The First International Conference on Networking and Distributed Computing (ICNDC 2010)

Conference Program

Hangzhou, Zhejiang, China

October 21-24, 2010

Table of Contents

Welcome from ICNDC 2010 General and Program Co-Chairs

Welcome to Hangzhou and to the First International Conference on Networking and Distributed Computing (ICNDC2010), held at Hangzhou, Zhejiang, China, October 21-24, 2010.

The Networking and Distributed Technologies are the most vital parts of IT technologies in the current days and the future. When the next generation of Internet comes true and mobile systems go to 3G or even 4G in the future, there are trends to transform legacy software into Internet applications. To bring together industrial and academic researchers to discuss hot topics and Trends on Networking and Distributed Computing, we organize the First International Conference on Networking and Distributed Computing (ICNDC2010) on Oct, 21-24, 2010 in Hangzhou, P.R.China. ICNDC2010 focuses on (1) distributed computing and distributed systems track including Clusters and Grids, SOA, SAAS,IAAS, Service Composition and Orchestration, Peer-to-Peer Systems, Cloud Computing, etc. (2) Networking track including IP networks, Next generation Internet, wireless network, wireless mesh networks,4G mobile communications and beyond, etc. (3) Distributed Applications track including application systems such as e-business, e-Science as well as application systems in the fields of Management Science and Economics and Education Science, etc.

Concurrent sessions will cover a wide range of topics and issues, including both contributed papers and special sessions/workshops on specific topics, all with a central focus of Distributed Computing and Networking. This year, we also have two workshops and four sessions that complemented ICNDC2010 program with contributions for specific topics. The workshops include The Second International Workshop on Semantic P2P Networks (SP2PN2010) (organized by Lican Huang), The first International Workshop on the Security of Wireless Sensor Networks (SecWSN 2010) (organized by Guiyi Wei), the session on Cloud Computing (organized by Junwei Cao), the session on Networked Robot (Organized by Yong Liu), the session on Economic Computing(Organized by Yingjun Lou), the session on Distributed Systems (Organized by Xiaoying Huang). The Conference Co-chairs and Program Co-chairs of ICNDC2010 would like to thank all the workshop and session chairs for their excellent work and effort in organizing these activities.

ICNDC2010 received 410 submissions (including main track papers, workshop papers and session papers) from over 20 countries and regions. All submitted papers have to go through a rigorous reviewing process. After rejecting parts of papers in the first round, each of the remainder submissions was reviewed by at least two independent reviewers in a standard peer-review process. Papers belonged to three categories: regular papers of 5 pages, short papers of 4 pages and poster papers of 2 pages. After rigorous peer-review, we finally select 81 papers (acceptance rate 20%) for publication.

ICNDC2010 is co-sponsored by Zhejiang Sci-Tech University, China; Institute of networking and Distributed Computing, Zhejiang Sci-Tech University, China; Chinese Academy of Sciences (CAS), China; State Key Laboratory of Networking and Switching, Beijing University of Posts and Communications, China; National Natural Science Foundation of China (NSFC), China;Science and Technology Department of Zhejiang Province, China and Hangzhou Virtual Zone Information Technology Co., Ltd. ICNDC2010 is also technically co-Sponsored by Parallel Computing Centre, Imperial College London, UK; Distributed & Scientific Computing, Cardiff University, UK ; Research Institute of Information Technology, Tsinghua University, China； IEEE Computer Society Technical Committee on Scalable Computing (TCSC), Canada. Their sponsorships support the success of conference.

ICNDC2010 would not have been successful without the support of many people and organizations. First and foremost, we would like to thank all the authors for submitting their papers to the conference, for their presentations and discussions during the conference. We would like to express our most sincere gratitude to Program Committee members and our professional reviewers, who carried out the most difficult work by carefully evaluating the submitted papers. We would like to give special thanks to the conference sponsors. Last but not least, we would like to thank all conference participants for their contribution and support. We hope that all participants can take this opportunity to share and exchange ideas with one another and enjoy ICNDC2010.

