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# Part I ICBCS2011 Conference Schedule

## Friday, 22 April, 2011

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|------------|---------------------|--|
| 9:00-19:00 | <b>Registration</b> | International Academic Exchange Center of HUST |
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## Saturday Morning, 23 April, 2011

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| <b>Time</b> | <b>Activity</b>   | <b>Location</b>                                   |
|-------------|---|---|
| 9:00-9:15   | <b>Opening Ceremony</b>   |   |
| 9:15-9:50   | <b>Keynote Speech:</b> An Information Hiding Scheme Using Sudoku<br><b>Speaker:</b> Prof. IEEE and IET Fellows, Chin-Chen Chang,(Feng Chia University,Taiwan)   |   |
| 9:50-10:25  | <b>Keynote Speech:</b> Modeling and Optimization of Nonlinear Model Predictive Control Systems Based on Recurrent and Feedforward Neural Networks<br><b>Speaker:</b> Prof. IEEE Fellow, Jun Wang (The Chinese University of Hong Kong, Hong Kong) | Conference Room of the Building No. 8 (8号楼 学术报告厅) |
| 10:25-10:40 | <b>Coffee Break</b>   |   |
| 10:40-11:15 | <b>Keynote Speech:</b> Integrated Safety Mechanisms for the Distributed Computer Systems<br><b>Speaker:</b> Prof. Vadym Mukhin (National Technical University of Ukraine “KPI”, Ukraine)  |   |
| 11:15-11:50 | <b>Keynote Speech:</b> SYNERGY BETWEEN BIOLOGY AND MATHEMATICS: PAST, PRESENT, AND FUTURE<br><b>Speaker:</b> Prof. Matthew He (Nova Southeastern University, USA)   |   |

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## Saturday Noon, 23 April

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|-------------|----------------------|---|
| 12:00-13:30 | <b>Launch Buffet</b> | Lvyuan, Huazhong University of Science and Technology |
|-------------|----------------------|---|

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### Saturday Afternoon, 23 April

| <b>Time</b> | <b>Activity (Coffee Break 15:50-16:10)</b> | <b>Location</b>               |
|-------------|--|-------------------------------|
| 14:30-17:30 | Oral session                               | Room 212 of the Bulding No. 1 |

### Saturday Evening, 23 April

|             |                        |   |
|-------------|------------------------|---|
| 18:00-20:00 | <b>Welcome Banquet</b> | Lvyuan, Huazhong University of Science and Technology |
|-------------|------------------------|---|

### Sunday, 24 April

| <b>Time</b> | <b>Activity</b>       | <b>Location</b> |
|-------------|-----------------------|-----------------|
| 8:30-17:00  | One-day Tour in Wuhan | Wuhan           |

## Part II Keynote Speeches

### Keynote speech: An Information Hiding Scheme Using Sudoku

**Speaker:** Prof. IEEE and IET Fellows, Chin-Chen Chang (Feng Chia University, Taiwan)

**Time:** 9:15-9:50, April 23, 2011

**Location:** Conference Room of the Building No. 8



**Abstract-**Steganography is the science of secret message delivery using cover media. A digital image is a flexible medium used to carry a secret message because the slight modification of a cover image is hard to distinguish by human eyes. In this talk, I will introduce two methods: Zhang and Wang's method and Sudoku solutions. A selected Sudoku solution is used to guide cover pixels' modification in order to imply secret data. Because the number of possible Sudoku solutions is very large, the proposed method is more secure than Mielikainen's method and Zhang and Wang's method. From the experimental results, the visual quality of stego images produced by the Sudoku method is higher than 44 dB in average, which is slightly less than that of related works; however, the embedding capacity of the proposed method is 1.5 bit per pixel, which is greater than that of the related works.

### Biography

Professor C. C. Chang was born in Taichung, Taiwan. He obtained his Ph.D. degree in computer engineering from National Chiao Tung University. His first degree is Bachelor of Science in Applied Mathematics and master degree is Master of Science in Computer and Decision Sciences. Both were awarded in National Tsing Hua University. Dr. Chang served in National Chung Cheng University from 1989 to 2005. His current title is Chair Professor in Department of Information Engineering and Computer Science, Feng Chia University, from Feb. 2005. Prior to joining Feng Chia University, Professor Chang was an associate professor in Chiao Tung University, professor in National Chung Hsing University, chair professor in National Chung Cheng University. He had also been Visiting Researcher and Visiting Scientist to Tokyo University and Kyoto University, Japan. During his service in Chung Cheng, Professor Chang served as Chairman of the Institute of Computer Science and Information Engineering, Dean of College of Engineering, Provost and then Acting President of Chung Cheng University and Director of Advisory Office in Ministry of Education, Taiwan.

