter

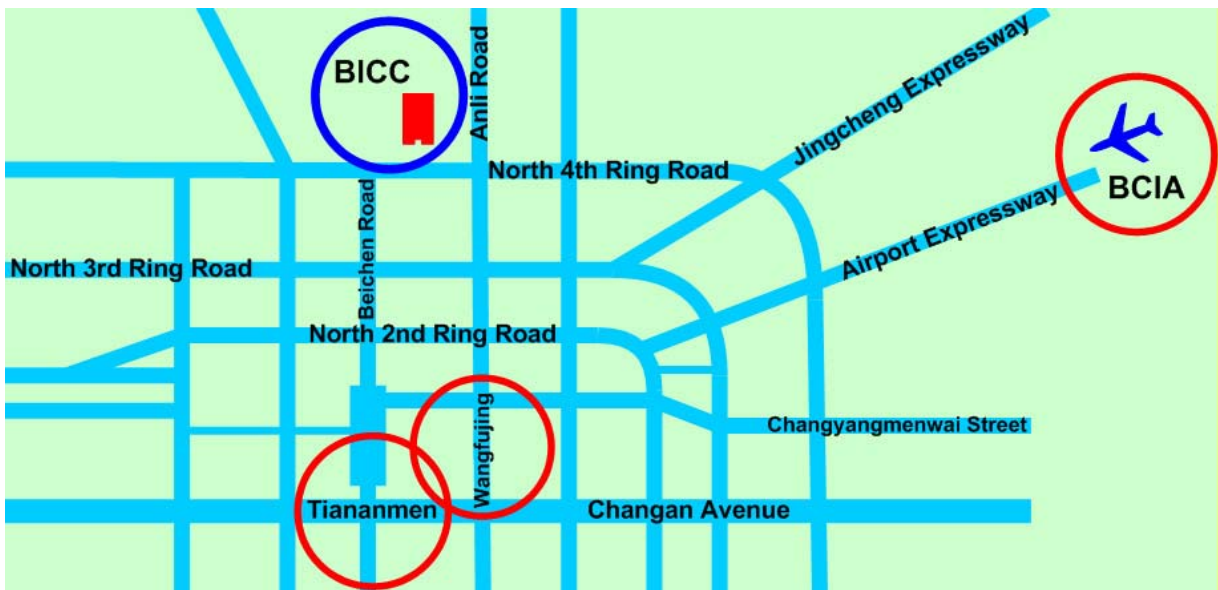
Erfu Yang

Li Zhang

Qiangfu Zhao

Conference Venue

ICICIP/BICS 2013 will be held at the Beijing International Convention Center (BICC), which is on the North 4th Ring Road of Beijing and along the capital axis line. It is right across the street from the center of 2008 Beijing Olympic Games – Beijing National Stadium, known as the “Bird’s Nest”, and the Aquatic Center, known as the “Water Cube”. It is 20 kilometers from the Beijing Capital International Airport (BCIA) and 9 kilometers from the city center.



Registration Information

The ICICIP/BICS 2013 registration desk, located outside Conference room 305 (3rd floor) of the Beijing International Convention Center, will be open during the following hours:

- June 9, 2013 (Sunday) 12:00 – 20:00
- June 10, 2013 (Monday) 08:00 – 17:00
- June 11, 2013 (Tuesday) 08:00 – 14:00.

Full registration includes a welcome reception ticket, conference attendance, a banquet ticket, and the conference CD-ROM proceedings.

Additional sets of CD-ROM proceedings and hardcopy proceedings may be purchased at the registration desk (50 US dollars for CD-ROM proceedings and 100 US dollars for one volume of hardcopy proceedings). In addition, each additional banquet ticket is 50 US dollars.

Accommodation

The North Star Continental Grand Hotel, which is a four star hotel, is directly connected to Beijing International Conference Center and is designated as the conference hotel.

Hotel address:

- Beijing North Star Continental Grand Hotel
- 8 Beichen East Road, Chaoyang District
- Beijing 100101, China
- Phone: +86 10 84985588

To its east side, the Continental Grand Hotel is directly connected to a five star hotel (North Star Crown Plaza Wu Zhou Hotel) which has 500 rooms. Nearby, within five minute walking distance, there are several three star hotels including North Star Yayuncun Hotel, North Star HuiYuan Service Apartment, National Jade Hotel, and few others with more than 800 rooms total.

A map showing all these different hotels is shown below.

亚运村平面位置示意图

Plan Of YaYunCun



Plenary Lecture I

Optimal Design for Cooperative Control Synchronization and Games on Communication Graphs

Frank Lewis

The University of Texas at Arlington, USA

In this talk we present design methods for cooperative controllers for distributed systems. The developments are for general directed graph communication structures, for both continuous-time and discrete-time agent dynamics. Our objective is to provide local agent feedback design methods that are independent of the graph topology and so function on a wide range of graph structures. An optimal design method for local feedback controllers is given that decouples the control design from the graph structural properties. A theory of duality between controllers and observers on communication graphs is given, including methods for cooperative output feedback control based on cooperative regulator designs.

In part two of the talk, we discuss graphical games. Standard definitions of Nash equilibrium are not useful for graphical games since, though in Nash equilibrium, all agents may not achieve synchronization. A strengthened definition of Interactive Nash equilibrium is given that guarantees that all agents are participants in the same game, and that all agents achieve synchronization while optimizing their own value functions.



Frank Lewis, Fellow IEEE, Fellow IFAC, Fellow U.K. Institute of Measurement & Control, PE Texas, U.K. Chartered Engineer, is Distinguished Scholar Professor, Distinguished Teaching Professor, and Moncrief-O'Donnell Chair at The University of Texas at Arlington Research Institute. IEEE Control Systems Society Distinguished Lecturer. He obtained the Bachelor's Degree in Physics/EE and the MSEE at Rice University, the MS in Aeronautical Engineering from Univ. W. Florida, and the Ph.D. at Ga. Tech. He works in feedback control, intelligent systems, distributed control systems, and sensor networks. He is author of 6 U.S. patents, 250 journal papers, 360 conference papers, 15 books, 44 chapters, and 11 journal special issues. He received the Fulbright Research Award, NSF Research Initiation Grant, ASEE Terman Award, Int. Neural Network Soc. Gabor Award 2009, U.K. Inst Measurement & Control Honeywell Field Engineering Medal 2009. Received IEEE Computational Intelligence Society Neural Networks Pioneer Award 2012. Received Outstanding Service Award from Dallas IEEE Section, selected as Engineer of the Year by Ft. Worth IEEE Section. Listed in Ft. Worth Business Press Top 200 Leaders in Manufacturing. Received the 2010 IEEE Region 5 Outstanding Engineering Educator Award and the 2010 UTA Graduate Dean's Excellence in Doctoral Mentoring Award. Elected to UTA Academy of Distinguished Teachers 2012. He served on the NAE Committee on Space Station in 1995. He is an elected Guest Consulting Professor at South China University of Technology and Shanghai Jiao Tong University. Founding Member of the Board of Governors of the Mediterranean Control Association. Helped win the IEEE Control Systems Society Best Chapter Award (as Founding Chairman of DFW Chapter), the National Sigma Xi Award for Outstanding Chapter (as President of UTA Chapter), and the US SBA Tibbets Award in 1996 (as Director of ARRI's SBIR Program).