Lican Huang, Zhejiang Sci-Tech University, China
Yike Guo, Imperial College London, UK
Yuanan Liu, Beijing University of Posts and Communications, China
David W. Walker, Cardiff University, UK
Lean Yu, Chinese Academy of Sciences, China
General Co-Chairs of ICNDC2010

Maozhen Li, Brunel University, UK
Junwei Cao,Tsinghua University., China
Kin Keung Lai, City University of Hong Kong, Hong Kong
Hui Xiong, Rutgers, The State University of New Jersey, USA
Program Co-Chairs of ICNDC2010

Conference Schedule Overview

Oct 20, 2010	Oct. 21, 2010	Oct. 22, 2010	Oct. 23, 2010	Oct. 24, 2010
	8:00-17:30 Registration	8:30-11:30 Registration	8:30-11:30 Registration	8:30-11:30 Registration
	8:30-9:00 Opening Session	8:30-9:20 Keynote Speech 4	Tutorial	Tutorial
	9:00-9:50 Keynote Speech 1	9:20-10:10 Keynote Speech 5		
	9:50-10:10 Coffee/Tea Break	10:10-10:30 Coffee/Tea Break		
	10:10-11:00 Keynote Speech 2	10:30-11:20 Keynote Speech 6		
14:00-18:00 Registration	11:00-11:50 Keynote Speech 3	11.20-12.10 Keynote Speech7		
	12:00-13:30 Lunch/Rest	12:10-13:30 Lunch/Rest		
	13:30-15:30 Parallel Session A1, B1	13:30-15:30 Parallel Session A3, B3		
	15:30-15:45 Coffee/Tea Break	15:30-15:45 Coffee/Tea Break		
	15:45-17:30 Parallel Session A2, B2	15:45-17:30 Parallel Session A4, B4		
18:00-20:30 Dinner	18:00-21:00 Banquet	18:00-20:30 Dinner		

Notes:

1. Conference Venue Arrangement

Opening/Keynote Session: **Conference hall, Days Hotel & Suites Hangzhou**

Parallel Session A: **Conference room A, Days Hotel & Suites Hangzhou**

Parallel Session B: **Conference room B, Days Hotel & Suites Hangzhou**

2. Conference Lunch/Supper and Banquet Arrangement

Lunch/Dinner: **Days Hotel & Suites Hangzhou**

Banquet: **Days Hotel & Suites Hangzhou**

3. All participants enter into the restaurant by Lunch/Dinner tickets and Banquet tickets issued by the Conference Organizer.

Technical Program

October 20, 2010 (Wednesday)

14:00-18:00	**Registration**
18:00-20:30	**Dinner**

October 21, 2010 (Thursday)

8:30-9:00	**Opening Session (30m/P) (Chair: Prof. Yuanan Liu General Co-Chairs)**
	Opening Address (Prof. Lican Huang General Co-Chairs)
9:00-9:50	**Keynote Speech (50m/P) (Chair: Prof. . Lican Huang)**
	Speaker: Yuanan Liu **Title: Cognitive Radio, Algorithms and Applications**
9:50-10:10	**Coffee/Tea Break**
10:10-11:50	**Keynote Speech (50m/P)(Chair: Prof Yuanan Liu)**
10:10-11:00	**Speaker: Dr. Keyuan Jiang** **Title: Biological Pathway Similarity Search – eScience with Distributed Computing**
11:00-11:50	**Speaker: Prof. Yike Guo** **Title: The Essence of Cloud Computing**
12:00-13:30	**Lunch/Rest**
13:30-15:30	**A1: Clusters and Grids Computing (20m/P)(Chair: Prof. Gang Chen)**
Parallel Session A1	**Title:** Research and Implementation of Distributed Simulation and Parallel Rendering System Based on Grid **Authors:** Zhang Yaping, Peng Haoyu, Wang Zonghui and Shi Jiaoying.
	Title: DFSB: A Prototype of Distributed Storage System Based On LDPC **Authors**: Teng Wu, Luchen Tan, Xiangxue Li and Baoan Guo.
	Title: The Study of the Distributed Transaction in the Service Bearer Network **Authors:** Lingjia Gui, Ligang Dong and Weiming Wang.
	Title: An innovation of Chinese input based on Android Multimedia mobile device **Authors:** Yao Xiaxia, Wu Yanhui and He Jin.
	Title: Parallel File System-surpported Server Virtual Environment in Data Center **Authors:** Haiming Zhang.
	Title: A Cluster-based Parallel Geometric Correction Algorithm for Photogrammetry **Authors:** Hangye Liu, Yongsheng Zhang and Shuang Song.
	Title: web services composition based on weighted planning graph **Authors:** Wenqiang Li, Xuemei Dai and Hao Jiang.