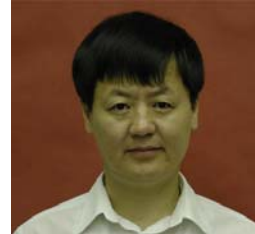
Professor Chang's specialties include, but not limited to, data engineering, database systems, and computer cryptography and information security. A researcher of acclaimed and distinguished services and contributions to his country and advancing human knowledge in the field of information science, Professor Chang has won many research awards and honorary positions by and in prestigious organizations both nationally and internationally. He is currently a Fellow of IEEE and a Fellow of IEE, UK. And since his early years of career development, he consecutively won Outstanding Youth Award of the R. O. C., Outstanding Talent in Information Sciences of the R. O. C., AceR Dragon Award of the Ten Most Outstanding Talents, Outstanding Scholar Award of the R. O. C., Outstanding Engineering Professor Award of the R. O. C., Chung-Shan Academic Publication Awards, Distinguished Research Awards of National Science Council of the R. O. C., Outstanding Scholarly Contribution Award of the International Institute for Advanced Studies in Systems Research and Cybernetics, Top Fifteen Scholars in Systems and Software Engineering of the Journal of Systems and Software, and so on. On numerous occasions, he was invited to serve as Visiting Professor, Chair Professor, Honorary Professor, Honorary Director, Honorary Chairman, Distinguished Alumnus, Distinguished Researcher, Research Fellow by universities and research institutes. He also published over 1000 papers in Information Sciences. In the meantime, he participates actively in international academic organizations and performs advisory work to government agencies and academic organizations.

# Keynote Speech: Modeling and Optimization of Nonlinear Model Predictive Control Systems Based on Recurrent and Feedforward Neural Networks

**Speaker:** Prof. IEEE Fellow, Jun Wang (The Chinese University of Hong Kong, Hong Kong)

**Time:** 9:50-10:25, April 23, 2011

**Location:** Conference Room of the Bulding No. 8



**Abstract**—In this talk, a model predictive control (MPC) scheme will be presented for unknown nonlinear dynamical systems based on recurrent neural networks (RNNs). Two RNNs (i.e., the echo state network and the simplified dual network) are adopted for system identification and dynamic optimization, respectively. Based on an echo state network, the original nonconvex optimization problem associated with nonlinear MPC is reformulated as a convex one by means of decomposition via Taylor expansion. An online supervised learning algorithm is developed for estimating the unknown residual term resulted from the decomposition. To save time, offline supervised learning is also carried out based on feedforward neural networks for the parameter estimation. The proposed neural network approach has many desirable properties such as global convergence and low complexity. Simulation results are provided to demonstrate the effectiveness and performance of the proposed approach.

## Biography

Jun Wang is a Professor and the Director of the Computational Intelligence Laboratory in the Department of Mechanical and Automation Engineering at the Chinese University of Hong Kong. Prior to this position, he held various academic positions at Dalian University of Technology, Case Western Reserve University, and University of North Dakota. He also held various short-term visiting positions at USAF Armstrong Laboratory (1995), RIKEN Brain Science Institute (2001), Universite Catholique de Louvain (2001), Chinese Academy of Sciences (2002), and Huazhong University of Science and Technology (2006–2007). He has held a Changjiang Chair Professorship in computer science and engineering at Shanghai Jiao Tong University since 2008 on a part-time basis. He received a B.S. degree in electrical engineering and an M.S. degree in systems engineering from Dalian University of Technology, Dalian, China. He received his Ph.D. degree in systems engineering from Case Western Reserve University, Cleveland, Ohio, USA. His current research interests include neural networks and their applications. He published over 140 journal papers, 12 book chapters, 8 edited books, and numerous conference papers in these areas. He has been an Associate Editor of the *IEEE Transactions on Systems, Man, and Cybernetics – Part B* since 2003 and a member of the Editorial Advisory Board of the *International Journal of*

*Neural System* since 2006. He also served as an Associate Editor of the *IEEE Transactions on Neural Networks* (1999-2009) and *IEEE Transactions on Systems, Man, and Cybernetics – Part C* (2002–2005), as a guest editor of special issues of *European Journal of Operational Research* (1996), *International Journal of Neural Systems* (2007), and *Neurocomputing* (2008). He was an organizer of several international conferences such as the General Chair of the 13th International Conference on Neural Information Processing (2006) and the 2008 IEEE World Congress on Computational Intelligence. He served as the President of the Asia Pacific Neural Network Assembly in 2006. He is an IEEE Fellow, an IEEE Distinguished Lecturer, and a recipient of the Research Excellence Award from the Chinese University of Hong Kong for 2008-2009, Shanghai Natural Science Award (first class) in 2009, and the Outstanding paper Award of the *IEEE Transactions on Neural Networks* in 2011.