Plenary Lecture II

The Visual Brain: Biologically-Inspired Imaging and Vision

Dan Schonfeld

University of Illinois at Chicago, USA

The brain is the most powerful image processing and computer vision system. It is therefore not surprising that much of the work in the areas of imaging and vision over the past several decades has been inspired by the brain. In this talk, we will discuss recent advances in the study of visualization in the brain and explore various influences of brain structure and function in imaging and vision.



Dan Schonfeld received the B.S. degree in Electrical Engineering and Computer Science from the University of California at Berkeley, and the M.S. and Ph.D. degrees in Electrical and Computer Engineering from The Johns Hopkins University, in 1986, 1988, and 1990, respectively. In 1990, he joined the University of Illinois at Chicago, where he is currently a Professor in the Departments of Electrical and Computer Engineering, Computer Science, and Bioengineering. Dr. Schonfeld has been elected University Scholar of the University of Illinois. He has authored over 200 technical papers in various journals and conferences. He was co-author of a paper that won the Best Paper Award at the ACM Multimedia Workshop on Advanced Video Streaming Techniques for Peer-to-Peer Networks and Social Networking 2010. He was also co-author of papers that won the Best Student Paper Awards in Visual Communication and Image Processing 2006 and IEEE International Conference on Image Processing 2006 and 2007. Dr. Schonfeld has been elevated to the rank of Fellow of the IEEE “for contributions to image and video analysis.” He was also elevated to the rank of Fellow of the SPIE “for specific achievements in morphological image processing and video analysis.” He is currently serving as Deputy Editor-in-Chief of the IEEE Transactions on Circuits and Systems for Video Technology and Area Editor for Special Issues of the IEEE Signal Processing Magazine. His current research interests are in signal processing, image and video analysis, video retrieval and communications, multimedia systems, computer vision, medical imaging, and genomic signal processing.

Plenary Lecture III

Active Learning with a Just-In-Time Strategy

Cesare Alippi

Politecnico di Milano, Milan, Italy

Institute of Automation, Chinese Academy of Sciences, Beijing, China

Most of machine learning applications assume the stationarity hypothesis for the process generating the data. This amenable assumption is so widely –and implicitly– accepted that sometimes we even forget that it does not generally hold in the practice due to concept drift (i.e., a structural change in the process generating the acquired datastream).

The ability to detect concept drift and react accordingly is hence a major achievement for intelligent learning machines and constitutes one of the hottest research topics. This ability allows the machine for actively tuning the application to maintain high performance, changing online the operational strategy, detecting and isolating possible occurring faults to name a few relevant tasks.

The talk will focus on the active just-in-time approach where changes e.g., induced by faults, time variance in the environment and ageing effects are detected by triggering mechanisms. After change detection the system immediately reacts to mitigate the accuracy loss by tracking the system evolution with a strategy depending on the available information (just-in-time approach).



Cesare Alippi received the Dr. Ing. degree in electronic engineering (summa cum laude) in 1990 and the Ph.D. degree in computer engineering in 1995, both from Politecnico di Milano, Milan, Italy. He has been a visiting researcher at the University College London, London, U.K., the Massachusetts Institute of Technology, Cambridge, USA, the École Supérieure de Physique et de Chimie Industrielles, France, the University of Lugano, Switzerland, and the Chinese Academy of Sciences, China. He was a research scientist of the Italian National Research Council (1996-98), then Reader and Associate Professor at Politecnico di Milano. Since 2002, he has been a Full Professor in Information Processing Systems at the same institution. Dr. Alippi is a Fellow of the IEEE, Vice President for Education of the IEEE Computational Intelligent Society, Adcom member of the CIS (2012-2014), Chair of the Awards Committee of the CIS (2012), Associate Editor of the IEEE-TNN (2004-2011), Associate Editor of the IEEE-TIM (2003-2010), Chair of the IEEE CIS NNTC (2008-2010) and chair and member of many other IEEE Committees among which the IEEE Rosenblatt award (2011-2013), the IEEE CIS Research grant sub-committee (2011), the CIS awards Committee (2009-2010) and the CIS Subcommittee for Outstanding Early Career Award (2011). In 2011 he has been awarded Knight of the Order of Merit of the Italian Republic. Among many other conferences, he has been conference chair of IEEE International Joint Conference on Neural Networks, IJCNN12, Brisbane, and will be program chair of IEEE IJCNN14, Beijing. Current research activity addresses adaptation and learning in non-stationary and evolving environments and Intelligent Embedded Systems. He holds 5 patents and has published about 200 papers in international journals and conferences.

ICICIP/BICS 2013 Technical Program

June 9, 2013 (Sunday)

12:00 – 20:00 Registration (Outside Conference room 305, 3rd floor, 北京国际会议中心三楼 305 会议室门口)
18:00 – 20:00 Welcome Reception (Lijiang Hall, 2nd floor, 北辰五洲大酒店二楼荔江厅)

June 10, 2013 (Monday)

Period / Hall	Conference room 305, 3rd floor		
08:00 – 08:30	Opening Ceremony		
08:30 – 09:30	Plenary Lecture I Speaker: Frank Lewis Chair: Huaguang Zhang		
09:30 – 10:00 Coffee Break			
10:00 – 11:00	Plenary Lecture II Speaker: Dan Schonfeld Chair: Derong Liu		
11:00 – 12:00	Plenary Lecture III Speaker: Cesare Alippi Chair: Dongbin Zhao		
12:00 – 13:30 Lunch			
Period / Hall	Conference room 305A, 3rd floor	Conference room 305B, 3rd floor	Conference room 305C, 3rd floor
13:30 – 15:00	Oral session MA11 Intelligent control theory and applications I (ICICIP)	Oral session MA12 Industrial automation, process control, and power systems I (ICICIP)	Oral session MA13 Intelligent vehicle, robots, and other applications I (ICICIP)
15:00 – 15:30 Coffee Break			
15:30 – 17:00	Oral session MA21 Intelligent control theory and applications II (ICICIP)	Oral session MA22 Industrial automation, process control, and power systems II (ICICIP)	Oral session MA23 Intelligent vehicle, robots, and other applications II (ICICIP)

* The conference does not provide dinner on June 10, 2013. Participants are suggested to use this time to get to know each other.