	Title: A wrapping approach and tool for migrating legacy components **Authors:** Guo Chenghao, Wang Min and Zhou Xiaoming

13:30-15:30	**B1: Wireless and Sensor Network & Computational Intelligence (15m/P) (Chair: Prof. Yuanan Liu)**
Parallel Session B1	**Title:** New Method for Weighted Coverage Optimization of Occlusion-Free Surveillance in Wireless Multimedia Sensor Network **Authors:** Yibo Jiang, Xinwei Yao and Wanliang Wang.
	Title: The Hierarchical Threat Model of Routing Security for Wireless Ad hoc Networks **Authors:** Xian Guo, Tao Feng, Jian-Feng Ma and Zhan-Ting yuan.
	Title: Improved SPEED protocol for Wireless Mesh Sensor Network **Authors:** Huang Lican， Lou Yingtian
	Title: A Distributed Location Based Service Framework of Ubiquitous Computing **Authors:** Weifeng Lv, Fei Wang, Yuan Zhang and Tongyu Zhu.
	Title: Multicast-Tree Construction and Streaming Mechanism for Intra 802.16 Mesh Networks **Authors:** Sheng-Tzong Cheng
	Title: Evenness Evaluation in Ad-Hoc Sensor Network **Authors:** Xuewen Shen
	Title: Research and Application of Pressure Sensitive Fingerprint Acquisition System **Authors:** Jing Huang and Dong Wan
	Title: The research and implemention of device login in FC-2 of Fibre Channel **Authors:** Bei Liu, Yuejian Fang, Zhonghai Wu
	Title: A Cut-Through Forwarding Scheme for Delay Optimization in IEEE 802.16j Simultaneous Transmit and Receive Multihop Relay Networks **Authors:** Wen-Kang Jia and Yaw-Chung Chen
	Title: Prediction of Investment on Inventory Clearance Based on Improved BP Neural Network **Authors:** Huang Lican, Zhao Yuhong, Xu Xin
	Title: Regression model in Selecting Network Information Technology Companies and Analyzing Their Business Development Trends **Authors:** hua luo, fengying lu and qiuying lu
	Title: Bayesian network forecasting of key material supply in uncertain environment **Authors:** Jiangming JIA, Zhigang BAO, Changjiang WAN and Baoli DONG

15:30-15:45	**Coffee/Tea Break**
15:45-17:30	**B2: Simulation and Monitoring & Communication networks (15m/P) (Chair: Yuanan Liu)**
Parallel Session B2	**Title:** Order Processing Simulation and Optimization Based on Stochastic Petri Net in Telecommunication Industry. **Authors:** Chen Anyuan, Kuang Yalan, Cao Yuwen.
	Title: Distributed Resource Monitoring Technique **Authors:** Lyne Austen and Min Nie
	Title: Study on the Distributed Framework of Integration Space and Ground Simulator **Authors:** CHAO Jian-gang, SHEN Jun-yi, Zhou Bohe and HE Ning.

	Title: Design of Microwave Circuits Based on High Performance Computing Simulation **Authors:** SHEN Minglei, SU Donglin, YANG Minglong
	Title: State-of-the-Art of Transmission Protocol for Deep Space Communication Networks **Authors:** Xiaoyou Yu, Fang Yu, Weibing Hou and Xiaochun Wang.
	Title: Many-to-Many Multicast Routing Under a Fixed Topology: Basic Architecture, Problems and Algorithms **Authors:** Wei Ding.
	Title: A New Method for Evaluating Node Importance in Complex Networks Based on Data Field Theory **Authors:** Lv le and Yu Hewei.
	Title: The implementation of oSIP stack in Qt software based on Embedded Linux **Authors:** Zeng Guigen, Wu Shuang, Cui Lei and Chen Fuzhou.
	Title: A Dynamic Probability Mark Method of Congestion Control Based on Explicit Feedback **Authors:** Lin Jia and Weihua Hu.
	Title: Online Content Delivery to Home Appliances **Authors:** Teck Yoong Chai, Teck Kiong Lee, Lek Heng Ngoh, Joseph Chee Ming Teo, Xu Shao, Luying Zhou and Jianhang Zhang.
15:45-17:30	**A2: SOA and PaaS & Data Mining (15m/P) (Chair: Prof. Gang Chen)**
Parallel Session A2	**Title:** Pervasive and Personal Learning Environment Using Service-Oriented Architecture: A Framework Design **Authors:** Yuqing GUO, Jianxun RUI and Hong ZHOU
	Title: The Improvement of PaaS Platform **Authors:** Shuqing Zeng and Jiebin Xu
	Title: The Research of Feedback Network Service Architecture **Authors:** Guo-hua Zhan and Yang Li.
	Title: Design of E-Government Information Management Platform Based on SOA Framework **Authors:** JIANG Yunliang, ZHANG Xiongtao, SHEN Qing, FAN Jing,ZHENG Ning
	Title: Resources Integration and Binding in Distributed Collaborative Design Process **Authors:** Nan Li
	Title: SOA-based distributed architecture for Crop Germplasm Resources **Authors:** si hai-ping, fang wei, tang peng and cao yong-sheng
	Title: Fuzzy FCA Based Ontology Mapping **Authors:** Xiaoliang Xu, You Wu and Jinkui Chen.
	Title: Feature Weighting Scheme for Text Categorization Based on Rough Set **Authors:** Huang Lican, Xu Xin, Zhao Yuhong，Gao Junzhou
	Title: Accommodating New Relations for e-Business Text Mining Applications **Authors:** Ki Chan, Wai Lam and Tak-Lam Wong.
	Title: An Improved Collaborative Filtering Recommendation Algorithm **Authors:** Liu Jianping, WANG Yong and YAN Feng-hua.
	Title: Incremental mining alogorithm Pre-FP in association rules based on FP-tree **Authors:** Liu Jianping, WANG Ying and YANG Fan-ding.
18:00-21:00	**Banquet**

