

# **International Conference on Computational and Information Sciences (CIS'04)**

## **Program**

**December 16-18, 2004, Shanghai,  
China**

## **International Scientific Committee**

Michael Berry, University of Tennessee, USA  
Xue-Bin Chi, Chinese Academy of Sciences, China  
Mehdi Dehghan , Amirkabir University of Technology, Iran  
Tony Drummond, Lawrence Berkeley National Laboratory, USA  
Yuxi Fu, Shanghai Jiaotong University, China (**Co-Chairs**)  
George Gravvanis , Hellenic Open University, Greece  
Qingping Guo, Wuhan University of Technology, China  
Murli M. Gupta, George Washington University, USA  
Ji-Huan He, Donghua University, China (**Co-Chairs**)  
Katica(Stevanovic) Hedrih, Yugoslavia  
Zhongxiao Jia, Tsinghua University, China  
Hai Jin, Huazhong University of Science and Technology, China  
Sangbae Kim, Hannam University, South Korea  
Wai Lam, Chinese University of Hong Kong, China  
Ming-Lu Li, Shanghai Jiaotong University, China  
Ming-Chih Lai, National Chiao Tung University, Taiwan  
Zhongze Li, Chinese Academy of Sciences, China  
Jing Liu, Chinese Academy of Sciences, China  
Guang Meng, Shanghai Jiaotong University, China  
Zeyao Mo, IAPCM, China  
Kengo Nakajima, University of Tokyo, Japan  
Jun Ni, University of Iowa, USA  
Mohamed Othman, University Putra Malaysia, Malaysia  
Yi Pan, Georgia State University, USA  
Haesun Park, University of Minnesota, USA  
Padama Raghavan, Pennsylvania State University, USA  
Dinggang Shen, University of Pennsylvania, USA  
Pengcheng Shi, University of Science and Technology, Hong Kong,  
China  
Jie Wang, Nanjing University of Technology, China  
Wei Wang, University of North Carolina-Chapel Hill, USA  
Dexuan Xie, University of Wisconsin-Milwaukee, USA

Geng Yang, Nanjing University of Posts and Communications, China  
Laurence Tianruo Yang, St. Francis Xavier University, Canada  
Jun-Hai Yong, Tsinghua University, China  
Jae Heon Yun, Chungbuk National University, South Korea  
Xiaodong Zhang, College of William and Mary, USA  
Jennifer J. Zhao, University of Michigan-Dearborn, USA  
Hong Zhu, Fudan University, China  
Jianping Zhu, University of Akron, USA  
Jun Zhang, University of Kentucky, USA (Co-Chair)  
Albert Zomaya, University of Sydney, Australia

### **Local Organizing Committee**

Guang Meng, Shanghai Jiaotong University, China (Chair)  
Juan Zhang, Donghua University, China (Secretary General)  
Yu-Qin Wan, Donghua University, China (Secretary)  
Hong-Mei Liu, Donghua University, China (Secretary)

### **General Information**

#### **Registration**

Registration will start on December 15, 2004, and will continue throughout the conference from 8:30am to 5:00pm. Registration will not be available at the opening ceremony.

#### **Badges**

The personal badge is your entrance ticket to all conference sessions and other arrangements. Thus participants are requested to always wear their badge. For losses of badge there will be a US \$50 fee. Please see the registration desk for a replacement.

### **Official Language**

The official language of the congress is English only.

### **Messages**

A message board will be provided in portico area of the meeting space.

#### **Service On-Line**

The following services are available

- 1) Business Center
- 2) Public telephones
- 3) General Information Desk

All the above mentioned services are maintained by the YingHe Hotel and are open according to their schedule.

### **E-mail Service**

There is no email service available. You can use your only laptops in your room, you will be charged per minute rate.

### **Meals**

There are many restaurants within the Yinghe hotel and XitianYou hotel. For students, much cheap meals can be provided at Donghua University.

### **Transportation**

The hotel, besides Donghua University, has transportation to and from the center city. Airbus 3 provides transportation to and from the Pudong International Airport (PVG), Shanghai, China.

## Welcome Address

### Ladies and Gentlemen,

I am immensely pleased and honored to welcome you to Shanghai, which has been developing very fast, and will be strongly impressed on your memory.

The New Century sees the first International Conference of Computational and Information Sciences (CIS04), which was initiated by Dr. Jun Zhang of the University of Kentucky, USA, and organized by Donghua University, Shanghai, China.

CIS04 is organized as a preeminent event for both computational science community and information science community. It is a great pleasure and honor for Donghua University to host this very important conference.

The aim of the conference is to bring to the fore the many new and exciting computational techniques for physical and information science, thereby capturing both the interest and imagination of the wider communities in various fields, such as in mathematics, physics, information science, computational science, biologics, medicine, and others.

The conference is a review of the state of the art of the field of computational and information sciences. In selecting presentations among more than 500 manuscripts, efforts were made to cover the field from all its key aspects to motivate the concepts and techniques used in computational and information sciences. This is illustrated by modeling increasingly more complex physical problems with ever-increasing computing power and sophisticated computational and information techniques in the proceedings. The participants represent 19 countries. As usual, these participants forge unity in

diversity and bring cooperation and collaboration into our world community of computational and information sciences.

It is my greatest honor to invite Dr. Horst D. Simon of the Lawrence Berkeley National Laboratory, USA, Professor Stephen M. Pizer of the University of North Carolina at Chapel Hill, USA, and Professor Haesun Park of the University of Minnesota, USA, to give our audience important plenary lectures, which present an overview of the current status of their fields with a speculative outlook on what are to come out in the future, making the conference accessible to a broad audience.

Hereby, I should express my thanks to Donghua University, Shanghai Jiaotong University, National Science Foundation of China, for their sponsorship of this conference, and Springer publisher for publication of the proceedings. I appreciate very much all reviewers for their time and help, without their help, the success of the conference will be impossible.

To learn about tomorrow's information today, this is the subject of the conference. I can ensure you that it will be a mathematically enriching and socially exciting event.

I hope you can take part in the special events issued in the program.

Ji-Huan He

## December 15, 2004

Registration desk open: 10:00AM – 17:00PM, Yinhe Hotel

**Evening Reception:** 18:00PM-20:00PM, this is an opportunity for the conference attendees to get together and to know each other before the conference starts. Light snacks and drinks will be provided. Location is to be confirmed. Contact the registration desk at Yinhe Hotel.

## December 16, 2004

**Opening Ceremony:** 8:30 - 8:50AM

**Keynote Speaker:** 8:50AM - 9:40AM (Chair: Jun Zhang)

Horst D. Simon: What Supercomputer Still Can't Do? (Associate Laboratory Director, Computing Sciences, Lawrence Berkeley National Laboratory, USA)

**Coffee Break:** 9:40AM - 10:10AM

**Section: High performance computing and algorithms**

**Chair:** Yang Geng (Nanjing University of Posts and Telecommunications)

A1(10:10-10:30): PAPER201: 33140001

Title: High Order Finite Difference Schemes for the Solution of Elliptic PDEs

Authors: Pierluigi Amodio, Ivonne Sgura <ivonne.sgura@unile.it>

Country: Italy

A2(10:30-10:50): PAPER204: 33140013

Title: A Grid Portal Model Based on Security and Storage

Resource Proxy

Authors: Quan Zhou, Geng Yang <qzhou@njupt.edu.cn>

Country: China

A3(10:50-11:10): PAPER228: 33140082

Title: Open Middleware-based Infrastructure for Context-aware in Pervasive Computing

Authors: Xianggang Zhang, Jun Liao, and Jinde Liu

<csxgzhang@uestc.edu.cn>

Country: China

A4(11:10-11:30): PAPER216: 33140062

Title: An Effective Compressed Sparse Preconditioner for Large Scale Biomolecular Simulations