June 11, 2013 (Tuesday)

Period / Hall	Conference room 305A, 3rd floor	Conference room 305B, 3rd floor	Conference room 305C, 3rd floor	Outside Conference room 305, 3rd floor
08:30 – 10:00	Oral session TM11	Oral session TM12	Oral session TM13	Poster session PM1
	Image processing, computer vision, and pattern recognition I (ICICIP)	Adaptive filtering, signal processing, and bioimaging I (ICICIP)	Other applications of information processing I (ICICIP)	Information processing I (ICICIP)
10:00 – 10:30 Coffee Break				
10:30 – 12:00	Oral session TM21	Oral session TM22	Oral session TM23	Poster session PM2
	Image processing, computer vision, and pattern recognition II (ICICIP)	Adaptive filtering, signal processing, and bioimaging II (ICICIP)	Other applications of information processing II (ICICIP)	Information processing II (ICICIP)
12:00 – 13:30 Lunch				
13:30 – 15:00	Oral session TA11	Oral session TA12	Oral session TA13	Poster session PA1
	Neural network control, fuzzy control, and learning system (ICICIP)	Biologically inspired systems (BICS)	Neural computation I (BICS)	Intelligent control (ICICIP)
15:00 – 15:30 Coffee Break				
15:30 – 17:00	Oral session TA21	Oral session TA22	Oral session TA23	Poster session PA2
	Sensor networks, network intelligence, and multimedia communications (ICICIP)	Cognitive neuroscience and models of consciousness (BICS)	Neural computation II (BICS)	Brain inspired cognitive systems (BICS)
18:00 – 20:00 Banquet (Lijiang Hall, 2nd floor, 北辰五洲大酒店二楼荔江厅)				

Oral sessions

June 10, 2013 (Monday)

Oral session MA11: Intelligent control theory and applications I (ICICIP)		
Chairs: Qihe Shan, Zhaohui Hu		
13:30 – 15:00, Conference room 305A, 3rd floor		
96	New Delay-dependent Stability Criteria for Linear Systems with Multiple Time-Varying Delays	Qihe Shan, Huaguang Zhang, Feisheng Yang
118	Study on Message Scheduling of Time-triggered CAN with Improved Genetic Algorithm and Discretely Distributed Strategy	Jiangwen Wan, Jianxiang Huang, Renjian Feng, Gang Sun
121	Optimal Control based on temperature dynamic model of greenhouse crop germination period	Zhiying Yao, Zitian Xu, Shangfeng Du
147	Greenhouse air temperature predictive control using the Dynamic Matrix Control	Zitian Xu, Zhiying Yao, Lijun Chen, Shangfeng Du
161	Network Load Balancing Strategy Based on Supervised Reinforcement Learning with Shaping Rewards	Zhaohui Hu, Hao Chen
200	Maneuvering Frequency Adaptive Algorithm of Maneuvering Target Tracking	Liang Chen, Xin Gong, Huijing Shi, Junwei Yang
215	The Sliding Mode Control for Speed System of the Variable Displacement Motor at the Constant Pressure Network	Shuhua Zheng, Xiangzhou Wang, Ye Lu, Yu Wang
225	Quantum-behaved Particle Swarm Optimization Algorithm with Lévy Mutated Global Best Position	Yuming Peng, Yi Xiang, Yubin Zhong
Oral session MA12: Industrial automation, process control, and power systems I (ICICIP)		
Chairs: Ming Yang, Stefano Squartini		
13:30 – 15:00, Conference room 305B, 3rd floor		
13	Development of foot surface pressure distribution measurement system for the training of soccer players	Xuecan Fei, Peng Mo, Guozhong Liu
14	Crowd density estimation based on the normalized number of foreground pixels in infrared images	Guozhong Liu, Tianze Wang, Zheng Cao
52	Stability Analysis of Singular Networked Control System with Long Time Delay and Data Packet Dropout	Ming Yang, Huaguang Zhang
15	Research on vector control method of neutral-point-clamped (NPC) three-level inverter with bootstrap driver	Ping Li, Qingxiao Zhang
51	A data-driven method of product quality monitoring for industrial furnace tube centrifugal casting process	Xiao Li, Ning Gao, Jintao Deng, Xiangwan Tao, Jinhong Zhang, Lifeng Ma, Wei Sun
139	Optimization Algorithms for Home Energy Resource Scheduling in presence of data uncertainty	Stefano Squartini, Matteo Boaro, Francesco De Angelis, Danilo Fuselli, Francesco Piazza
252	Research on PLCC Network and Routing Optimization for Advanced Metering Infrastructure in Intelligent Microgrid System	Guoqing Weng, Wenwei Zhou, Jun Qi

346	Design of a New Predictive Functional Control Algorithm Based on Linear Difference Equation Model	Zhiyun Zou, Dandan Zhao, Yue Huang, Yusong Pan, Yuqing Guo, Meng Yu
Oral session MA13: Intelligent vehicle, robots, and other applications I (ICICIP)		
Chairs: Lu Chen, Yuanchun Li		
13:30 – 15:00, Conference room 305C, 3rd floor		
31	Methodology for remanufacturing of industrial robotic manipulators using open control architecture	Marcelo H. Bomfim, Roberto A. Gontijo, Alexandre Q. Bracarense, Eduardo J. Lima II
73	Forecast of Power Generation for Grid-Connected Photovoltaic System Based on Grey Theory and Verification Model	Yingzi Li, Zefeng Wang, Jincang Niu
76	Analysis of VANET Security Based on Routing Protocol Information	Lu Chen, Hongbo Tang, Junfei Wang
98	Implementation of Face Cartoon Maker System Based on Android	Kairong Wang
111	Sliding Mode Control Using Switching Gain for a Vehicle Flexible Manipulator	Yang Li, Meng Wang, Yuanchun Li
137	The Motion Decomposition of Power Descent Section of Soft Landing on Small Bodies Based on Sliding Mode and PD Control Algorithm	Lingli Gan, Yuanchun Li
150	A Fundamental Analysis-based Method for Stock Market Forecasting	Yuh-Jen Chen, Yuh-Min Chen
154	Multi Agent With Multi Behavior Based on Particle Swarm Optimization (PSO) for Crowd Movement in Fire Evacuation	Hartarto Junaedi, Mochamad Hariadi, I Ketut Eddy Purnama
Oral session MA21: Intelligent control theory and applications II (ICICIP)		
Chairs: Haibo Zhao, Zhen Zhang		
15:30 – 17:00, Conference room 305A, 3rd floor		
226	Robust Strategies for Differential Games under Uncertain Dynamics and the Relation to Robust H^∞ Control	Xianwei Zeng, Ye Tang, Youzhi Ding, Guoqing Wang, Qingzheng Xiao
242	Security Control System Research on a High-altitude Hot Washing Device	Shan He, Sijie Xiao, Jinbei Zheng, Guangming Li, Jingfei Lai, Dengguo Wu, Zhensheng Liu
345	Backstepping Adaptive Control of Dual-motor Driving Servo System with Backlash Nonlinearity	Haibo Zhao
385	Research of UAV's Multiple Routes Planning based on Multi-Agent Particle Swarm Optimization	Xuzhi Chen, Wei He, Zhe Wu
398	Cooperative Multiagent Reinforcement Learning Using Factor Graphs	Zhen Zhang, Dongbin Zhao
399	Context-Aware Multi-Agent Model of MicroGrid Optimization Using Fuzzy Preferences Evolutionary Algorithm	Hongbin Sun, Chunjun Zhou