October 22, 2010 (Friday)

8:30-10:10	**Keynote Speech (50m/P) (Chair: Lican Huang)**
8:30-9:20	**Speaker: Prof. Junwei Cao** **Title: Distributed Computing in an era of Clouds and IoT**
9:20-10:10	**Speaker: Prof. Gang Chen** **Title: Grid Computing in High Energy Physics in China**
10:10-10:30	**Coffee/Tea Break**
10:30-11:50	**Keynote Speech (50m/P) (Chair: Prof. Junwei Cao)**
10:30-11:20	**Speaker: Prof. Lican Huang** **Title: Semantic P2P Networks: Future Architecture of Clouds Computing and Internet of Things?**
11:20-12:10	**Speaker:** Prof. Hui Huang **Title:** Markway BI Product
12:10-13:30	**Lunch/Rest**
13:30-15:30	**A3: Securiy and privacy & Image Processing (15m/P)(Chair: Dr. Guiyi Wei)**
Parallel Session A3	**Title:** Improving Strict Partition for Privacy Preserving Data Publishing **Authors:** Qingming Tang, Yingjie Wu, Xiaodong Wang and Shangbin Liao
	Title: A Collaborative Filtering Recommendation Algorithm Based on User Trust Model **Authors:** Jia Yubo and Cai Hao.
	Title: Research on e-government security risk assessments **Authors:** Xinlan Zhang and Xin Zhang.
	Title: An Adaptive Rule-Based Intrusion Alert Correlation Detection Method **Authors:** Chenn-Jung Huang, Ching-Yu Li, Yu-Wu Wang, Chin-Fa Lin, Jia-Jian Liao and Kai-Wen Hu
	Title: Secure Online Scientific Visualization of Atmospheric Nucleation Processes **Authors:** Huaguang Song, Weichao Wang, Jinzhu Gao, Aidong Lu and Lican Huang.
	Title: Formal description and verification of security filtered rules **Authors:** yaohua Zhao, BaiHu, Jianfeng ma and Conghua Zhou.
	Title: Threshold Signature Scheme based on Non-interactive Diffie-Hellman Signature **Authors:** Wang Xiuqun and Huang LiCan.
	Title: A study on 3D Measurement Technology **Authors:** Nan Lin, Ni Ling, Haitao Li and Chen Yao.
	Title: A skew detection method of fabric images based on the analysis of multi- threshold **Authors:** Ruilin Zhang, Xianghui Zeng and Lei Zhang.
13:30-15:30	**B3: Numerical Algorithm and Analysis & Economic computing (15m/P) (Chair: Dr. Yingjun Lou)**
Parallel Session B3	**Title:** FFT based single frequency interference accurate analysis method for OFDM signal **Authors:** Ying Xiaofan
	Title: Selecting Optimal Threshold Value of Douglas-Peucker Algorithm Based on Curve Fit