# Keynote Speech: Integrated Safety Mechanisms for the Distributed Computer Systems

**Speaker:** Prof. Vadym Mukhin (National Technical University of Ukraine “KPI”, Ukraine)

**Time:** 10:40-11:15, April 23, 2011

**Location:** Conference Room of the Bulding No. 8



**Abstract**—The paper describes the security problems and challenges faced in a environment of distrubuted computing. There are shown the specifics of security mechanisms for distributed computer systems based on the modern security technologies and standards. The structure of the mechanism for the security risk minimization in the distributed computer systems is suggested. There are suggested the estimation of the level of security threats, the integrated estimation of damage due to the attacks on the vulnerability and the estimation for risk of the security threats realition. Also, there is suggested an approach to the risk analysis based on estimation of the risk factors of the security threats. Also, the special security risk matrix for risk minimization is suggested.

The main principles for design and the basic elements of security policy in distrubuted computer systems are described. A model of security policy for distributed computer systems is suggested. This model allows formulate and substantiate the main principles of security policy for administrating of the distributed computer systems.

## Biography

Candidate of science, docent Muhin Vadim. The field of scientific researches – designing of information security systems, user and message authentication in computer systems, theory of risk for security monitor tasks, methods and approaches of security adaptive control in computer systems, designing of Security Policy for computer systems and networks. Is the author of 110 papers (3 of them are monographies, 1 guide certified by Ministry of Science, 2 pats). Trained 2 candidates of science, 12 MPhils. Took part in 40 scientific conferences in 8 countries around the world. Got ‘Soros pastgraduate’ prize in 1996.

# **Keynote Speech: SYNERGY BETWEEN BIOLOGY AND MATHEMATICS: PAST, PRESENT, AND FUTURE**

**Speaker:** Prof., Matthew He (Nova Southeastern University, USA)

**Time:** 11:15-11:50, April 23, 2011

**Location:** Conference Room of the Bulding No. 8



**Abstract**—Although biology and mathematics have long been intertwined over the last half millennium, an explosive synergy between biology and mathematics seem poised to enrich and extend both fields and biomedical engineering greatly in the coming decades. The avalanche of biological data generated by contemporary high-throughput computational biology has changed the traditional landscape of biology. As a science, biology depends increasingly on data, algorithms, and models in virtually every respect. It is becoming more quantitative, more computational, and more mathematical. All three methods-quantitative, computational, mathematical-are spreading across the entire landscape of biological science, from molecular to cellular, organismic, and ecological. Two disciplines that have extraordinary potential to meet these biological challenges are mathematics, computer science, and bioinformatics.

## **Biography**

Matthew He, Ph.D., is Full Professor and Director of the Division of Math, Science, and Technology of Nova Southeastern University, Florida, USA. He is Full Professor and Grand Ph.D. from the World Information Distributed University since 2004. He has been awarded as an Academician of European Academy of Informatization since 2004. He received the World Academy of Sciences Achievement Awards in recognition of his research contributions in the field of computing in 2003 and 2010.

Matthew He received his Ph. D. in Mathematics from University of South Florida in 1991. He was a research associate at the Department of Mathematics and Theoretical Physics, Cambridge University, Cambridge, England in 1986 and at the Department of Mathematics, Eidgenossische Technische Hochschule, Zurich, Switzerland in 1987. He was also a visiting professor at National Key Research Lab of Computational Mathematics of Chinese Science of Academy and University of Rome, Italy in 1998.

Dr. Matthew He has authored/edited 8 books/proceedings and published over 120 research papers in the areas of mathematics, bioinformatics, computer vision, information theory, mathematics and engineering techniques in medical and biological sciences. He is an editor of International Journal of Software Science and Computational Intelligence, International Journal of Cognitive Informatics and Natural Intelligence, International Journal of Biological Systems, and International Journal of Integrative Biology. He is an invited series editor of Biomedical and Life

Sciences of Henry Stewart Talk “Using Bioinformatics in Exploration in Genetic Diversity”. He is a Chairman of International Society of Symmetry in Bioinformatics and a member of International Advisory Board of "International Symmetry Association (ISA). He is a member of American Mathematical Society (AMS), Association of Computing Machinery (ACM), IEEE Computer Society, World Association of Science Engineering (WASE), and International Advisory Board member of Bioinformatics Group of International Federation for Information Processing (IFIP). He was an international scientific committee co-chair of International Conference of Bioinformatics and its Applications (ICBA 2004), a general co-chair of International Conference of Bioinformatics Research and Applications (ISBRA 2009), and a keynote speaker of many international conferences in the areas of mathematics, bioinformatics, and information science and engineering.