403	Indirect Adaptive Control of Nonlinear System via Dynamic Multilayer Neural Networks with Multi-Time Scales	Zhi-Jun Fu, Li Liu, Wen-Fang Xie
409	Multi-step evolution strategy based DNA generic algorithm for parameter estimation	Duan Zhang, Yanling Xia, Xiongxiang He, Sheng Li
Oral session MA22: Industrial automation, process control, and power systems II (ICICIP)		
Chairs: Yanan Gao, Jianning Hua		
15:30 – 17:00, Conference room 305B, 3rd floor		
347	A Review of Control Strategies for DC Micro-grid	Zhihui Jian, Zhengyou He, Junbo Jia, Yuhong Xie
370	Design and Implementation of A Solid-state Flight Data Recorder Using Multichannel Technique	Guojie Qin, Guoman Liu, Hui Feng, Butugeqi
372	Formal Analysis of A Fault Tolerant GNC System Architecture	Songtao Fan, Yanan Gao, Yue Lin, Lei Wan
375	An IoT-based Appliance Control System for Smart Homes	Ming Wang, Guiqing Zhang, Chenghui Zhang, Jianbin Zhang, Chengdong Li
376	Research on Regulation Performance Evaluation of Automatic Generation Control in Power Plants and Its Application	Chen Chen, Ping-kang Li, Wu-bin Wen
388	Force Feedback Assisted Balancing of Inverted Pendulum under Manual Control	Jianning Hua, Yujie Cui, Pu Shi, Yanhua Yang, Hongyi Li
408	A Hybrid Method for Online Rotor Parameters Estimation	Huiyuan Li, Yixin Su, Min Hong, Fei Long
Oral session MA23: Intelligent vehicle, robots, and other applications II (ICICIP)		
Chairs: Bai Li, Jianqiang Yi		
15:30 – 17:00, Conference room 305C, 3rd floor		
195	Design of distributed energy system based on artificial neural network approach	Yingya Zhou, Zhe Zhou, Dongxiang Jiang
228	IDVR-PFM: A Connectivity-oriented VANET Routing Protocol in Urban Scenarios	Huijing Shi, Chong Ma, Liang Chen, Zhizhong Ding
319	Unmanned Combat Aerial Vehicles Path Planning Using a Novel Probability Density Model Based on Artificial Bee Colony Algorithm	Bai Li, Ligang Gong, Chunhui Zhao
348	Optimization for Four-sample Rotation Vector Attitude Estimation Algorithm	Shuyuan Yang, Baokui Li, Qingbo Geng
349	Controllers' design and verification based on the method of undetermined coefficients for satellite formation	Zhaohui Dang
357	Experimental Research on Laser Material Processing Used in Quartz MEMS Gyroscope	Ke Zhao, Qianqian Wang, Lihui Feng, Benguo Wang, Fang Cui
365	Wave Following Control Based on Robust Adaptive Method and ADRC for a Flying Boat	Huan Du, Guoliang Fan, Yinggu Zhu, Jianqiang Yi
369	Alternating Direction Algorithm for Optimal H2 Model Reduction	Taishan Zeng

June 11, 2013 (Tuesday)

Oral session TM11: Image processing, computer vision, and pattern recognition I (ICICIP)		
Chairs: Songyun Xie, Hongmei Wang		
08:30 – 10:00, Conference room 305A, 3rd floor		
87	Optimized H.264 Motion Estimation Algorithm Based on UMHexagonS	Chen Liu, Jian-Zhong Cao, Li-Nao Tang, Ji-Jiang Huang, Hui-Nan Guo, Xiao-Kun Dong
104	3D Hand Gesture Recognition Based On Polar Rotation Feature And Linear Discriminant Analysis	Yiding Wang, Lin Zhang
112	A Flame Detection Method Based on the Amount of Movement of the Flame Edge	Hongke Xu, Yanyan Qin, Yong Pan, Hao Chen
131	Fast Detecting Moving Objects in Moving Background using ORB Feature Matching	Songyun Xie, Wanpeng Zhang, Ying Wang, Khalid Zakim
133	Running State Recognition in Videos via Frames' Frequency and Positions of Two Feet	Jinyan Yang, Guanlei Xu, Yu Li
136	A Scheme of Triangular-hiding Based on Two-dimensional Chaotic Maps	Hongmei Wang, Limin Qu
145	A SVM-based Method for the Estimation of Fingerprint and Palmprint Orientation	Yanping Wu, Tong Zhao, Shuguang Wang, Yong A, Tiande Guo
171	Adaptive Kernel-bandwidth Object Tracking Based on Mean-shift Algorithm	Le Zhang, Danhong Zhang, Yixin Su, Fei Long
Oral session TM12: Adaptive filtering, signal processing, and bioimaging I (ICICIP)		
Chairs: Yunong Zhang, Xiaokun Dong		
08:30 – 10:00, Conference room 305B, 3rd floor		
41	Intelligent fault diagnosis of train bearings acoustic signals with Doppler shift based on the EMD and BPN	Ao Zhang, Fei Hu, Fang Liu, Changqing Shen, Fanrang Kong
68	Steady-state Tracking Error Analysis of GPS Receiver Frequency Locked Loop	Dangwei Wang, Lihua Wang, Fangyao Lv
72	Z-Type and G-Type ZISR (Zhang Inverse Square Root) Solving	Yunong Zhang, Zhen Li, Yunjia Xie, Hongzhou Tan, Pei Chen
99	A Tri-Stable Stochastic Resonance Model and its Applying in Detection of Weak Signal	Haibin Zhang, Fanrang Kong, Siliang Lu, Qingbo He
101	Object Tracking based on integrating the Genetic algorithm with Complex method	Xiaokun Dong, Jianzhong Cao, Hongtao Yang, Zhi Yu, Huinan Guo, Chen Liu
106	A Novel Feature Extraction Method for Motor Imagery Based on Common Spatial Patterns with Autoregressive Parameters	Mengqi Feng, Xiangzhou Wang, Shuhua Zheng
108	Comparative Study of DMS and Conventional Stereo Based on Subjective Evaluation Experiment	Wei Zhao, Yin Wu, Cong Jin, Qin Zhang, Hui Wang
110	Model Parameter Adaptive Approach of Extended Object Tracking Using Random Matrix	Borui Li, Tianming Bai, Yongqiang Bai, Chundi Mu