	Authors: Wang Xiaoli and Zhang De.
	Title: Several Optimality Sufficient Conditions of Composite Multiobjective Programming **Authors:** leifu gao and feifei hou.
	Title: The Interaction between Gold, Oil and Dollar—Further Discussion Based on Quantile Regression **Authors:** Yingjun Lou;Lin Zeng.
	Title: Can dual moving averages generate extra returns ?——Evidence from the Shanghai Stock Market **Authors:** Meiyun Jiang
	Title: Analyzing the Impacts of Carbon-Motivated Border Tax Adjustment to China's Industrial Exports -- A CGE Based Simulation **Authors:** Keting Shen.
	Title: Appliaction and Research of Component in Financial Risk Management Domain **Authors:** Huiyan Qi, Jianping Cheng and Yan Zhang.
	Title: China's Monetary Policy in the Context of Financial Crisis **Authors:** Lei Meng, Ju'e Guo and Zengkai Zhang.
15:30-15:45	**Coffee/Tea Break**
15:45-17:30	**A4: Distributed Systems & Networked Robot System (15m/P) (Chair: Dr. Yong Liu)**
Parallel Session A4	**Title:** A Hybrid Approach Based on Biological and Morphology Methods Used in Species Identification System **Authors:** Sunhua Wan, Yuanchun Zhou and Baoping Yan.
	Title: A Wavelet Packet Based Approach for the Research of the Avian Influenza virus cross-species infection **Authors:** Shasha Li, Yuanchun Zhou and Baoping Yan.
	Title: Screening Data for Phylogenetic Analysis of Land Plants: A parallel Approach **Authors:** Yong Liu, Zhen Meng, Qi Liu, Yuanchun Zhou, Jianhui Li and Yanping Gao.
	Title: Market basket analysis based on text segmentation and association rule mining **Authors:** XIE Wen-xiu，Qi Heng-nian，Huang Mei-li
	Title: Self-adaptive Network Service Research Based on Multi-Agents in Hierarchy **Authors:** Taoqing Zhou，Xiaoying Huang
	Title: Research on PDA-based Distributed Field Data Acquisition Method **Authors:** Peng Wu，Xiaomei Yi，Jian Li，Xuequn Wang
	Title: The application and Research of T-test in Medicine **Authors:** Li Jiaxi,
	Title: Using MapReduce for Data Processing in the Cloud For Forest Pest Control **Authors:** Shaocan Jiang, Chaofan Shen, Yongjie Xiao and Xiaoying Huang
	Title: Optimal On-Line Walking Pattern Generation for Biped Robot **Authors:** Hao Chen, Shuwen Pan, Rong Xiong, and Jun Wu
	Title: Force/Torque-based Compliance Control for Humanoid Robot to Compensate the Landing Impact Force **Authors:** Wei Xu, et.al.
	Title: optimal momentum compensation with waist joint for on-line biped gait generating

	Authors: Yuanfei Xiang, Rong Xiong, Yichao Sun, Wei Xu
15:45-17:30	**B4: Clouds Computing & P2P Networks (15m/P) (Chair: Prof. Junwei Cao)**
Parallel Session B4	**Title:** Adjacent Matrix based Deduction for Grid Workflow Applications **Authors:** Fan Zhang, Junwei Cao, Lianchen Liu, Cheng Wu.
	Title: UPDS: Reliable Storage for Personal data in Online Services **Authors:** Hong Liu Jiangning Cui Taoying Liu and Wei Li
	Title: Effective service selection under BPEL orchestration **Authors:** HE Lingjuan, LIU Lianchen, WU Cheng.
	Title: Popular or Personal: Access Patterns of User Generated Content **Authors:** Yi Shan, Taoying Liu, Hong Liu
	Title: Collaborative Development System Based on Federation Integration **Authors:** WU Song XIAO Tianyuan FAN Wenhui CUI Bing
	Title: GPU Based Parallel Computing on Blast Program **Authors:** Lican Huang, Ya Hu
	Title: Large Scale cooperative multiagent system based on semantic P2P Network **Authors:** Lican Huang
	Title: Traffic Locality in the eMule System **Authors:** Lijie Sheng
	Title: Large-scale Network Topology Generation for Emulation Environment **Authors:** Kuang Xiao-hui and Huang Min-huan.
	Title: Best Position Algorithms for Top-k Query Processing in Highly Distributed Environments **Authors:** Qiming Fang, Ying Zhao, Guangwen Yang and Weimin Zheng.
	Title: A Peer-to-Peer Streaming Overlay Construction for Low Diffusion Delay **Authors:** Kai Zhang, Kan Li and Jian Cao
	Title: Large Scale Distributed Database Systems Based on Semantic P2P Networks **Authors:** Lican Huang
18:00-20:30	**Dinner**

October 23, 2010 (Saturday)

8:30-18:00	Tutorial
18:00-20:30	**Dinner**

October 24, 2010 (Sunday)

8:30-18:00	Tutorial
18:00-20:30	**Dinner**

Keynote Speakers

Prof. Gang Chen

Institute of High Energy Physics
Chinese Academy of Sciences
Computing Center, 19B YuquanLu, Shijingshan District, Beijing
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Title: Grid Computing in High Energy Physics in China

Abstract:

High energy physics (HEP) has always been the pioneer on the development and applications of computer science. As the new generations of HEP experiments, LHC and BEPCII as examples, started to be operational in 2009, grid computing has become an integral part of the practice of high energy physics. A large scale grid computing infrastructure, namely WLCG[1] or Worldwide LHC Computing Grid, has been being built and is providing high performance computing services of data process and physics analysis. Institute of High Energy Physics is one of important grid sites of WLCG. The WLCG is so successful that it is not just used by HEP project but also adopted by large number of different disciplines of science activities. This work will present an overview of WLCG and status of HEP grid computing in China. The IHEP site consists of 1100 CPU cores as computing nodes and 600 TB disks as the storage resource. The high bandwidth dedicated links of 622 Mbps to the US and 1 Gbps to Europe were established for data transfer and job distribution. In 2009, the IHEP site provided more four million CPU-hours of computing service to HEP as well as cosmic ray research, bioinformatics and geodynamics.

Bio

1991-1994 he was the physicist of L3 experiment at CERN; since 1995-1996 he was post-doc at Peking University and member of BESII; 1996 he joined

the AMS (Alpha Magnetic Spectrometer) for the International Space Station. His main jobs were on detector developments and physics simulations. Since 2003 he is the director of the Computing Centre of the IHEP; He is in charge of the provision of a high performance computing infrastructure for BESIII, ARGO-YBJ and LHC projects. He is the member of International High Energy Physics Computing Coordination Committee (IHEPCCC) since 2005. Starting from 2004, he has been leading a group to build the WLCG site in China for LHC experiments.

Prof. Lican Huang

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Title: Semantic P2P Networks: Future Architecture of Cloud Computing and Internet of Things?

Abstract

When more and more nodes and users are connected in the Internet in the cases of Cloud computing and the Internet of Things, centralized computing modes will be failed with the limit band width and privacies. P2P technologies may be the future architecture of Cloud computing and the Internet of Things.

This talk will introduce a different P2P technology: semantic P2P Network--Virtual Hierarchical Tree Gird Organizations (VIRGO). Other than unstructured and DHT-based structured P2P networks, VIRGO keeps the semantic meanings of the nodes' roles in the communities. In VIRGO approach, the nodes are identified as domain names classified by the semantic meaning of roles in the organizations. The nodes construct the VIRGO network according to their domains, which form a coalition of vertical virtual organizations.

Bio

Prof. Huang works on challenges about Cloud Computing and P2P computing. He has worked on e-Science and Grid computing since the beginning of 2000's. He was honored in Marquis Who's Who in the World 2006, Marquis Who's Who in the Science and Engineering 2006-2007, and Marquis Who's Who in Asia 2006-2007 due to his achievement of proposing Virtual and Dynamic Hierarchical Architecture for e-Science and Grid and VIRGO protocols. He serves as program committee member of many international conferences. He has contributed over 100 technical papers to various conferences and refereed journals.

Prof. Huang now is a Director of Network & Distributed Computing at Zhejiang Sci-Tech University (ZSTU). Prior to joining ZSTU, Prof. Huang worked as a Senior Research Associate in the School of Computer Science at Cardiff University since 2004. Before working at Cardiff University, he developed many large software systems in several companies, as technical leader or department manager. He obtained his Ph.D. in Computer Science from Zhejiang University in 2003, Bachelor's From Nanchang University in 1982, and Master's from Hangzhou University in 1984.

Prof. Junwei Cao

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Title: Distributed Computing in an era of Clouds and IoT

Abstract

While Cloud Computing is gaining popularity and Internet of Things is becoming the next strategic direction of technology development in China, distributed computing, after several decades of development, is still one of kernel driving forces in the new wave of IT infrastructuralization from a technological perspective.

In this talk, new challenges of Clouds and IoT are summarized. How can traditional distributed computing techniques be used to address these challenges? How will distributed computing middleware evolve to meet new application requirements in the new era of Clouds and IoT? Prototype systems and applications under development at Tsinghua University are introduced to demonstrate our view of future trends in distributed computing.

Bio

Junwei Cao is currently a Professor and Assistant Dean of Research Institute of Information Technology, Tsinghua University, China. Before joining Tsinghua in 2006, he was a Research Scientist of Massachusetts Institute of Technology, USA. Before that he worked as a research staff member of NEC Laboratories Europe, Germany. Junwei Cao got his PhD in Computer Science from University of Warwick, UK, in 2001, where his PhD thesis was focused on Agent-based Resource Management for Grid Computing. He got his master and bachelor degrees from Tsinghua University in 1998 and 1996, respectively.