# Part III Oral Sessions

## Oral Session

Room 212 of the Bulding No. 1

14:30-17:30, Saturday, 23 April, 2011

| Paper ID | Title   | Author          |
|----------|---|-----------------|
| 370      | A Novel Spiking Cortical Model based Filter for Impulse Noise Removal   | Xuming Zhang    |
| 431      | Wavelet-Based Medical Image denoising and Enhancemen  | Huiqin Jiang    |
| 522      | Post-craniectomy intracranial pressure dynamics:A novel compartmental model of generalized Monro-Kellie principle | Ketong Wang     |
| 749      | Parallel Algorithm for Solving 3-D Freezing Problems in Biological Tissues During Cryosurgery                     | Peng Zeng       |
| 913      | A Novel Lumen Segmentation Technique for Carotid Ultrasound Images on Transverse View                             | Xin Yang        |
| 969      | Thermal Enhancement of Capsaicin on Target Tissue Involved in Hyperthermia  | Peng Zeng       |
| 509      | Texture based anisotropic diffusion for real ultrasound image despeckling   | Jie Huang       |
| 291      | Design a kind of Family Embedded Health Care System   | Wang Qi         |
| 990      | A Novel Hand Prosthesis Control Scheme Implementing a Tongue Control System                                       | Daniel Johansen |
| 550      | License Plate Binarization Method based on Fuzzy classification   | Wo Yan          |
| 341      | The Speaker and Content Adaptation in Radiology Information System  | Feiran Wu       |
| 365      | An Efficient Site-directed Mutagenesis Method in vivo in Escherichia coli   | Muqing Qiu      |
| 478      | Recognition of optical microscopy images based on shape and texture   | Zhang Shuheng   |
| 377      | Enzymatic Synthesis of Ferulyl Oleins and Their Inhibition Effects on Nitrosamine                                 | Lin-lin Chen    |
| 372      | Competing Front for Directed Surface Extraction from CT Images  | Xueshu Liu      |

## Part IV Poster Sessions

### Poster Session

Chair: Prof. Zhiwei Ye

Room 212 of the Bulding No. 1

14:30-17:30, Saturday, 23 April, 2011

| Paper ID | Title  | Author               |
|----------|--|----------------------|
| 236      | A simple,yet rapid and effective method for LogP Prediction of Dipeptides Based on Theoretical Descriptors (HMLP)                      | Jiajian Yin          |
| 237      | Molecular cloning and sequence analysis of the gene encoding interferon alpha of the giant panda(Ailuropoda melanoleuca)               | Yue Yi               |
| 336      | Physico-Chemically Weighted Kernel for SVM Protein Classification  | Jiang Hao            |
| 345      | Anti-tumor Immunity Elicited by Peptide Complex-Alpha-fetoprotein and Glycoprotein 96  | Xiaoping Wang        |
| 337      | Inferring Functional Annotation for Human Genes from Gene-PDB Structure Mapping  | Jiang Hao            |
| 412      | The muscle activity detection from surface EMG signal using the morphological filter   | Qiang Li             |
| 424      | Evaluation of causal influences in model of motor control in left hand's movement-readiness state                                      | Yuqing Wang          |
| 813      | Study on the Application of Artificial Immunity in Virus Detection System  | Deng Daping          |
| 498      | Pain expression recognition based on SLPP and MKSVM  | Zhang Wei            |
| 503      | Protein Folding Prediction based on Levy Flight Particle Swarm Optimization  | Chen Xin             |
| 538      | The Research of Automatic License Plate Location Algorithm Under Various Conditions  | Xiaobo Guo           |
| 564      | Detecting Lung Nodules in Chest CT Images with Ensemble Relevance Vector Machine   | Chao Dong            |
| 592      | Diffraction Tomography: Its Application in Ultrasound  | Omer M. Gaddoura     |
| 921      | Entropy Analysis of EEG signals in Emotional Stress States   | Seyyed Abed Hosseini |
| 617      | Simulation for the 24-hour features of Cruising Taxi Operation System  | Chen Mu              |
| 670      | A Medical Image Fusion Method Based on Contourlet Transformation and Region Sensivity  | Junli Li             |
| 677      | Color image segmentation using level set method with initialization mask in multiple color spaces                                      | Zhang Yongqin        |
| 716      | A Novel Medical Image Registration Algorithm for Combined PET-CT Scanners Based on Improved Mutual Information of Feature Points       | Shuo Jin             |
| 718      | A New Deformable Image Registration Method Based on B-Spline for Clinical 4D CT  | Hui Wang             |
| 719      | Accurate Tumor Positioning from 18F-FDG PET-CT Scans by Jointly Registration and Segmentation  | Dengwang Li          |
| 723      | Comparison of Multi Freedom Degrees for Patient Positioning Using kilovoltage Cone Beam CT in Image-guided Radiotherapy                | Jingjing Wang        |
| 729      | Prioritization of Candidate Nonsynonymous Single Nucleotide Polymorphisms via Sequence Conservation Features                           | Jiaxin Wu            |
| 738      | A Novel Fast Medical Image Segmentation Based on Level-Set   | Junli Li             |
| 759      | BEDO:An Image Preprocessing Solution for Image Registration  | Hao Wei              |
| 806      | Determination of damages of photosynthetic physiology caused by Salt stress using delayed fluorescence emission spectrum and intensity | Ying Li              |
| 938      | The Stability of Boolean Rules Memory Based on the Core Systems of Number-Processing   | Xiuzhen Wang         |
| 847      | Automated Liver Segmentation for Cone Beam CT Dataset by Probabilistic Atlas Construction  | Dengwang Li          |