Oral session TM13: Other applications of information processing I (ICICIP)		
Chairs: Bo Yuan, Stefano Squartini		
08:30 – 10:00, Conference room 305C, 3rd floor		
193	Markov Reconstruction of Financial Time Series	Kecheng Tang, Bo Yuan
229	A Novel Chaotic System and Design of Pseudorandom Number Generator	Lequan Min, Lijiao Zhang, Yuqun Zhang
246	Improved Extended Kalman Fusion Method For Upper Limb Motion Estimation With Inertial Sensors	Sheng Zhang, Kang Xiao, Qian Zhang, Hao Zhang, Yi Liu
315	Wireless M-Bus Sensor Nodes in Smart Water Grids: the Energy Issue	Stefano Squartini, Leonardo Gabrielli, Matteo Mencarelli, Mirco Pizzichini, Susanna Spinsante, Francesco Piazza
364	Research on Data and Workflow Security of Electronic Military Systems	Wei Wang, Haining Luo, Huiyu Deng
390	3D Hybrid Mesh Generation for Complex Geometry	Yamin Wang, Yafei Zhang
391	Implementation of Rössler Chaotic System through Inherent Exponential Nonlinearity of a Diode with Two-Channel Chaotic Synchronization Applications	Sura Larptawee, Wimol San-Um
Oral session TM21: Image processing, computer vision, and pattern recognition II (ICICIP)		
Chairs: Zehua Gao, Zhicheng Wang		
10:30 – 12:00, Conference room 305A, 3rd floor		
206	Nonsubsampled Shearlet-Based Image Denoising Using Multiscale Products	Junliang Liu, Lin Lei, Shilin Zhou
207	A New Texture Feature Extraction Method for Image Retrieval	Zong Li, Ying Liu, Daxiang Li
208	Real Time Handwritten Digit Recognition on Mobile Devices	Qi Song, Zehua Gao
216	Fingerprint Subclassification Using Rotation-invariant Features	Yong A, Tiande Guo, Yanping Wu, Guangqi Shao
220	Implementation and Performance of Image Filtering on GPU	Xi Chen, Yuehong Qiu, Hongwei Yi
324	Optimal Binary Thresholding Segmentation for Medical Images in Rough Fuzzy Set Framework	Jinhong Yang, Tingquan Deng
363	Salient Region Detection Based on Color-Complexity and Color-Spatial Features	Zhicheng Wang, Lina Li, Yufei Chen, Weidong Zhao
Oral session TM22: Adaptive filtering, signal processing, and bioimaging II (ICICIP)		
Chairs: Yunong Zhang, Min Han		
10:30 – 12:00, Conference room 305B, 3rd floor		
123	Different Zhang Functions Leading to Different ZD Models Illustrated via Time-Varying Square Roots Finding	Yunong Zhang, Yonghua Yin, Dongsheng Guo, Weibing Li, Zhende Ke
143	A Fast Trend Extraction for the Analysis of Temperature Data	Da Yang, Xiaotong Wang, Guanlei Xu, Shipeng Su

177	A New Method to Estimate and Calibrate Channel Amplitude and Phase Errors of Phased Array Radar in Jamming Environment	Ziqiang Meng, Yachao Li, Zheng Bao
218	Prediction of Multivariate Time Series with Sparse Gaussian Process Echo State Network	Min Han, Weijie Ren, Meiling Xu
344	Adaptive Phased-Array Tracking in the Standoff Jammer Using H Infinity Filter	Jing Hou, Zhanrong Jing, Tian Gao, Yan Yang
358	The Study of Archimedean Spiral Antenna for Partial Discharge Measurement	Qingyan Wu, Guoqiang Liu, Zhengwu Xia, Liang Lu
379	Novel adaptive VSS-NLMS Algorithm for System Identification	Haiquan Zhao, Yi Yu
Oral session TM23: Other applications of information processing II (ICICIP)		
Chairs: Cesare Alippi, Lifeng Xiao		
10:30 – 12:00, Conference room 305C, 3rd floor		
405	The Performance of Differential Evolution Algorithm for Training CSFNN Using a Pattern Recognition Application	Ali Rıza Yilmaz, Burcu Erkmen, Oguzhan Yavuz
412	An Ensemble Approach to Estimate the Fault-Time Instant	Cesare Alippi, Giacomo Boracchi, Vicenc Puig, Manuel Roveri
414	Quantitative recognition of rolling element bearing fault through an intelligent model based on support vector regression	Changqing Shen, Fei Hu, Fang Liu, Ao Zhang, Fanrang Kong
415	Study of micro-vessel recognizing using sequence image spatiotemporal relationship	Zhongming Luo, Zhuofu Liu, Shaojie Zhou
416	Design and Realization of Strain Measurement System Based on FPGA and ARM	Lifeng Xiao, Xinguang Chen, Baihong Lin
427	Research on Performance of a T/F-Domain MC-SS System over AWGN Channels	Jinbao Wang, Wenge Yang, Xiaohuan Dong, Jiaqing Zhou
432	Robust Visual Tracking via Adaptive Forest	Song Cao, Wenfang Xue
Oral session TA11: Neural network control, fuzzy control, and learning system (ICICIP)		
Chairs: Geyang Xiao, Chengdong Li		
13:30 – 15:00, Conference room 305A, 3rd floor		
36	The Adaptive PID Controller Design for Motor Control System with Backlash	Jinlong Dong, Bo Mo
71	Stability Analysis of Nonlinear Singular System with Time-Varying Delay based on Neural Networks	Geyang Xiao, Huaguang Zhang
83	A Criteria of Passivity for Neural Networks with Discontinuous Activations	Jian Xiao, Zhigang Zeng
153	Research on State Differential Artificial Neural Network	Ziyin Wang, Mandan Liu, Yicheng Cheng
244	Direct Adaptive Type-2 Fuzzy Logic Control of a Generic Hypersonic Flight Vehicle	Fang Yang, Ruyi Yuan, Jianqiang Yi, Guoliang Fan, Xiangmin Tan
320	Modeling of Thermal Comfort Words Using Interval Type-2 Fuzzy Sets	Chengdong Li, Jianqiang Yi, Guiqing Zhang, Ming Wang