Junwei Cao's research is focused on advanced computing technology and applications. He recently participated in research projects on Cloud Computing and Internet of Things under the National 973 Basic Research Program, Ministry of Science and Technology of China. Junwei Cao has published over 100 academic papers, cited by international researchers for over 2000 times. Junwei Cao is a Senior Member of the IEEE Computer Society and a Member of the ACM and CCF.

Dr. Yike Guo , Professor of Computer Science,

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Title: The Essence of Cloud Computing

Abstract:

Cloud computing has been viewed as a technical revolution or a synonym of some distributed HPC technique such as Grid Computing. In this talk, we argue a quite different view of cloud computing: the essence of cloud computing is to deliver computation as services. One key feature of a service is its quality. Higher quality services are paid with higher price. Also, as payment increases, a better service should be delivered. This service oriented business model provides cloud computing a new semantics where algorithm design and software building have very different principles compared to those in traditional computing. We present the IC Cloud development carried in our group and use it to illustrate some key concepts for building up a cloud based service market.

Bio

Dr. Yike Guo is a professor in computing science in the Department of Computing, Imperial College London. His research is in the areas of large scale scientific data analysis , data mining algorithms and applications, parallel algorithms and cloud computing. He graduated in Computer Science from Tsinghua University of China and has a PhD in Computational Logic and Declarative Programming at Imperial College London. During his PhD study, he was one of the founding members of the field studying uniform declarative programming by integrating functional and logic programming languages. Later, his work on functional coordination forms established a foundation for structured parallel programming. Dr. Yike Guo has been working in the area of data intensive analytical computing since 1995 when he was the Technical Director of Imperial College Parallel Computing Centre. During last 10 years, he has been leading the data mining group of the department to carry out many research projects, including some major UK e-science projects such as: Discovery Net on Grid based data analysis for scientific discovery; MESSAGE on Wireless mobile sensor network for environment monitoring; BAIR on System biology for diabetes study. He has been focusing on applying data mining technology to scientific data analysis in the fields of life science and healthcare, environment science and security. He is the Principal Investigator of the Discovery Science Platform grant from UK EPSRC and he is also the Founder and Chief Technical Officer of InforSense Limited , an Imperial College spin-out company on enterprise platform for business and scientific intelligence.

Keyuan Jiang, PhD
Purdue University Calumet
USA

Title: Biological Pathway Similarity Search – eScience with Distributed Computing

Abstract

Biological pathways are important determinants of living activities. Recent advances in laboratory technologies have driven an increasing accumulation of biological pathway datasets. This wealth of pathway datasets provides researchers with an opportunity to elucidate biological functions by performing pathway comparisons at the genomic scale against known pathways found in other organisms or within the same organism. A method has been developed to perform similarity searches using a scoring mechanism to rank the similarities of the pathway in question against those in the pathway repository. To achieve a reasonably good performance, the method is implemented using the Condor distributed computing resources spanning across several campuses. Leveraging the community-developed XML-based pathway data format, our method compares the pathway in question against those stored in a pathway database. A pair of XML documents is compared at each Condor node, and the result of all the comparisons are scored and ranked to indicate the similarity of each pair of pathways.

Bio

Dr. Keyuan Jiang is a faculty member at Department of Computer Information Technology & Graphics of Purdue University Calumet, U.S.A. He earned his bachelor degree from Nanjing Institute of Technology, and his doctorate from Vanderbilt University. Dr. Jiang has been actively involved in the research areas of information technology applications in biomedical field, ranging from a knowledge-based system for gene design, semantic web in bioinformatics, and clinical research information technology. As a senior member of the Institute of Electric and Electronic Engineers (IEEE), he serves as an Associate Editor of the IEEE Transactions on Information Technology in Biomedicine.

Dr. Yuanan Liu, Professor of wireless networks
Beijing University of Posts and Telecommunications, China

Title: Cognitive Radio, Algorithms and Applications

Abstract

This report will recall the background of cognitive radio technologies at first. Multi-band spectrum sensing, non-cooperative power control game for OFDMA-based secondary spectrum sharing and high power efficiency spectrum sharing algorithms are simply described. Also, simulation results showed in the report.

Bio

Prof. Liu received B.E., M.Eng and PH.D degree in electronic engineering from University of Electronic Science and Technology of China, ChengDu, SiChuan province, in 1984, 1989, 1992, respectively. Now, He is Dean of School of Electronic Engineering of Beijing University of Posts and Telecommunications，IEE Fellow, Vice-chairman of the ninth Technical Committee of China Communication Standards Association，Member of National 863 Program.

He is interested in LTE and IMT-A mobile technology, next generation mobile network, sensors network, things of Internet, radio technology, and etc. He is the author or co-authors of more than 170 technical papers , five books and 24 patents.