| Paper ID | Title  | Author           |
|----------|--|------------------|
| 542      | Development of Automatic Bio-Monitoring System for the Life History of Insect  | Huaang-youh Hung |
| 930      | Optimal conditions for cholesterol oxidase production and enzymatic properties study produced by <i>Monascus X-1</i>   | Lu Hao           |
| 958      | Combining Local Binary Patterns and Visual Attention for Face Recognition  | Zhiyong Gao      |
| 569      | Optimal Measurement Model for the Assessment of Cell Adhesive Force by Using the Dielectrophoresis Force   | Lin Jeng-liang   |
| 658      | Automatic Tracking and Manipulation for Cell Lysis System Development  | Chyung Ay        |
| 1005     | Secure DV-Hop Localization for Wireless Sensor Networks  | Jianmin Zhang    |
| 439      | The influence of UVB radiation on proliferation and Young's modulus of dermal fibroblasts  | Cheng-chang Lien |
| 466      | Mining the bioinformation of differentially expressed genes in obese mice treated with chronic intermittent hypoxia based on the bioinformatics methods      | De Bi            |
| 474      | Using Composite Classifier Systems to predict protein locations  | Lin Jie          |
| 479      | Novel Approach of Surface Unfolding for Ceramic Bowls  | Xien Cheng       |
| 490      | Research of the QoC-aware Service Selection for Middleware based Pervasive Applications  | Di Zheng         |
| 556      | Design and Fluent Simulation of Impeller for Axial Maglev Heart Pump   | Wang Ziyang      |
| 573      | Electrocardiogram ST-segment Morphology Variability Analysis Base on Correlation Coefficient Entropy and Inverse Correlation Coefficient Entropy             | Jinzhong Song    |
| 585      | Image Denoising by Nonlinear Diffusing on Mixed Curvature  | Gao Jian         |
| 616      | Hash Function Construction Based on RBFNN and Chaotic Mapping  | Jun Chen         |
| 631      | Freeze-Drying Investigations of Antlers  | Jun Liu          |
| 639      | Efficient Parallel Design for Edit distance algorithm in DNA Sequence Alignment  | Xu Li            |
| 640      | The finite mixtures of GAUSS distribution dealing with non-normal errors in factor analysis model using the EM algorithm                                     | Xingcai Zhou     |
| 671      | A system for preventing and recovering bone loss in manned spaceflight   | X.X. Lou         |
| 672      | Numerical Simulation of Water Transport Through Vessel Perforation Plates  | Chen Qi          |
| 683      | Effects of blue light on mycelium morphology, citrinin production and the proportion of sexual spore of <i>Monascus</i>                                      | Jing Wang        |
| 721      | A comparison of FDG PET-CT tumor segmentation for clinical application   | Wei Wang         |
| 733      | Modeling fluid flow in angiosperms xylem pits  | Fang Xu          |
| 754      | DNA vaccines co-expressing containing Hsp70 and GP5/M protein of porcine reproductive and respiratory syndrome virus (PRRSV) display enhanced immunogenicity | Zuo Lan          |
| 785      | Analysis of Synonymous Codon Usage in the newly identified DPV UL43 Gene   | Qin He           |
| 790      | An Energy-efficient Receiver for Human Body Communication  | Dahui Zhang      |
| 794      | Bleeding Detection in Wireless Capsule Endoscopy Using Color Similarity Coefficient  | Guobing Pan      |
| 798      | A Novel Weighted-Cooperative Spectrum Sensing Scheme using Clustering  | Huiheng Liu      |
| 807      | Pattern recognition of multiscale entropy curve for ECG signal analysis  | Chien-chih Wang  |
| 826      | Prediction of Protein Subcellular Localization Using EDA based Ensemble Classifiers  | Ying Li          |
| 830      | DESIGN OF EDGE-SHARPENING ANISOTROPIC DIFFUSION BY ADJUSTING EIGENVALUES   | Wenhua Ma        |
| 842      | A New Graph-construction Method for Graph-cut Clustering   | Rong Wang        |
| 881      | Modification of PK-15 cells proteome in the early stage of classical swine fever virus infection*  | Jinfu Sun        |
| 890      | Catalase activity in rock carp ( <i>Procypris rabaudi</i> Tchamg) exposed to the total dissolved gas supersaturation   | Liu Xiao-qing    |