Authors: Dexuan Xie <dxie@uwm.edu>

A5(11:30-11:50): PAPER237: 33140096

Title: Solving Separable Nonlinear Equations with Jacobians of Rank Deficiency One

Authors: Yun-Qiu Shen, Tjalling J. Ypma

<yqshen@cc.wvu.edu>

Country: USA

**Section: Numerical simulation and numerical algorithms**

**Chair:** Zhu Hong (Fudan University)

B1(10:10-10:30): PAPER254: 33140114

Title: An Adaptive Two-dimensional Mesh Refinement Method for the Problems in Fluid Engineering

Authors: Zhenquan Li <li\_z@usp.ac.fj>

Country: Fiji

B2(10:30-10:50): PAPER366: 33140226

Title: A Study on the Efficient Parallel Block Lanczos Method

Authors: Sun Kyung Kim, Tae Hee Kim  
<skkim@daegu.ac.kr>  
Country: Korea

B3(10:50-11:10): PAPER369: 33140233  
Title: Performance Evaluation of Numerical Integration  
Methods in the Physics Engine  
Authors: Jong-Hwa Choi, Dongkyoo Shin, Won Heo, Dongil  
Shin <dshin@sejong.ac.kr>  
Country: Korea

B4(11:10-11:30): PAPER603  
Title: SchurRAS: A restricted version of the overlapping  
Schur complement preconditioner  
Authors: Zhange Li  
Country: China

B5(11:30-11:50) : PAPER247: 33140108  
Title: Solving Non-Linear Finite Difference Systems by  
Normalized Approximate Inverses  
Authors: George A. Gravvanis, Konstantinos M. Giannoutakis  
<gravvanis@eap.gr>  
Country: Greece

**Section: Computational technology in physics, chemistry, biology,  
finance and economics**

**Chair:** Jing Liu (Chinese Academy of Science, China)

C1 (10:10-10:30): HE026: 33140441  
A New Algebraic-based Geometric Constraint Solving Approach:  
Path Tracking Homotopy Iteration Method  
Authors: Li Wenhui, Cao Chunhong, and Yi Wan  
<chunhongcao0448@tom.com>  
Country: China

C2(10:30-10:50): HE018: 33140996  
TITLE: Fast Query Over Encrypted Character Data in  
Database  
Authors: Jing Dai, Zheng-Fei Wang, Wei Wang and Bai-Le Shi  
<zhengfwang@sohu.com>  
Country: China

C3(10:50-11:10): PAPER207: 33140031  
Title: Feedforward Wavelet Neural Network and Multi-Variable  
Functional Approximation  
Authors: Jing Zhao, Wang Chen, and Jianhua Luo  
<zhaojing\_cq@hotmail.com>  
Country: China

C4(11:10-11:30): PAPER299: 33141100  
Title: Adaptive Quantization of DWT-Based Stereo Residual  
Image Coding  
Authors: Han-Suh Koo and Chang-Sung Jeong  
<esprit@snoopy.korea.ac.kr>  
Country: Korea

C5(11:30-11:50): PAPER433: 33140423  
Title: Influence of Moment Arms on Lumbar Spine  
Subjected to Follower Loads  
Authors: Kyungsoo Kim, Yoon Hyuk Kim  
<azureton@kaist.ac.kr>  
Country: Korea

**Section: Numerical computing**

**Chair:** Ran Baik (Honam University, Korea)

D1(10:10-10:30): PAPER215: 33140055  
Title: The Half-Sweep Iterative Alternating Decomposition  
Explicit (HSIADE) Method for Diffusion Equations

Authors: J. Sukaiman, M. K. Hasan, M. Othman  
<mothman@fsktm.upm.edu.my>  
Country: Malaysia

D2(10:30-10:50): PAPER217: 33140068  
Title: A Study on Lower Bound of Direct Proportional Length-Based DNA Computing for Shortest Path Problem  
Authors: Zuwaire Ibrahim, et al. <zuwairie@isc.meiji.ac.jp>  
Country: Japan

D3(10:50-11:10) PAPER386: 33140411  
TITLE: A Numerical Model for Estimating Pedestrian Delays at Signalized Intersections in Developing Cities  
Authors: Qingfeng Li, Zhaoan Wang, Jianguo Yang  
<qfli78@yahoo.com.cn>  
Country: China

D4(11:10-11:30): PAPER211: 33140043  
Title: Alternating Direction Finite Element Method for a Class of Moving Boundary Problems  
Authors: X.-Z. Liu, Xia Cui, Jun-Hai Yong, Jia-Guang Sun  
<liu-xz02@mails.tsinghua.edu.cn>  
Country: China

**Lunch Break:** 11:50AM - 1:30PM (attendees on their own)

**Section: Parallel computing**

**Co-Chairs:** H. D. Simon (Lawrence Livermore National Laboratory, USA), Rui-song Ye (Santou University, China)

A6(1:30-1:50): PAPER325: 33140190  
TITLE: Asynchronous Distributed Genetic Algorithm for Optimal Channel Routing  
Authors: Wonkil Kim, Chuleui Hong, and Yeongjoon Kim  
<wikim@sejong.ac.kr>

Country: Korea

A7(1:50-2:10): PAPER332: 33140196  
TITLE: High Level Language and Compiler for Reconfigurable Computing  
Authors: Fu San Hiew and Kah Hoe Koay  
<fshiew@mmu.edu.my>  
Country: Malaysia

A8(2:10-2:30): PAPER343: 33140202  
Title: A Parallel Algorithm for the Biorthogonal Wavelet Transform without Multiplication  
Authors: HyungJun Kim <hyungjun@korea.ac.kr>  
Country: Korea

A9(2:30-2:50): PAPER347: 33140208  
TITLE: Algorithms for Loosely Constrained Multiple Sequence Alignment  
Authors: Bin Song, Feng-feng Zhou, Guo-liang Chen  
<heather@mail.ustc.edu.cn>  
Country: China

A10(2:50-3:10) PAPER370: 33140245  
TITLE: An Approximation Algorithm for a Queuing Model with Bursty Heterogeneous Input Processes  
Authors: Sugwon Hong, Tae-Sun Chung, et al.  
<swhong@mju.ac.kr>  
Country: Korea

A11(3:10-3:30): PAPER372: 33140251  
TITLE: Improved Adaptive Modulation and Coding of MIMO with Selection Transmit Diversity Systems  
Authors: Min-goo Kang, Ou-seb Lee, et al.  
<kangmg@hanshin.ac.kr>  
Country: Korea

**Section: Grid computing**

**Chair:** Murli M. Gupta (George Washington University, USA), Jiten C. Kalita (Indian Institute of Technology Guwahati, India)

B6(1:30-1:50): PAPER416: 33140274

Title: A Survey of Load Balancing in Grid Computing  
Authors: Yawei Li, Zhiling Lan <liyawei@iit.edu>  
Country: USA

B7(1:50-2:10):

TITLE: Molecular Dynamics Simulation of DNA Molecules' Adhesion on Substrate  
Authors: Xinghua Shi [yzhao@lnm.imech.ac.cn](mailto:yzhao@lnm.imech.ac.cn)  
Country: China

B8(2:10-2:30): PAPER310: 33140168

Title: Basic Mathematical Properties of Multiparty Joint Authentication in Grids  
Authors: Hui Liu, Minglu Li <liuhui@cs.sjtu.edu.cn>  
Country: China

B9(2:30-2:50): PAPER396: 22140239

TITLE: A Design and Analysis of Circulant Preconditioners  
Authors: Ran Baik <baik@honam.ac.kr>, SungWook Baik  
Country: Korea