366	Discrete-Time LQR Optimal Tracking Control Problems Using Approximate Dynamic Programming Algorithm with Disturbance	Qingqing Xie, Bin Luo, Fuxiao Tan
377	Near-optimal control for continuous-time nonlinear systems with control constraints using on-line ADP	Chunbin Qin, Huaguang Zhang, Yanhong Luo
Oral session TA12: Biologically inspired systems (BICS)		
Chairs: Zengqiang Chen, Erfu Yang		
13:30 – 15:00, Conference room 305B, 3rd floor		
BICS-10	An Improved Free Search Approach for Energy Optimization in Wireless Sensor Networks	Zengqiang Chen, Yuefei Wei, Qinglin Sun
BICS-17	Research on Electromagnetic Coupling Artificial Neural Network with Spatial Topology	Ziyin Wang, Mandan Liu, Xiang Ren, Yicheng Cheng
BICS-24	A New Bio-inspired Unsupervised Learning Method	Kaijian Weng, Guoyuang Liang, Xinyu Wu
BICS-35	A Memory Stimulating Brain-Computer Interface.	Abhinandan Kelgere Ramesh
BICS-44	A Basal Ganglia Inspired Soft Switching Approach to the Motion Control of A Car-like Autonomous Vehicle	Erfu Yang, Amir Hussain, Kevin Gurney
BICS-48	Cryptanalysis of Truong et al.'s Fingerprint Biometric Remote Authentication Scheme Using Mobile Device	Muhammad Khurram Khan, Saru Kumari, Mridul K. Gupta, Fahad T. Bin Muhaya
BICS-53	A Novel Clinical Expert System for Chest Pain Risk Assessment	Kamran Farooq, Amir Hussain, Hicham Atassi, Stephen Leslie, Chris Eckl, Calum MacRae, Warner Slack
BICS-55	A Review of Artificial Intelligence and Biologically Inspired Computational Approaches to Solving Issues in Narrative Financial Disclosure	Saliha Minhas, Soujanya Poria, Amir Hussain, Khalid Hussainey
Oral session TA13: Neural computation I (BICS)		
Chairs: Rubin Wang, David Powers		
13:30 – 15:00, Conference room 305C, 3rd floor		
BICS-8	Silhouette-based Gait Recognition via Deterministic Learning	Wei Zeng, Cong Wang
BICS-16	Hybrid Real-coded Genetic Algorithm and MIMO CMAC NN Classifier for Solving Medical Data Classification Problems	Jui-Yu Wu
BICS-19	Time-dependent Multivariate Multiscale Entropy Based Analysis on Brain Consciousness Diagnosis	Li Ni, Jianting Cao, Rubin Wang
BICS-22	EEG Signal Classification using the Event-related Coherence and Genetic Algorithm	Chunying Fang, Haifeng Li, Lin Ma
BICS-25	Research on Resource Scheduling of Cloud Based on Improved Particle Swarm Optimization Algorithm	Yan Wang, Jinkuan Wang, Cuirong Wang, Xin Song
BICS-26	An Associative Memory based on the Immune Networks: Perspectives on Internal Image with Antibody Dynamics	Chung-Ming Ou, Chung-Jen Ou
BICS-28	A computationally and cognitively plausible model of supervised and unsupervised learning	David Powers

Oral session TA21: Sensor networks, network intelligence, and multimedia communications (ICICIP)		
Chairs: Guoli Wang, Zhiqin Liu		
15:30 – 17:00, Conference room 305A, 3rd floor		
50	Design and implementation of production management information system for an enterprise specialized in centrifugal casting	Jintao Deng, Ning Gao, Xiao Li, Xiangwan Tao, Jinhua Zhang, Yahong Zhao, Wei Sun
53	A Modified Time-Domain Channel Estimation Method for OFDM Systems In Impulsive Noise Environment	Chaoyong Xu, Xiangning Chen, Shuang Yu
67	An Exponential-Rayleigh Signal Strength Model for Device-Free Localization and Tracking with Wireless Networks	Yao Guo, Kaide Huang, Nanyong Jiang, Xuemei Guo, Guoli Wang
125	Behavioral Analysis and Modeling of Sensor Network System in Ambient Intelligence Environment	Xiaolong Zeng, Zhangqin Huang, Sheng Qian, Yiyuan Ren, Chunhua Xiao, Shuo Wang
210	System Performance Analysis of Low-Altitude Relay Networks	Qingmin Meng, Mingkui Lu, Benli Sun, Lei Wang, Wenjing Yue, Feng Tian
214	Semantic annotation method of IOT middleware	Ming Zhou, Hong Fan, Yan Ma
230	Real-time Barrier Lakes Monitoring and Warning System Based on Wireless Sensor Network	Zhiqin Liu, Jun Huang, Qingfeng Wang, Yaobin Wang, Jie Fu
234	An improved Single-Pass clustering algorithm Internet-oriented network topic detection	Xiaolin Yi, Xiao Zhao, Nan Ke, Fengchao Zhao
Oral session TA22: Cognitive neuroscience and models of consciousness (BICS)		
Chairs: Yi-Xiang Jin, Lequan Min		
15:30 – 17:00, Conference room 305B, 3rd floor		
BICS-27	Effects of Emotional Content on Working Memory: Behavioral and Electrophysiological Evidence	Yi-Xiang Jin, Xue-Bing Li, Yue-Jia Luo
BICS-41	Prospective emotion regulation in smokers as reflected in self-reports, facial electromyographic and electroencephalogram activity	Lingdan Wu, Markus Winkler, Marta Andreatta, Paul Pauli
BICS-45	Hierarchically Arranged Mutualism of Neural Circuit Ecosystems	Derek Harter
BICS-13	The global-local mental rotation in divided attention paradigm	Yong Niu, Xiang Qiu
BICS-36	Differences in allocations of attention to faces during affective learning of Chinese people	Junchen Shang, Xiaolan Fu
BICS-46	What You Talk About is What You Look At?	Shulan Lu, Lonnie Wakefield
BICS-50	Study on the Statistical Test for String Pseudorandom Number Generators	Lequan Min, Longjie Hao, Lijiao Zhang
BICS-57	Subject-Orientation as a Method to Specify the Cooperation of Active Entities in the uCepCortex Project	Albert Fleischmann, Egon Börger, Harald Lerchner