| Paper ID | Title   | Author         |
|----------|---|----------------|
| 899      | Application of Fuzzy Enhancement in the Diagnosis of Liver Cancer from Ultrasound Images  | Wu Qiu         |
| 918      | Automatically Extracting Name Alias of User from Email  | Meijuan Yin    |
| 919      | Using immortalized human lymphocytes cell lines to screen the genetic markers of ADH5 to formaldehyde   | Juan Zhang     |
| 942      | Revising algorithm for pathology image stitching  | Haishun Wang   |
| 967      | Removal of salt-pepper noise based on multi-feature combination and WSVM  | Fu Yan         |
| 1001     | Using Neighbors Monitoring Clone Attack in Wireless Sensor Networks   | Jianmin Zhang  |
| 1032     | SAR and Temperature Evaluations of a 900 MHz TEM Chamber for Cell Exposure  | Zhe Ren        |
| 1033     | Analysis of Exposure Uniformity on Cells in Vitro with 900 MHz TEM Chamber  | Jingning Zhang |
| 1034     | Dosimetry and Temperature Evaluation of TEM Chamber for Cell Exposure at 1800 MHz   | Wei Wang       |
| 174      | The Computational Study of Microwave-induced Thermo-Acoustic Tomography for Biologic Tissue Imaging Based on Pseudo-Spectrum Time Domain and Time Reversal Mirror technique | Guoping Chen   |
| 188      | The identification of human cassette exons based on SVM   | Lan Tao        |
| 552      | A New Method of Signature Verification Based on Biomimetic Pattern Recognition Theory   | Yan Wu         |
| 229      | Study on Sound Field of High Intensity Focused Ultrasound With Short Focal Length   | Zhao Jinhua    |
| 318      | CoMSIA Study of a Series of N-dichloroacetyl Oxazolidine Derivatives  | Ying Fu        |
| 385      | Study on the Design of a Magnetic started Wireless Capsule Endoscopy  | Yazhen Wang    |
| 389      | Pulmonary Parenchyma Segmentation by Watershed Transform  | Ruiping Wang   |
| 421      | Study on Dynamic Characteristics of the Hippocampal Neuron under Current Conductance's Changing   | Yueping Peng   |
| 422      | Study on the Hippocampal CA1 Pyramid Neuron's Minimal Models and Its Discharge Patterns   | Yueping Peng   |
| 577      | A New Likelihood Estimate method in Video Segmentation  | Yang Shen      |
| 635      | Mining Associated Factors about Emotional Disease Bases on FP-Tree Growing Algorithm  | Xu Ai-ping     |
| 175      | Characterization and Anti-proliferative Activity of Ethanol Extract of Tartary Buckwheat  | Yuxiang Ma     |
| 182      | Extraction of Flavonoids from Clovers   | Chungang Chen  |
| 209      | Local Reweighted Kernel Regression  | Weiwei Han     |
| 405      | New method simulating flexible object—operator cube model   | Yu-cai Ma      |
| 215      | C2C e-commerce risk assessment based on AHP and fuzzy comprehensive evaluation  | Wei Baolu      |
| 251      | Behavioral compatibility analysis of component-based real-time system   | Lin Xi         |
| 309      | Antioxidant Activity of Ethanol Extract of Pomegranate seed   | Yuzhong Shi    |
| 397      | A Fuzzy Superposition Evaluation Algorithm of E-commerce Customers  | Hongxin Wan    |
| 425      | dbDMAD: a database of DNA methylation in human age-related disease  | Wei Zhang      |
| 443      | Design and Apply of the Improved Genetic Algorithm in the Prediction of Protein Fold  | Xiangting Fan  |
| 604      | Parallelization of Needleman-Wunsch Algorithm based on Software Pipelining  | Hanwen Hu      |
| 621      | Nutritional evaluation of Adinandra nitida Leaves   | Gang Li        |
| 708      | Experiment Research of Diffuse Optical Tomography Imaging in Homogeneous Medium   | Wei Zhang      |
| 760      | A Simple Economics in Local Hospital Information Management   | Lin Xixi       |
| 838      | Application of PSO algorithm in parameter optimization of biodegradable medical polymer degradation model   | Zhang Ying     |
| 860      | Operational Risk Research on Social Pooling Fund Under Diseases Score Settlement System   | Wang Min       |
| 950      | Study on 2D simulation model of human skull with inhomogeneous resistivity distribution   | Chi Tang       |
| 965      | Application of Bayesian statistics and Markov model in medical decision   | Jianqian Chao  |
| 581      | The utilization of Escherichia coli-based magnetic nanobeads as an ultrasensitive biosensor for Mercury   | Sun Ying       |
| 678      | The research of using irregular triangulated network to achieve the relevant water calculation  | Hongbin Ma     |