B10(2:50-3:10) PAPER430: 33140417

Title: Feature Selection with Particle Swarms  
Authors: Yu Liu, Zheng Qin, Zenglin Xu, Xingshi He <liuyu@mailst.xjtu.edu.cn>  
Country: China

B11(3:10-3:30): PAPER449: 33140298

TITLE: A Nonlinear Finite Difference Scheme for Solving the Nonlinear Parabolic Two-Step Model

Authors: Weizhong Dai and Teng Zhu <dai@coes.latech.edu>  
Country: USA

**Section: Numerical Simulation**

**Chair:** Jun-Hai Yong (Tsinghua University, China)

C6(1:30-1:50): HE012: 33140318

TITLE: The Geometric Constraint Solving Based on Mutative Scale Chaos Genetic Algorithm  
Authors: Cao Chunhong, and Li Wenhui <chunhongcao0448@tom.com>  
Country: China

C7(1:50-2:10): HE041: 33140351

TITLE: History Information based Optimization of Additively Decomposed Function with Constraints  
Authors: Qingsheng Ren, Jin Zeng, Feihu Qi <zengjin@sjtu.edu.cn>  
Country: China

C8(2:10-2:30): HE004: 33140310

TITLE: A New Boundary Preserval and Noise Removal Method Combining Gibbs Random Field with Anisotropic-Diffusion  
Authors: Guang Tian, Fei-hu Qi <tianguang@sjtu.edu.cn>  
Country: China

C9(2:30-2:50): PAPER350: 33140391

TITLE: Growing RBF Networks for Function Approximation by A DE-Based Method  
Authors: Junhong Liu, Saku Kukkonen, and Jouni Lampinen <liu@lut.fi>  
Country: Finland

C10(2:50-3:10) PAPER376: 33140259

TITLE: Design of a Cycle-Accurate User-Retargetable Instruction-Set Simulator Using Process-Based Scheduling Scheme  
Authors: Hoonmo Yang, Moonkey Lee  
[slover@spark.yonsei.ac.kr](mailto:slover@spark.yonsei.ac.kr)  
Country: Korea

**Section: Parallel computing**

**Chair:** Xiaoling Dai (University of the South Pacific, Fiji), Zhongze Li (Chinese Academy of Science, China)

D6(1:30-1:50): PAPER214: 33140049

Title: Binomial-Tree Fault Tolerant Routing in Dual-Cubes with Large Number of Faculty Nodes  
Authors: Y. Li, S. Peng, W. Chu <yamin@k.hosei.ac.jp>  
Country: Japan

D7(1:50-2:10): PAPER323: 33140184

TITLE: A Novel Approach to Load Balancing Problem  
Authors: Chuleui Hong, Wonil Kim, and Yeongjoon Kim  
<wikim@sejong.ac.kr>  
Country: Korea

D8(2:10-2:30): PAPER358: 33140220

TITLE: A Distributed Locking Protocol  
Authors: Jaechun No, Sung Soon Park <jano@sejong.ac.kr>  
Country: Korea

D9(2:30-2:50): PAPER427: 33140292

Title: Load and Performance Balancing Scheme for Heterogeneous Parallel Processing  
Authors: Tae-Hyung Kim <tkim@cse.hanyang.ac.kr>  
Country: Korea

D10(2:50-3:10): PAPER320: 33140178

TITLE: GA Based Adaptive Load Balancing Approach for a Distributed System  
Authors: SeongHoon Lee, DongWoo Lee  
<dwlee@woosong.ac.kr>  
Country: Korea

D11(3:10-3:30): PAPER238: 33140102

Title: Optimal Capacity Expansion Arc Algorithm on Networks  
Authors: Liu Yuhua, Yu Shengsheng, et al.  
<yhliu@ccnu-1.ccnu.edu.cn>  
Country: China

**Coffee Break:** 3:30PM – 3:50PM

**Section: Data processing and data mining**

**Co-Chairs:** Minrui Fei (Shanghai University, China) and Jun Zhang (University of Kentucky, USA)

A12(3:50-4:10): PAPER202: 33140671

Title: Utilizing Staging Tables in Data Integration to Load Data into Materialized Views  
Authors: Ahmed Ejaz and Revett Kenneth  
<eahmed@ccse.kfupm.edu.sa>  
Country: Saudi Arabia

A13(4:10-4:30): PAPER296: 33140767

Title: A Case Study on the Real-time Click Stream Analysis System  
Authors: Sangkyun Kim, Choon Seong Leem  
<saviour@somansa.com>  
Country: Korea

A14(4:30-4:50): HE016: 33140990

TITLE: Discretization of Continuous Attributes in Rough Set Theory and Its Application  
Authors: Gexiang Zhang, Laizhao Hu, and Weidong Jin  
<zhgxdylan@tom.com>  
Country: China

A15(4:50-5:10) HE037: 33141014

TITLE: Adopting Ontologies and Rules in Web Searching Services  
Authors: He Hu, Xiao-yong Du <write2huhe@yahoo.com>  
Country: China

A16(5:10-5:30) HE056: 33141032

TITLE: SVM Model Selection with the VC Bound  
Authors: Huaqing Li, Shayu Wang, and Feihu Qi  
waking\_lee@sjtu.edu.cn  
Country: China

A17(5:30-5:50) PAPER220: 33140685

Title: String Matching with Swaps in a Weighted Sequence  
Authors: Hui Zhang, Qing Guo, Costas S. Iliopoulos  
<hui@dcs.kcl.ac.uk>  
Country: China

A18(5:50-6:10): PAPER234: 33140710

Title: A Simple Group Diffie-Hellman Key Agreement Protocol without Member Serialization  
Authors: Xukai Zou, Byrav Ramamurthy  
<xkzou@cs.iupui.edu>  
Country: USA

### Section: Networking

**Co-Chairs:** Ming-lu Li, and Hui Liu (Shanghai Jiaotong University, China)

B12(3:50-4:10): PAPER290: 33140156

Title: A MPLS-based Micro-Mobility Supporting Scheme in Wireless Internet  
Authors: SuKyoung Lee <sklee@sejong.ac.kr>  
Country: Korea

B13(4:10-4:30):

Title: Numerical and Analytical Study on the Pull-in Instability of Micro-structure under Electrostatic Loading  
Authors: Zhang Yin and Zhao Ya-pu  
[zhangyin@lnm.imech.ac.cn](mailto:zhangyin@lnm.imech.ac.cn)  
Country: China

B14(4:30-4:50): PAPER279: 33140138

Title: Approximate Waiting Time Analysis of Burst Queue at an Edge in Optical Burst-Switched Networks  
Authors: SuKyoung Lee <sklee@sejong.ac.kr>  
Country: Korea

B15(4:50-5:10) PAPER269: 33140126

Title: Networked Control System Design Accounting for Delay Information  
Authors: O.K. Kwon <okkwon@inha.ac.kr>  
Country: Korea

B16(5:10-5:30) HE043: 33140357

TITLE: An Efficient Multiple-constraints QoS Routing Algorithm Based on Nonlinear Path Distance  
Authors: Xiaolong Yang, Min Zhang, and Keping Long  
<yangxl@cqupt.edu.cn>  
Country: China

B17(5:30-5:50) PAPER355: 33140214

TITLE: Application of the Hamiltonian Circuit Latin Square to the Parallel Routing Algorithm on 2 Circulant Networks