Oral session TA23: Neural computation II (BICS)		
Chairs: Ruizhuo Song, Yuhong Xie		
15:30 – 17:00, Conference room 305C, 3rd floor		
BICS-34	Ontology-based Collaborative Filtering Recommendation Algorithm	Zijian Zhang, Lin Gong, Jian Xie
BICS-38	Optimal tracking control for a class of nonlinear time-delay systems with actuator saturation	Ruizhuo Song, Wendong Xiao, Qinglai Wei
BICS-40	Improved efficiency of Road Sign Detection and Recognition by employing Kalman filter	Usman Zakir, Amir Hussain, Liaqat Ali, Bin Luo
BICS-43	Conceptual Clustering of Documents for Automatic Ontology Generation	Reshmy Krishnan, Amir Hussain, Sherimon P.C
BICS-60	A Review of DC Micro-grid Protection	Yuhong Xie, Jia Ning, Yanquan Huang, Junbo Jia, Zhihui Jian
BICS-63	Fault Detection Filter Design for Certain Networked Control System	Yuqiang Chen, Wei Lu, Zhiyan Xu
BICS-66	On a New-Member-Joining-Protocol Design Using Bivariate Polynomials Based DKG Algorithms	Qian Wu, Yanyan Yang

Poster sessions

June 11, 2013 (Tuesday)

Poster session PM1: Information processing I (ICICIP)		
Chairs: Ding Wang, Hongliang Li		
08:30 – 10:00, Outside Conference room 305, 3rd floor		
21	Vision Measurement Method with Single Camera and 3-Axis Accelerometer Sensor	Shidu Dong
25	The Improved DOA Estimation Algorithm for Cross Array MIMO Radar	Zijing Zhong, Yu Shi, Hong Jiang, Yang Wang
27	A Selective Virtual Anchor Node Positioning Scheme for Wireless Sensor Networks	Lanhui Liu, Zhilong Shan
35	Comparison of Several Lane Marking Line Recognition Methods	Haitao Ding, Bowei Zou, Konghui Guo, Cong Chen
38	Pairing Based Elliptic Curve Encryption Scheme with Hybrid Problems in Smart House	Rui Guo, Qiaoyan Wen, Zhengping Jin, Hua Zhang
65	On the Improvement of Sea Ice Classification by Fusing C- and L-band SIR-C Polarimetric Quantities	Qinchuan Xie, Wenhui Lang, Xi Zhang, Xuezhi Yang
77	Deriving reflectance and shading components from a Single Image	Caixia Fan, Hong Zhu, Guangfeng Lin, Lei Cao
78	Fast Compression Algorithm of SAR Image Based on Compressed Sensing	Lina Guo, Xianbin Wen, Jinjin Yu
80	On the vertex-distinguishing proper total colorings of several classes of complete p-partite graphs with equipotent parts	Fang Yang, Xiang-en Chen, Chunyan Ma, Bing Yao
86	Robust Principal Component Analysis for Sparse Face Recognition	Ling Wang, Hong Cheng
95	A Method for Automatic Generation of Track Layout Graph Based on Visio Secondary Development	Yong Zhang, Yaowei Su
103	Public key cryptosystem and signature schemes over the ring of eisenstein integers	Xuedong Dong, Liqiang Hou, Yan Zhang
105	A Spatial Spectrum Estimation Algorithm based on Adaptive Beamforming Nulling	Yong J. Huang, Yu W. Wang, Fan J. Meng, Guo L. Wang
107	Joint Estimation of Angle and Doppler Frequency in MIMO Radar	Xiaoli Liu
128	The Research of the Data Security for Cloud Disk Based on the Hadoop Framework	Jing Huang, Renfa Li, Zhuo Tang
129	A new ICA Method based on Chaos Artificial Fish Swarm Algorithm	Lu Huang, Hong Wang
142	An Improved Dynamic-octree-based Judging Method of Real-time Node in Moving Geometry	Hongbo Li, Yuxin Wu, Yu Wu
158	The Driver Fatigue Monitoring System Based on Face Recognition Technology	Xiao-qing Luo, Rong Hu, Tian-e Fan

Poster session PM2: Information processing II (ICICIP)		
Chairs: Ding Wang, Hongliang Li		
10:30 – 12:00, Outside Conference room 305, 3rd floor		
165	An Implementation of Distance Measuring for Dynamic Scene	Sai Wei, Zhengyi Liu, Chuanwen Hu
178	Robust Visual Tracking with a Novel Online Semi-Supervised Multiple Instance Boosting Algorithm	Si Chen, Shaozi Li
196	Bayesian Detection in Partially Homogeneous Environment with Orthogonal Rejection	Long Cai, Yajun She, Honghua Wang, Tao Luo
197	An Energy Efficient Sampling Method through joint Linear Regression and Compressive Sensing	Bo Zhang, Yulin Liu, Jiwei He, Zhaowu Zou
198	LIDAR Based Terrain Slope Detection on Fractal based Lunar Surface Modeling	Xiaonan Jiang, Xuechen Sun, Chengshan Han, Xiangzhi Li, Yunlong Zhao
201	An Enhanced Histogram of Oriented Gradient for Pedestrian Detection	Daimeng Wei, Yong Zhao, Ruzhong Cheng, Guoliang Li
204	Exploratory Study on Memory Analysis of Windows CE Device	Shumian Yang, Lianhai Wang, Shuhui Zhang
221	A Novel Loop Adaptive Hardware Design for Coarse-Grained Reconfigurable Array	Wei Ge, Wen Wen, Zhi Qi
222	Speech Emotion Recognition using Combination of Features	Qingli Zhang, Ning An, Kunxia Wang, Fuji Ren, Lian Li
232	Image Quality Assessment Using Histograms of Oriented Gradients	Yazhou Yang, Dan Tu, Guangquan Cheng
236	Implementation of BDS/DR System Based on CYGNAL Kernel	Nan Yao, Zhonghua Liu, Feng Qian
237	Wavelet-based Denoising: A Brief Review	Guangyi Chen, Wenfang Xie, Yongjia Zhao
248	Pitch Detection Using EMD-Based AMDF	Yuan Zong, Yumin Zeng, Mengchao Li, Rui Zheng
250	Dual tree complex wavelet transform and Bayesian estimation based denoising of Poission-corrupted X-ray Images	Lingyan Du, Yuqiao Wen, Jiang Ma
251	The implementation of FIR low-pass filter based on FPGA and DA	Guo-Wei Cui, Feng-Ying Wang
321	Research of GrabCut Algorithm for Single Camera Video Synopsis	Lili Hao, Jianrong Cao, Chengdong Li
326	A New Traffic Light Detection and Recognition Algorithm for Electronic Travel Aid	Jie Ying, Xiaomin Chen, Pengfei Gao, Zhonglong Xiong
400	A Task Multi-Resolution Modeling Method in the Aggregated CGF	Fei Jie, Sanyuan Zhao, Zimu Li, Ke An