| Paper ID | Title  | Author        |
|----------|--|---------------|
| 877      | Supply Voltage Compensation of Hot Wire Flow Measurement Device  | Wang Haitao   |
| 971      | Research on Application of OGSA-based Digital Campus   | Shunli Zhang  |
| 1061     | Calcium Ion and Protocorm Differentiation for Cymbidium Hybrid Cymbidium Lucky Gloria×Cymbidium Lovely Moon‘Crescent’                | Chuangui Yang |
| 361      | The Heartbeat Classification based on PCA  | Xueqin Chen   |
| 679      | Study on Methods of Metal Mine Reserves Estimation and System Development  | Hongbin Ma    |
| 848      | Detection of Endotoxin Concentration Using Piezoelectric Based Biosensor System  | Shiming Wang  |
| 480      | Morphological Image Processing in Quality Inspection for Bowl  | Huiying Li    |
| 596      | Applying Motion Capture in Computer Animation Education  | Xiaoting Wang |
| 654      | THE CHANGES OF TISSUE-TYPE PLASMINOGEN ACTIVATOR AND MATRIX METALLOPROTEINASES IN NEONATAL MICE WITH HYPOXIC-ISCHEMIC ENCEPHALOPATHY | J.W. Xu       |
| 743      | The Application in Speed Sensorless Based on BP Neural Network Optimized by Genetic Algorithm  | Yi Liu        |
| 748      | A Strength Training Machine Specific for Hamstrings: Injury Prevention and Rehabilitation  | Guodong Wang  |
| 815      | The Impact of Organizational Slack on the Performance of Pharmaceutical and Chemical Firms   | Heping Zhong  |
| 816      | Optimization method of the transcutaneous energy transmission system with given output power   | Bai Liangyu   |
| 922      | Research on Patient Privacy-preservation for Wireless Health Monitoring System   | Qi-ming Huang |
| 926      | Neural Network recognizes fruit fly's wing vibration sound based on Hilbert-Huang Transform  | Min Guo       |
| 1009     | A Service-Oriented Architecture Framework for Emergency Vehicles Information System  | Guangliang Li |
| 1023     | Introducing Adjuvants for Dendritic Cell Algorithm to Detect Stealthy Malware  | Jun Fu        |
| 357      | Database design of a general data analysis system of merchandize sales information   | Xiaolu Wang   |
| 369      | A Measurable Approach for Access and Control Modeling in SOA   | Gu Junkai     |
| 393      | Image Mosaics Technology for Video Sequence of Inspecting Security of Pit Shaft  | Wu Qingfeng   |
| 426      | Construction of Health Promotion Management System Based on Web  | Weibing Wu    |
| 255      | Research on the Reform of Practical Teaching Driven By Practical Training under Constructivism                                       | XinLiang Ou   |
| 56       | Transabdominal and Laparoscopic Myomectomy Comparative Analysis of 566 Cases   | Minhua Gao    |
| 225      | Behavioral Model based on Fruit Fly Larva's Response to Light  | Zhejun Gong   |
| 242      | A Study of Watermarking Application in Medical Digital Images  | Deng Xiaohong |
| 12       | PCR-based Detection of Locus Encoding PIA in Staphylococcus epidermidis from Bovine Subclinical Mastitis Cases                       | Wei Chen      |
| 21       | Application research of multi-layer algorithm on image spam Filtering  | Rui Chang     |
| 26       | Design of Wind Power Turbine's Main Components and Computation of Its Output Power   | Yiming He     |
| 30       | Electromagnetic Field of Resonance Linear Motion Actuator and its Finite Element Analysis which Applied to Coal Mine                 | Xianyi Qian   |
| 43       | Positive Crankcase Ventilation System  | Gaoming Ding  |
| 50       | Stability of Wind Power Turbine's Magnetic Bearing   | WeiJun Yu     |
| 220      | APPLICATION OF GEOGRAPHIC INFORMATION SYSTEM TECHNIQUE IN THE DESIGN OF GAS PIPE NETWORK PLAN  | Yang Shuren   |
| 323      | SIMULATION STUDY ON ELECTRICAL ACTIVITIES IN MYOCARDIAL CELLS  | Chengde Qin   |
| 625      | Research of DistributedDataMining System Based on Web Services   | Liu Weiming   |
| 720      | Neural Spike Feature Extraction of Globus Pallidus Based on Wavelet Package Decomposition  | Yan He        |
| 758      | Research on the Application of Knowledge Management in Modern Hospitals  | Wang Xinhao   |
| 777      | Infusion of Warm Fluid During Abdominal Surgery Prevents Hypothermia and Postanaesthetic Shivering                                   | You Zhi-jian  |