Authors: Yongeun Bae, Llyong Chung  
yc@mail.chosun.ac.kr>  
Country: Korea

**Section: Imaging processing**

**Chair:** Takao Miura (Hosei University, Japan)

C12(3:50-4:10): PAPER333: 33141130

TITLE: A Brushlet-Based Feature Set Applied to Texture Classification

Authors: Tan Shan, Xiangrong Zhang, Licheng Jiao  
<tanshan5989@yahoo.com.cn>

Country: China

C13(4:10-4:30): PAPER371: 33141155

TITLE: Adaptive Model-based Multi-Person Tracking

Authors: Kyoung-Mi Lee <kmllee@duksung.ac.kr>

Country: Korea

C14(4:30-4:50): PAPER397: 33141162

TITLE: A Novel Noise Modeling for Object Detection Using Uncalibrated Difference Image

Authors: Joungwook Park, Kwan H. Lee <vzo@gist.ac.kr>

Country: Korea

C15(4:50-5:10) HE023: 33140280 (replace PAPER418)

TITLE: Fractal Tiling with the Extended Modular Group

Authors: Rui-song Ye, Yu-ru Zou, Jian Lu <rsye@stu.edu.cn>

Country: China

C16(5:10-5:30) HE024: 33141192

TITLE: Imaging Electromagnetic Field using SMP Image

Authors: Guo Wei, Chai Jianyun, and Tang Zesheng  
<netone@gmail.com>

Country: China

C17(5:30-5:50) PAPER301: 33141106

Title: Finding the Natural Problem in the Bayer Dispersed Dot Method with Genetic Algorithm

Authors: Timo Mantere <tmantere@lut.fi>

Country: Finland

C18(5:50-6:10) PAPER275: 33141082

Title: Color Image Vector Quantization using an Enhanced Self-Organizing Neural Network

Authors: Kwang Baek Kim, Abhijit S. Pandya  
<gbkim@silla.ac.kr>

Country: Korea

**Section: Interdisciplinary Science**

**Co-Chairs:** Ai Kah Soh (The University of Hong Kong, Hong Kong), Juan Zhang (Donghua University)

D12(3:50-4:10): HE047: 33140457

TITLE: Allometric Scaling Law for Static Friction of Fibrous Materials

Authors: Yue Wu, Yu-Mei Zhao, Jian-Yong Yu, Ji-Huan He  
<noodlewu@mail.dhu.edu.cn>

Country: China

D13(4:10-4:30): HE055: 33140477

TITLE: The Application of Nonaffine Network Structural Model in Sine Pulsating Flow Field

Authors: Juan Zhang <zhangjuan@dhu.edu.cn>

Country: China

D14(4:30-4:50): PAPER445: 33140640

TITLE: A Brief Review on Allometric Scaling in Biology

Authors: Ji-Huan He <jhhe@dhu.edu.cn>

Country: China

D15(4:50-5:10) PAPER379: 33140405

TITLE: Use of Simulation Technology for Prediction of Radiation Dose in Nuclear Power Plant

Authors: Yoon Hyuk Kim, Won Man Park

<yoonhkim@khu.ac.kr>

Country: Korea

D16(5:10-5:30) PAPER442: 33140429

TITLE: Monte Carlo Simulation of the Effects of Large Blood Vessels during Hyperthermia

Authors: Zhong-Shan Deng <zsdeng@cl.cryo.ac.cn>, Jing Liu

Country: China

D17(5:30-5:50) PAPER423: 33140898

Title: Hybrid Genetic Algorithms and Case-Based Reasoning Systems

Authors: Hyunuchul Ahn, Kyoung-jae Kim, and Ingoo Han

<goodguy@kgs.m.kaist.ac.kr>

Country: Korea

D18(5:50-6:10) HE002: 33140435

TITLE: A Delimitative and Combinatorial Algorithm for Discrete Optimum Design with Different Discrete Sets

Authors: Lianshuan Shi Heng Fu <shilianshuan@263.net>

Country: China

**Dinner: 6:00PM - 8:00PM** (attendees on their own)

18:00PM-20:00PM. **December 16**, CIS04 Business Meeting. We invite the co-chairs, members of the scientific committee, and anyone else who are interested in helping organize the next International

Symposium on Computational and Information Sciences. We will decide the location, host, and time of the next CIS, and form the scientific committee. (Location is to be confirmed, please check the message board for up-to-date information.)

**December 17, 2004**

**Student Paper Award:** 8:30 - 8:50AM

**Keynote Speaker:** 8:50AM - 9:40AM (Chair: Yu-xi Fu)

Stephen M. Pizer: Anatomic Geometry and Deformations and Their Population Statistics (Kenan Professor of Computer Science, University of North Carolina at Chapel Hill, USA)

**Coffee Break:** 9:40AM - 10:10AM

**Section: Biological modeling and simulation**

**Co-Chairs:** Stephen M. Pizer (University of North Carolina at Chapel Hill, USA), Haiying Wang (University of Ulster at Jordanstown, N. Ireland)

A19(10:10-10:30): HE052: 33140469

TITLE: Representation of Signal Transduction with Aberrance Using Ipi Calculus

Authors: Min Zhang, Guoqiang Li, Yuxi Fu, Zhizhou Zhang, and Lin He Rosy Zhang <zhangmin@sjtu.edu.cn>

Country: China

A20(10:30-10:50): PAPER253: 33140383

Title: Three-Dimensional Motion Analysis of the Right Ventricle Using an Electromechanical Biventricular Model

Authors: Ling Xia, Meimei Huo

<xialing@hznc.com>

Country: China

A21(10:50-11:10): PAPER265: 33140552  
Title: Discontinuity-Preserving Moving Least Squares Method  
Authors: Huafeng Liu, Pengcheng Shi <liuhf@zju.edu.cn>  
Country: China

A22(11:10-11:30): HE032: 33140452  
TITLE: Stability of Non-autonomous Delayed Cellular Neural Networks  
Authors: Qiang Zhang, Dongsheng Zhou, Xiaopeng Wei <zhangq30@yahoo.com>  
Country: China

**Section: Data mining and information**

**Chair:** Yun-Qiu Shen (Western Washington University, USA)

B19(10:10-10:30): PAPER398: 33140872  
TITLE: Determining Optimal Decision Model for Support Vector Machine by Genetic Algorithm  
Authors: Syng-Yup Ohn, Ha-Nam Nguyen, Dong Seong Kim, and Jong Sou Park <nghanam@hangkong.ac.kr>  
Country: Korea

B20(10:30-10:50): PAPER448: 33140960  
TITLE: Application of Web Service in Web Mining  
Authors: Beibei Li, Jiajin Le <bb@mail.dhu.edu.cn>  
Country: China

B21(10:50-11:10): HE009: 33140984  
TITLE: A Revision for Gaussian Mixture Density Decomposition Algorithm  
Authors: Xiaobing Yang, Fansheng Kong, Bihong Liu <konglab@zju.edu.cn>  
Country: China

B23(11:10-11:30) PAPER273: 33141076  
Title: p-Belief Communication Leading to a Nash Equilibrium  
Authors: Takashi Matsuhisa <mathisa@ge.ibaraki-ct.ac.jp>  
Country: Japan

**Section: Bioinformatics**

**Chair:** Dexuan Xie (University of Wisconsin at Milwaukee, USA)

C19(10:10-10:30): PAPER429: 33140634  
Title: The Structural Classes of Proteins Predicted by Multi-resolution Analysis  
Authors: Jing Zhao, Peiming Song, Linsen Xie, Jianhua Luo <zhaojing\_cq@hotmail.com>  
Country: China

C20(10:30-10:50): PAPER233: 33140489  
Title: Peptidomic Pattern Analysis and Taxonomy of Amphibian Species  
Authors: Huiru Zheng, Piyush C Ojha, Stephen McClean, Norman D Black John G. Hughes, and Chris Shaw <H.Zheng@ulster.ac.uk>  
Country: England