Poster session PA1: Intelligent control (ICICIP)		
Chairs: Qinglai Wei, Xiong Yang		
13:30 – 15:00, Outside Conference room 305, 3rd floor		
18	Research on Oil Rig Automatic Feed Drilling System Based On MOBP Neural Network	Li Zhang, Jian Liu, Lei Wei
20	A heuristic algorithm for dispatching policy based on Vague Set's evaluation and optimization	Hongtao Zhao, Tao Wang, Qi Zhang
28	A new Scheduling Approach for Mix-Criticality Real-Time System	Shujuan Huang, Yi'an Zhu, Junhua Duan
54	Optimization Design of Truss Structure Based on synchronous Cellular Genetic Algorithm	Yi Zhang, Fangjun Hu, Zheng Liu, Teng Zhan
56	Tuning of Auto Disturbance Rejection Controller Based on Multi-objective Genetic Algorithm	Zhengmao Tang, De Xie
81	Dynamic Model and Fuzzy Adaptive Control of a Chinese Medicine Sugar Precipitation Process	Hongjun Duan, Qingwei Li
82	Improved Reversely A star Path Search Algorithm based on the Comparison in Valuation of Shared Neighbor Nodes	Weiteng Zhou, Baoming Han, Dewei Li, Bin Zheng
114	Characteristic Analysis and Suppression Method Study of Seismic Scattered Waves	Junhua Zhang, Ming Zhang, Zhen Liu, Wenbo Zhu, Huaibang Zhang
122	An Expert System Approach for Generating Test Sequence for CTCS-3 Train Control System	Yong Zhang, Shuo Sha, Shu Wang
126	Application of optimization model based on neural network in Softening Slope Stability by Strong Rainfall Infiltration	Zhigang Yang, Dong Zhang, Biao Deng, Weimin Chen
141	A Study of CMAC Neural Network Generalized Predictive Control for Generating Unit	Tao Sun, Hujun Ling, Licong Yuan
155	A Robust Lane Detection Method for Autonomous Car-like Robot	Tao Sun, Shuming Tang, Jinqiao Wang, Weibin Zhang
157	Self-adaptive Prediction and Compensation Model for High-Accuracy MEMS Gyro's Startup Drift	Nan Yao, Zhonghua Liu, Feng Qian
159	Analysis and Design of Internal Compensation for Peak-Current-Mode Converter	Suping Huang, Quanyuan Feng
163	Adaptive Optimal Control for Nonlinear Systems with Control Constraints Using GDHP Technique	Dehua Zhang, Derong Liu
170	A semi-explicit multi-symplectic Fourier pseudospectral scheme for the coupled nonlinear Schrödinger equation	Hao Fu, Xu Qian, Songhe Song
174	A Design of Intelligent Transfusion Monitoring System Based on the DSP and Fuzzy Control Algorithm	Yongming Qiao, Xiangfu Wu
202	On the Control Algorithm of Nonlinear Systems with Backlash	Guochun Sun, Ce Ding
355	Intelligent Control for Air-Fuel Ratio of Compressed Natural Gas Engine	Pengwei Li, Jing Wang, Wenyuan Cai
371	Exponential Stability of Stochastic MJSNNs with Partly Unknown Transition Probabilities	Chunge Lu, Linshan Wang

387	A New Higher Sliding Mode Control Scheme for Underactuated system	Zhuang Lin, Benjie Dong, Zhiqun Guo
392	A Universal Simulation Control Service based on HLA	Fei Jie, Yufeng Chen, Fengxia Li, Feifei Li
417	A Novel Control System Design Method for Missile with Lateral Jet and Aerodynamic Surfaces	Zhen Shi, Wenqiao Ma, Yufang Zhang
422	Balance Control of Two-wheeled Self-balancing Robot Based on Linear Quadratic Regulator and Neural Network	Chenxi Sun, Tao Lu, Kui Yuan
Poster session PA2: Brain inspired cognitive systems (BICS)		
Chairs: Qinglai Wei, Xiong Yang		
15:30 – 17:00, Outside Conference room 305, 3rd floor		
BICS-11	How Do Emotional Cues Modulate Readers' Perception of Emotional Arousal during Text Comprehension: An ERP Study	Jinlu Zhang, Xiaohong Yang, Yufang Yang
BICS-14	An ERP Study of Semantic Anomalies in Second Language Processing	Jia Miao
BICS-18	General Change Detection Explains the Early Emotion Effect in Implicit Speech Perception	Aishi Jiang, Jianfeng Yang, Yufang Yang
BICS-21	Cognitive Styles as Motivating Factors of Language Learners' Metaphorical Competence: a Case Study based on Riding's CSA	Peng Wang, Chunlei Hao
BICS-23	Research on Formation Control for Hybrid Multi-robot Based on Leader-Follower	Cuicui Zhang, Yong Zhang
BICS-32	Is ERP Old/New Effect related to Familiarity Memory Modulated by Emotion?	Pengyun Wang, Yue Wu, Jie Gao, Wenqi Yang, Baoxi Wang, Juan Li
BICS-33	Characteristics of Verbal Serial List Learning in Amnesic Mild Cognitive Impairment: A Profile Analysis of Learning Curve, Retention, Interference, and Serial Position Effect	Pengyun Wang, Juan Li
BICS-37	Magnetically tunable photonic crystal fibers Bragg grating	Yong Zhao, Yuyan Zhang, Yan Zhao
BICS-51	A Novel Adaptive Tropism Reward ADHDP Method with Robust Property	Jing Chen, Zongshuai Li
BICS-54	The Research of Thermal Power Unit Based on Improved neural network Generalized Predictive Control	Licong Yuan, Hujun Ling, Tao Sun
BICS-61	Multicast Routing Algorithm Based on Network Coding	Dongming Tang
BICS-62	An Intelligent Tutoring System Based on Speech Assessment for Spoken English Learning in China	Yingli Liang, Jun Xu
BICS-65	Trace Representation of Quasi-Negacyclic Codes	Xiuli Li, Chenghua Fu
BICS-67	Dynamic Model and Sliding Adaptive Control of a Chinese Medicine Sugar Precipitation Process	Qingwei Li, Hongjun Duan
BICS-68	Establishment of Tourism Geographic Information System to Promote Field Work in Tourism Management Major	Yan Liu