| <b>Paper ID</b> | <b>Title</b>  | <b>Author</b> |
|-----------------|---|---------------|
| 882             | Efficient implementation of Marching Cubes with GPU parallel computing architecture                       | Yufei Xue     |
| 1041            | Privacy Preservation of Cross Domain data sharing over Electronic Health Records in Cloud Computing       | Qi-ming Huang |
| 353             | The Application of VPD in University Entrance Examination Management System                               | Rui Yan       |
| 560             | An Algorithm of Hierarchical Fuzzy Evaluation Based on Attributes Reduction                               | Yun Peng      |
| 773             | Sensitivity Training of Residents to Pressure Improves the Management of Tracheal Tube Intracuff Pressure | You Zhi-jian  |

## **Part V Instructions for Presentations**

### **Oral Presentation**

#### **Devices Provided by the Conference Organizer:**

Laptops (with MS-Office & Adobe Reader)

Projectors & Screen

Laser Sticks

#### **Materials Provided by the Presenters:**

PowerPoint or PDF files

Durations of each Presentation (Tentatively):

Regular Oral Session: about 15 Minutes of Presentation, 5  
Minutes of Q&A

Keynote Speech: 35 Minutes of Presentation, 5 Minutes of Q&A

## Part VI Hotel Information

### Conference Hotel: *International Academic Exchange Center of HUST*



International Academic Exchange Center of HUST is located at No. 1037 Luoyu Road in the campus of Huazhong University of Science and Technology (HUST).

**Address:** No.1037 Luoyu Road, Hongshan District, Wuhan, Hubei Province, China.

#### **How to get to the hotel**

10 km to Railway Station, 47 km to Tianhe Airport.

#### **From the Tian He Airport:**

Take a taxi to No.1037 Luoyu Road, Hongshan District, Wuhan (fee: about RMB 140. Time: 90 minutes)

#### **From the Railway Station:**

Take a taxi to No. 1037 Luoyu Road, Hongshan District, Wuhan (fee: about RMB 25. Time: 30 minutes)

#### **From the Long Distance Bus Station:**

Take a taxi to No. 1037 Luoyu Road, Hongshan District, Wuhan (fee: about RMB 25. Time: 15 minutes)



Homepage: <http://www.husthotel.com>

Tel: +86-027-87540188

Fax: +86-027-87540108

Rate: Standard Room RBM 338/ Night (8<sup>#</sup>, about 60USD/Night).

Rate: Single Room RBM 328/ Night (8<sup>#</sup>, about 50USD/Night).

**请送我到:**

**华中科技大学国际学术交流中心(8#楼)**

Please take me to:

CONFERENCE HOTEL: International Academic Exchange Center of HUST, No. 1037 Luoyu Road, Hongshan District, Wuhan, China

## **Part VII Contact Us**

### **Contact Information**

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