C22(10:50-11:10)PAPER345: 33140596  
TITLE: PASL: Prediction of the Alpha-Helix Transmembrane by Pruning the Subcellular Location  
Authors: Young Joo Seol, Hyun Suk Park, Seong-Joon Yoo <sjyoo@sejong.ac.kr>  
Country: Korea

C23(11:10-11:30): PAPER378: 33140602  
TITLE: Information Processing in Cognitive Science  
Authors: Sung-Kwan Je, Jae-Hyun Cho, Kwang-Baek Kim <jimmy374@pusan.ac.kr>  
Country: Korea

**Section: Information retrieval and information processing**

**Chair:** Kwang-Baek Kim (Silla University, Korea)

D19(10:10-10:30): PAPER330: 33140791

**TITLE:** Component-Based Recommendation Agent System for Efficient Email Inbox Management

**Authors:** Ok-Ran Jeong, Dong-Sub Cho  
<orchung@ewha.ac.kr>

**Country:** Korea

D20(10:30-10:50): HE006: 33140652

**TITLE:** A Novel Feature Selection Approach and Its Application

**Authors:** Gexiang Zhang, Weidong Jin, and Laizhao Hu  
<zhgxdylan@tom.com>

**Country:** China

D21(10:50-11:10): PAPER244: 33140513

**Title:** Text Retrieval Using Sparsified Concept Decomposition Matrix

**Authors:** Jing Gao, and Jun Zhang <jzhang@cs.uky.edu>

**Country:** USA

D22(11:10-11:30): PAPER292: 33140756

**Title:** Image Retrieval Using Dimensionality Reduction

**Authors:** Ke Lu, Xiaofei He, Jiazhi Zeng  
<xiaofei@cs.uchicago.edu>

**Country:** China

D23(11:30-11:50) PAPER438: 33140936

**TITLE:** An Instance Learning Approach for Automatic Semantic Annotation

**Authors:** Wang Shu, and Chen Enhong <cheneh@ustc.edu.cn>

**Country:** China

**Lunch Break: 11:50AM-1:30PM**(attendees on their own)

**Section: Biomedical imaging**

**Co-Chairs:** Yong-guk Kim (Sejong University, Korea), Oubong Gwon (Chonbuk National University, Korea)

A24(1:30-1:50): PAPER267: 33140560

**Title:** Multiscale Centerline Extraction of Angiogram Vessels Using Gabor Fibers

**Authors:** nong sang <nsang@hust.edu.cn>, Qiling Tang, Xiaoxiao Liu, Wenjie Weng

**Country:** China

A25(1:50-2:10): PAPER306: 33140578

**Title:** Computerized Detection of Liver Cirrhosis Using Wave Pattern of Spleen in Abdominal CT Images

**Authors:** Won Seong, June-Sik Cho, Seung-Moo Noh, Jong-Won Park <wseong123@empal.com>

**Country:** Korea

A26(2:10-2:30): PAPER307: 33140584

**Title:** Automatic Segmentation Technique without User Modification for 3D Visualization in Medical Images

**Authors:** Won Seong, Eui-Jeong Kim, Jong-Won Park <wseong123@empal.com>

**Country:** Korea

A27(2:30-2:50): PAPER422: 33140628

**Title:** Deterministic Annealing EM and Its Application in Natural Image Segmentation

**Authors:** Jonghyun Park, Wanhyun Cho, Soonyoung Park <jhpark@dahong.chonbuk.ac.kr>

Country: Korea

A28(2:50-3:10) HE011: 33140658

TITLE: Applying Fuzzy Growing Snake to Segment Cell Nuclei in Color Biopsy Images

Authors: Min Hu, Xijian Ping, Yihong Ding  
<hhummin@yahoo.com>

Country: China

A29(3:10-3:30): HE014: 33140664

TITLE: Evaluation of Morphological Reconstruction, Fast Marching and a Novel Hybrid Segmentation Method

Authors: Jianfeng Xu, Lixu Gu <xujf@sjtu.edu.cn>

Country: China

**Section: Data mining - computational learning from unstructured data**

**Chair:** Wai Lam (Chinese University of Hong Kong, China)

B24(1:30-1:50): PAPER436: 33140922

TITLE: Giving Temporal Order to News Corpus

Authors: Hiroshi Uejima, Takao Miura, and Isamu Shioya  
<miurat@k.hosei.ac.jp>

Country: Japan

B25(1:50-2:10): PAPER437: 33140928

TITLE: Semantic Role Labeling using Maximum Entropy

Authors: Kwok Cheung Lan, Kei Shiu. Ho, Wing Pong Luk, and Hong Va Leong <csksho@comp.polyu.edu.hk>

Country: Hongkong, China

B26(2:10-2:30): PAPER232: 33140704

Title: Discretization of Multidimensional Web Data for Informative Dense Regions Discovery

Authors: Edmond H. Wu, Michael K. Ng, Andy M. Yip, and Tony

F. Chan <kkpong@hkusua.hku.hk>

Country: Hongkong, China

B27(2:30-2:50): PAPER439: 33140942

TITLE: Interpretable Query Projection Learning

Authors: Yiqiu Han, Wai Lam <cyberboy@cuhk.edu.hk>

Country: Hongkong, China

B28(2:50-3:10) PAPER440: 33140948

TITLE: Improvements to Collaborative Filtering Systems

Authors: Fu Lee Wang <flwang@cityu.edu.hk>

Country: Hongkong, China

B29(3:10-3:30): PAPER441: 33140954

TITLE: Looking Up Files in Peer-to-Peer Using Hierarchical Bloom Filters

Authors: Kohei Mitsuhashi, Takao Miura, Isamu Shioya  
<i04r3243@k.hosei.ac.jp>

Country: Japan

**Section: Information security**

**Chair:** Yuxi Fu (Shanghai Jiaotong University, China)

C24(1:30-1:50): PAPER388: 33140857

TITLE: Analyzing iKP Security in Applied Pi Calculus

Authors: Yonggen Gu, Guoqiang Li, Yuxi Fu  
<gyg68@sjtu.edu.cn>

Country: China

C25(1:50-2:10): HE020: 33141002

TITLE: Factoring Based Proxy Signature Schemes with Forward-Security

Authors: Zhenchuan Chai and Zhenfu Cao  
<zcchai@cs.sjtu.edu.cn>

Country: China

C26(2:10-2:30) PAPER338: 33140798

Information Security Based on Fourier Plane Random Phase  
Coding and Optical Scanning Classification

Authors: Kyu B. Doh, Kyeongwha Kim, Jungho Ohn, Ting-C  
Poon <kdoh@hangkong.ac.kr>

Country: Korea

C27(2:30-2:50): PAPER295: 33140162

Title: A Novel RBF Neural Network with Fast Training and  
Accurate Generalization

Authors: Lipo Wang, Bing Liu, and Chunru Wan  
<liubing@pmail.ntu.edu.sg>

Country: Singapore

C28(2:50-3:10): PAPER395: 33140866

TITLE: General Public Key m-out-of-n Oblivious Transfer

Authors: Zhide Chen <021021091@fudan.edu.cn>, Hong Zhu

Country: China

### **Section: E-commerce**

**Chair:** Xukai Zou (Indiana University-Purdue University at  
Indianapolis, USA)

D24(1:30-1:50): PAPER339: 33140804

TITLE: Simulation on the Interruptible Load Contract

Authors: Jianxue Wang, Xifan Wang, and Tao Du  
<jxwang@mailst.xjtu.edu.cn>

Country: China

D25(1:50-2:10): PAPER348: 33140816

TITLE: An Agent Based Supply Chain System with Neural  
Network Controlled Processes

Authors: Nurat Ermis, Ozgur Koray Sahingoz, Fusun Ulengin  
<oksahingoz@netscape.net>

Country: Turkey

D26(2:10-2:30): HE001: 33140966

TITLE: A Collaborative Work Framework for Joined-up  
E-government Web Services

Authors: Liuming Lu, Guojin Zhu, and Jiaxun Chen  
<lmlu@mail.dhu.edu.cn>

Country: China

D27(2:30-2:50): HE044: 33141026

TITLE: Fair Tracing without Trustees for Multiple Banks

Authors: Chen Lin, XiaoQing Huang, Jinyuan You  
<chenlin@sjtu.edu.cn>

Country: China

D28(2:50-3:10): PAPER294: 33140761

Title: Three Integration Methods for a Component-based  
NetPay Vendor System

Authors: Xiaoling Dai, and John Grundy <dai\_s@usp.ac.fj>

Country: Fiji

D29(3:10-3:30):

Title: Nonlinear Finite Element Modeling of the  
Electromagmechanical Behavior of Ferroelectric Ceramics

Authors: Ai Kah Soh, Dai-Ning Fang and Tie-Qi Liu

Country: Hong Kong, China

**Coffee Break:** 3:30PM – 3:50PM

### **Section: Computational graphics**

**Chair:** Mohamed Othman (University Putra Malaysia, Malaysia)

A30(3:50-4:10): PAPER257: 33141064

Title: Scientific Computing on Commodity Graphics  
Hardware

Authors: Ruigang Yang <ryang@cs.uky.edu>  
Country: USA

A31(4:10-4:30): PAPER286: 33141088

Title: Alternate Pattern Fill  
Authors: Xiao-Xin Zhang, Jun-Hai Yong, Lie-Hang Gong,  
Guo-Qin Zheng, and Jia-Guang Sun  
<yongjh@tsinghua.edu.cn>  
Country: China

A32(4:30-4:50): PAPER293: 33141094

Title: A Boundary Surface Based Ray Casting using 6-Depth  
Buffers  
Authors: Ju-Whan Song, Ou-Bong Gwun, Seung-Wan Kim and  
Yong-Guk Kim <obgwun@chonbuk.ac.kr>  
Country: Korea

A33(4:50-5:10) PAPER309: 33141118

Title: Alternation of Levels-of-Detail Construction and  
Occlusion Culling for Terrain Rendering  
Authors: Hyung Sik Yoon, Moon-Ju Jung, and JungHyun Han  
<jhan@korea.ac.kr>  
Country: Korea

A34(5:10-5:30) PAPER356: 33141142

TITLE: 3D Mesh Fairing Based on Lighting and Geometric  
Conditions for Interactive Smooth Rendering  
Authors: Seung-Man Kim and Kwan H. Lee  
<lee@kyebek.kjist.ac.kr>  
Country: Korea

A35(5:30-5:50) PAPER360: 33141149

TITLE: Up to Face Extrusion Algorithm for Generating  
B-rep Solid  
Authors: Yu Peng, Hui Zhang, Jun-Hai Yong, Jia-Guang Sun

<pengyu00@mails.tsinghua.edu.cn>  
Country: China

**Section: Data mining**

**Co-Chairs:** Huiru Zheng (University of Ulster, United Kingdom),  
Wei Lai (Swinburne University of Technology, Australia)

B30(3:50-4:10) PAPER352: 33140826

TITLE: Retrieval Based On Combining Language Models  
With Clustering  
Authors: Hua Huo, Boqin Feng <huohua@mailst.xjtu.edu.cn>  
Country: China

B31(4:10-4:30): PAPER368: 33140845

TITLE: A Modular k-Nearest Neighbor Classification Method  
for Massively Parallel Text Categorization  
Authors: Hai Zhao <areal@sjtu.edu.cn> Bao-Liang Lu  
Country: China

B32(4:30-4:50): PAPER408: 33140886

Title: An Agent based Privacy Preserving Ming for  
Distributed Databases  
Authors: Sung Baik <sbaik@sejong.ac.kr>, Jerzy Bala,  
Daewoong Rhee  
Country: Korea

B33(4:50-5:10) PAPER289: 33140750

Title: A Distributed Knowledge Extration Data Mining Algorithm  
Authors: Jiangbo Liu [jiangbo@bumail.bradley.edu](mailto:jiangbo@bumail.bradley.edu) Umadevi  
Thanneru, Daizhan Cheng  
Country: USA

BA34(5:10-5:30) PAPER302: 33140773

Title: Mining Medline for New Possible Relations of  
Concepts

Authors: Wei Huang, Yoshiteru Nakamori, Shouyang Wang,  
Tiejun Ma <w-huang@jaist.ac.jp>  
Country: Japan

B35(5:30-5:50) PAPER426: 33140910

Title: A Parallel Optical Computer System for Large  
Database and Knowledge Based Systems  
Authors: Jong Whoa Na <jwna21@hotmail.com>  
Country: Korea

**Section: Web and grid based computation and simulations**

**Chair:** Ruigang Yang (University of Kentucky, USA)

C30(3:50-4:10): HE050: 33140463

TITLE: Flexible Web Service Composition Based on Interface  
Matching  
Authors: Shoujian Yu, Ruiqiang Guo, and Jiajin Le  
<jackyysj@mail.dhu.edu.cn>  
Country: China

C31(4:10-4:30): HE034: 33141008

TITLE: A Method of Acquiring Ontology Information from  
Web Documents  
Authors: Lixin Han, Guihai Chen, Li Xie  
<lixinhan2002@yahoo.com.cn>  
Country: China

C33(4:50-5:10) PAPER327: 33140785

TITLE: Dynamic Mining for Web Navigation Patterns Based  
on Markov Model  
Authors: JiuJun Chen, Ji Gao, Jun Hu, Bei Shui Liao  
<rackycjj@zju.edu.cn>  
Country: China

C34(5:10-5:30) PAPER401: 33140880

TITLE: A Mobile Application of Client-Side Personalization  
based on WIPI Platform  
Authors: SangJun Lee <sjlee@seonam.ac.kr>  
Country: Korea

C35(5:30-5:50) PAPER402: 33141170

TITLE: Fast and Accurate Half Pixel Motion Estimation Using  
the Property of Motion Vector  
Authors: MiGyoung Jung, GueeSang Lee  
<mgjung@chonnam.chonnam.ac.kr>  
Country: Korea

C36(5:50-6:10) PAPER446: 33140646

TITLE: On He Map (River Map) and the Oldest Scientific  
Management Method  
Authors: Ji-Huan He <jhhe@dhu.edu.cn>  
Country: China

**Section: Computational graphics**

**Co-Chairs:** Pengcheng Shi (University of Science and Technology,  
Hong Kong, China) and Huanfeng Liu (Zhejiang University)

D30(3:50-4:10): PAPER409: (33140892)

Title: Geometrical Analysis for Assistive Medical Device  
Design  
Authors: Taceung D. Yoo, Eunyong Kim, Daniel K. Kogen,  
JungHyun Han <jhan@korea.ac.kr>  
Country: Korea

D31(4:10-4:30): HE049: 33140286

TITLE: Shelling Algorithm in Solid Modeling  
Authors: Dong-Ming Yan, Hui Zhang, Jun-Hai Yong, Yu Peng,  
Jia-Guang Sun <yandm@cg.cs.tsinghua.edu.cn>  
Country: China

D32(4:30-4:50): PAPER213: 33141037

Title: Unbalanced Hermite Interpolation with Tschirnhausen Cubics  
Authors: Jun-Hai Yong, Hua Su <yongjh@tsinghua.edu.cn>  
Country: China

D33(4:50-5:10) PAPER252: 33141058

Title: Bilateral Filter for Meshes Using New Predictor  
Authors: Yu-Shen Liu, Pi-Qiang Yu, et al.  
<liuyushen00@mails.tsinghua.edu.cn>  
Country: China

D34(5:10-5:30) PAPER403: 33141178

TITLE: An Efficient Half Pixel Motion Estimation Algorithm Based on Spatial Correlations  
Authors: HyoSun Yoon, GueeSang Lee, and YoonHeong Shin  
<estheryoon@naver.com>  
Country: Korea

D35(5:30-5:50) PAPER406: 33141186

TITLE: Multi-step subdivision algorithm for Chaikin curves  
Authors: Ling Wu, Jun-Hai Yong, You-Wei Zhang, Li Zhang  
<wul02@mails.tsinghua.edu.cn>  
Country: China

D36(5:50-6:10) PAPER251: 33141052

Title: Computing the Sign of a Dot Product Sum  
Authors: Yong-Kang Zhu, Jun-Hai Yong, Guo-Qin Zheng  
<zyk02@mails.tsinghua.edu.cn>  
Country: China

**Banquet: 6:10PM - 8:00PM, Dec. 17**

**December 18, 2004**

**Business Announcement:** 8:30 - 8:50AM

**Keynote Speaker:** 8:50AM - 9:40AM (Chair: Ji-Huan He)

Haesun Park: Matrix Decompositions and Effective Dimension Reduction for Classification, Professor of Computer Science, University of Minnesota, USA

**Coffee Break:** 9:40AM - 10:10AM

**Section: Biomedical imaging**

**Chair:** Zhiling Lan, (Illinois Institute of Technology, USA)

A37(10:10-10:30): PAPER264: 33140546

Title: Interactive GSOM-based Approaches for Improving Biomedical Pattern Discovery and Visualization  
Authors: Haiying Wang, Francisco Azuaje, and Norman Black  
<hy.wang@ulster.ac.uk>  
Country: England

A38(10:30-10:50): PAPER421: 33140620

Title: Proteomic Pattern Classification using Bio-markers for Prostate Cancer Diagnosis  
Authors: Jung-Ja Kim, Yongggwan Won, Young-Ho Kim  
<j2kim@chonnam.ac.kr>  
Country: Korea

A39(10:50-11:10): HE027: 33140447

TITLE: A BioAmbients Based Framework for Chain-Structured Biomolecules Modelling  
Authors: Cheng Fu, Zhengwei Qi, Jinyuan You

<fucheng@ca.sjtu.edu.cn>  
Country: China

A40(11:10-11:30)PAPER240: 33140495  
Title: Global and Local Shape Analysis of the Hippocampus based on Level-of-Detail Representations  
Authors: Jeong-Sik Kim, Soo-Mi Choi, Yoo-Joo Choi, and Myoung-Hee Kim <smchoi@sejong.ac.kr>  
Country: Korea

**Section: Control, modelling & genetic algorithm**

**Co-Chairs:** Haesun Park (University of Minnesota, USA), Enhong Chen (University of Science and Technology of China, China)

B37(10:10-10:30): HE015: 33140324  
TITLE: Genetic Algorithm Based Neuro-fuzzy Network Adaptive PID Control and Its Applications  
Authors: Dongqing Feng, Lingjiao Dong, Minrui Fei, Tiejun Chen <dqfeng@zzu.edu.cn>  
Country: China

B38(10:30-10:50): PAPER203: 33140007  
Title: An Algorithm for Optimal Tuning of Fuzzy PID Controllers for Precision Measuring Device  
Authors: Jia Lu, Yunxia Hu <clujia@email.uophx.edu>  
Country: USA

B39(10:50-11:10): PAPER374: 33140851  
TITLE: Avatar Behavior Representation and Control Technique: A Hierarchical Scripts Approach  
Authors: Jae-Kyung Kim, Won-Sung Sohn, Soon-Bum Lim, Yoon-Chui Choy <ki187cm@rainbow.yonsei.ac.kr>  
Country: Korea

B40(11:10-11:30): PAPER447: 33140304  
TITLE: Analysis on Networked-induced Delays in Networked Learning based Control Systems  
Authors: Li Lixiong, Fei Minrui, and Zhou Xiaobing <lilix@sh163.net>  
Country: China

**Section: Medical imaging**

**Chair:** Timo Mantere (Lappeenranta University of Technology, Finland)

C37(10:10-10:30): PAPER383: 33140608  
TITLE: Reconstruction of Human Anatomical Models from Segmented Contour Lines  
Authors: BYEONG-SEOK SHIN <bsshin@inha.ac.kr>  
Country: Korea

C38(10:30-10:50): PAPER243: 33140507  
Title: Brain Region Extraction and Direct Volume Rendering of MRI Head Data  
Authors: Yong-Guk Kim, Ou-Bong Gwun, Ju-Whan Song <ykim@sejong.ac.kr>  
Country: Korea

C39(10:50-11:10): PAPER242: 33140501  
Title: Vascular Segmentation Using Level Set Method  
Authors: Yongqiang Zhao, Lei Zhang, Minglu Li <zhaoyq@cs.sjtu.edu.cn>  
Country: China

C40(11:10-11:30): PAPER229: 33140483  
Title: Microcalcifications Detection in Digital Mammogram using Morphological Bandpass Filters  
Authors: Ju Cheng Yang, Jin Wook Shin, Gab Seok Yang, Dong Sun Park <jwshin@chonbuk.ac.kr>

Country: Korea

C41(11:30-11:50) PAPER385: 33140614

TITLE: Efficient Perspective Volume Visualization Method  
Using Progressive Depth Refinement

Authors: BYEONG-SEOK SHIN <bsshin@inha.ac.kr>

Country: Korea

**Section: Image processing and medical imaging**

**Chair:** Du-Yih Tsai (Niigata University, Japan)

D37(10:10-10:30): PAPER313: 33140590

Title: Adaptive Stereo Brain Images Segmentation Based on  
the Weak Membrane Model

Authors: Yonghong Shi, Feihu Qi [shi-yh@cs.sjtu.edu.cn](mailto:shi-yh@cs.sjtu.edu.cn)

Country: China

D38(10:30-10:50): PAPER329: 33141124

TITLE: New Algorithms for Feature Description, Analysis  
and Recognition of Binary Image Contours

Authors: Donggang Yu <dyu@it.swin.edu.au>, Wei Lai

Country: Australia

D39(10:50-11:10): PAPER341: 33141136

TITLE: An Image Analysis System for Tongue Diagnosis in  
Traditional Chinese Medicine

Authors: Yonggang Wang, Yue Zhou, Jie Yang, Qing Xu  
<yonggangwang@sjtu.edu.cn>

Country: China

D40(11:10-11:30): PAPER283: 33140566

Title: Improved Adaptive Neighborhood Pre-Processing for  
Medical Image Enhancement

Authors: Du-Yih Tsai, and Yongbum Lee  
<tokugi\_sai@hotmail.com>

Country: Japan

D41(11:30-11:50) HE007: 33140972

TITLE: A Novel Method for Eye Features Extraction

Authors: Zhonglong Zheng, Jie Yang, Meng Wang, Yonggang  
Wang <zhgxdylan@tom.com>

Country: China

**Lunch Break: 11:50AM-1:30PM** (attendees on their own)

**Section: Informatics and modeling biomedical imaging**

**Chair:** Zhenquan Li (University of South Pacific, Fiji)

A43(1:50-2:10): PAPER258: 33140528

Title: Robust TSK Fuzzy Modeling Approach Using Noise  
Clustering Concept for Function Approximation

Authors: Kyoungjung Kim, Kyu Min Kyung, Chang-Woo Park,  
Euntai Kim, Mignon Park <kjkim@yeics.yonsei.ac.kr>

Country: Korea

A44(2:10-2:30): PAPER261: 33140534

Title: Helical CT Angiography Of Aortic Stent Grafting:  
Comparison Of Three-Dimensional Rendering Techniques

Authors: Zhonghua Sun, and Huiru Zheng  
<H.Zheng@ulster.ac.uk>

Country: England

A45(2:30-2:50): PAPER262: 33141070

Title: FIR Filtering Based Image Stabilization Mechanism for  
Mobile Video Appliances

Authors: Pyung Soo Kim <kimps@samsung.com>

Country: Korea

A46(2:50-3:10) PAPER431: 33140916  
Title: Transaction Processing in Partially Replicated Databases  
Authors: Misook Bae, Buhyun Hwang  
<msbae@chonnam.chonnam.ac.kr>  
Country: Korea

A47(3:10-3:30): HE008: 33140978  
TITLE: A Q-Based Framework for Demand Bus Simulation  
Authors: Zhiqiang Liu, Cheng Zhu, Huanye Sheng, and Peng Ding <zqliu@sjtu.edu.cn>  
Country: China

A48(3:30-3:50)PAPER266: 33140722  
Title: Implementation of the Security System for Instant Messengers  
Authors: Sangkyun Kim <saviour@somansa.com>, Choon Seong Leem  
Country: Korea

**Section: Mobile computing**

**Co-Chairs:** Xia Ling (Zhejiang University), Jiangbo Liu (Bradley University, USA)

B42(1:30-1:50): HE036: 33140339  
TITLE: A Scalable and Reliable Mobile Agent Computation Mode  
Authors: Liu Yong, Xu Congfu, Wu Zhao, Pan Yunhe  
<cckaffe@yahoo.com.cn>  
Country: China

B43(1:50-2:10): PAPER384: 33140268  
TITLE: An Authentication Scheme Based Upon Face Recognition for the Mobile Environment

Authors: Yong-Guk Kim and Taekyoung Kwon  
<ykim@sejong.ac.kr>  
Country: Korea

B44(2:10-2:30): PAPER205: 33140019  
Title: Optimal Designs of Directed Double-loop Networks  
Authors: Chen Bao-Xing, Xiao Wen-Jun  
<cbaoxing@hotmail.com>  
Country: China

B45(2:30-2:50): PAPER288: 33140150  
Title: Genetic Algorithms with Stochastic Ranking for Optimal Channel Assignment in Mobile Communications  
Authors: Lipo Wang, and Wen Gu <PG01634077@ntu.edu.sg>  
Country: Singapore

B46(2:50-3:10) PAPER268: 33140728  
Title: Communication in Awareness Reaching Consensus without Acyclic Condition  
Authors: Ken Horie, and Takashi Matsuhisa  
<abc9872000jp@yahoo.co.jp>  
Country: Japan

B47(3:10-3:30): HE038: 33141020  
TITLE: An Arbitrated Quantum Message Signature Scheme  
Authors: Xin Lu, Deng-Guo Feng <lu\_xin@mails.gscas.ac.cn>  
Country: China

**Section: Pattern recognition**

**Co-Chairs:** Teng Zhu (Grambling State University, USA)

C42(1:30-1:50): PAPER276: 33140744  
Title: An Intelligent System for Passport Recognition using Enhanced RBF Network

Authors: Kwang Baek Kim, Young-Ju Kim, Am-Suk Oh  
<gbkim@silla.ac.kr>  
Country: Korea

C43(1:50-2:10): PAPER270: 33140132  
Title: Eidon: Real-time Performance Evaluation Approach for Distributed Programs Based on Capacity of Communication Links  
Authors: Yunfa Li, Hai Jin, et al. <hjin@mail.hust.edu.cn>  
Country: China

C44(2:10-2:30) PAPER235: 33140090  
Title: Boundary Integral Simulation of the Motion of Highly Deformable Drops in A Viscous Flow with Spontaneous Marangoni Effect  
Authors: Wei Gu, Olga Lavrenteva, and Avinoam Nir  
<ceolga@technion.ac.il>  
Country: Israel

C45(2:30-2:50)C47(3:10-3:30): PAPER344: 33140810  
TITLE: Consistency Conditions of the Expert Rule Set in the Probabilistic Pattern Recognition  
Authors: Marek Kurzynski <Marek.Kurzynski@pwr.wroc.pl>  
Country: Poland

C46 (2:50-3:10) PAPER601  
TITLE: A streamfunction-velocity formulation for the Navier-Stokes equations  
Authors: Jiten C. Kalita and Murli M. Gupta  
Country: India and USA

C47(3:30-3:50): PAPER364: 33140832  
TITLE: Lightweight Mobile Agent Authentication Scheme for Home Network Environments  
Authors: Jae-gon Kim, Gu Su Kim, Young Ik Eom  
<angel77@ece.skku.ac.kr>

Country: Korea

**Section: Computing science and relative topics**

**Chair:** Leonardo Traversoni (Universidad Autonoma Metropolitana, Mexico)

D42(1:30-1:50): HE031: 33140330  
TITLE: Formalizing the Environment View of Process Equivalence  
Authors: Yuxi Fu, Xiaojun Dong <dong-xj@cs.sjtu.edu.cn>  
Country: China

D43(1:50-2:10): HE051: 33140363  
TITLE: The Early and Late Congruences for Asymmetric  $\chi$ -Calculus  
Authors: Farong Zhong <zhong-fr@cs.sjtu.edu.cn>  
Country: China

D44(2:10-2:30): PAPER210: 33140037  
Title: The Distributed Wavelet-based Fusion Algorithm  
Authors: R. Sarochawikosit, T. Wiyarat, T. Achalakul  
<raj@cpe.kmutt.ac.th>  
Country: Thailand

D45(2:30-2:50) PAPER241: 33141046  
Title: An Efficient Iterative Optimization Algorithm for Imaging Thresholding  
Authors: Liju Dong <dong\_liju@yahoo.com.cn>, Ge Yu  
Country: China

D46 (2:50-3:10): PAPER600  
Title: Fast Determination of the 3D Characteristics of A Moving Object  
Author: Leonardo Traversoni [ltd@xanum.uam.mx](mailto:ltd@xanum.uam.mx)

Country: Mexico

D47(3:10-3:30): PAPER256: 33140520

Title: Knowledge-based Search Engine for Specific 3D Models

Authors: Dezhi Liu <liudezhi@zjuem.zju.edu.cn>, Anshuman Razdan

Country: China

D48(3:30-3:50): 10 PAPER212: 33140679

Title: HMMs for Anomaly Intrusion Detection

Authors: Ye Du, Huiqiang Wang, Yonggang Pang <duye@hrbeu.edu.cn>

Country: China

## Special Events

18:00PM-20:00PM. **December 15**, Evening Reception, this is an opportunity for the conference attendees to get together and to know each other before the conference starts. Light snacks and drinks will be provided. Location is to be confirmed. Contact the registration desk at Yinhe Hotel.

18:00PM-20:00PM. **December 16**, CIS04 Business Meeting. We invite the co-chairs, members of the scientific committee, and anyone else who are interested in helping organize the next International Symposium on Computational and Information Sciences. We will decide the location, host, and time of the next CIS, and form the scientific committee. (Location is to be confirmed.) **Official Language: English**

16:30PM-18:00PM. **December 18**. Meeting Room at College of Science, Donghua University

How to publish your work in scientific journals? Ji-Huan He (Regional Editor of Chaos, Solitons and Fractals), for Chinese Ph.D. students only. **Official Language: Chinese**

18:30-21:00, **December 18**. Editorial Meeting of International Journal of Nonlinear Sciences and Numerical Simulation, Xitianyou Hotel, for members of editorial board of IJNSNS and those are invited. **Official Language: Chinese**

## Subscription Information

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