He is recognized as the first person and leading person of IEEE802.16 in China by the Chairman of IEEE 802.16, Roger A Marks. He was the Conference Chairman of Broadband Wireless Internet Access, Beijing, July, Beijing Hotel, 2001; He was Technical Program Chairman of Joint Conference on mobile between China and Japan, Sci-Tec Building, in campus of BUPT, Feb.6, 2001; He was the Technical Program Chairman of International Conference on Telecommunications 2002; He was Conference Chairman of Wireless Multimedia Forum, Sci-Tec Building, in campus of BUPT, Sep. 5, 2003; He was the chair of Technical Program Committee, International Conference on Communication and Information, Beijing, June 26-28, 2005; Co-chair of China-Sweden workshop on communication, Beijing, Sep 23-24; Co-chair of International Conference on Communications Technology and Applications 2009, Beijing.

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1、 **Registration Place:**

The first floor of Kan Hotel HangZhou, the address is :NO.299 .4th Avenue.Economic& Technological Area HangZhou, Zhejiang Province ,China.

杭州凯恩大酒店，地址：浙江省杭州市下沙高新技术开发区 4 号大街209号

2、 **Conference Venue:**

The fifth floor of Kan Hotel HangZhou.(Address:NO.299.4th Avenue.Economic& Technological Area HangZhou, Zhejiang Province ,China.)

杭州凯恩大酒店五楼。（地址：浙江省杭州市下沙高新技术开发区 4 号大街209号）

3、 **Conference Hotel:**

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4、 **Tour Information:**

Outside the hotel have the travel agency,if you want to travel in Hangzhou you can go there.

酒店外有一家旅行社，有需要旅游的贵宾请到哪里联系。

5、 **Transportation:**

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2.乘坐 K210 路（首班：18:30 末班：0:00）公交车至公交文溯路学林街口站下车，换乘的士至杭州凯恩大酒店

杭州火车南站（萧山火车站）到杭州凯恩大酒店乘车路线：

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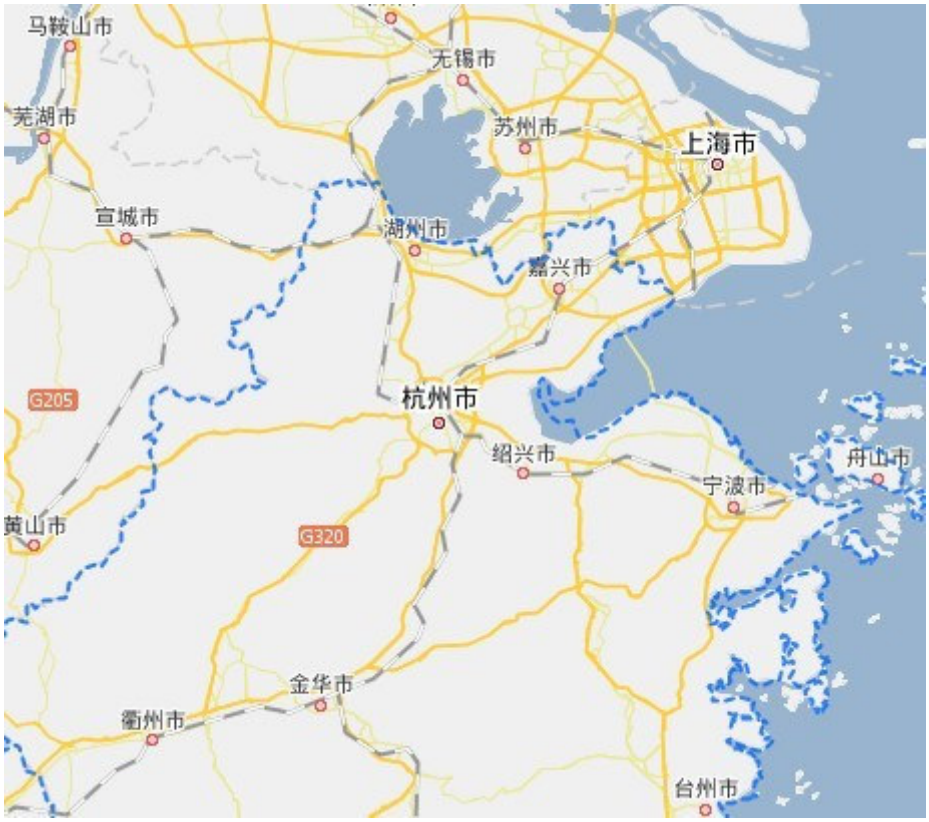
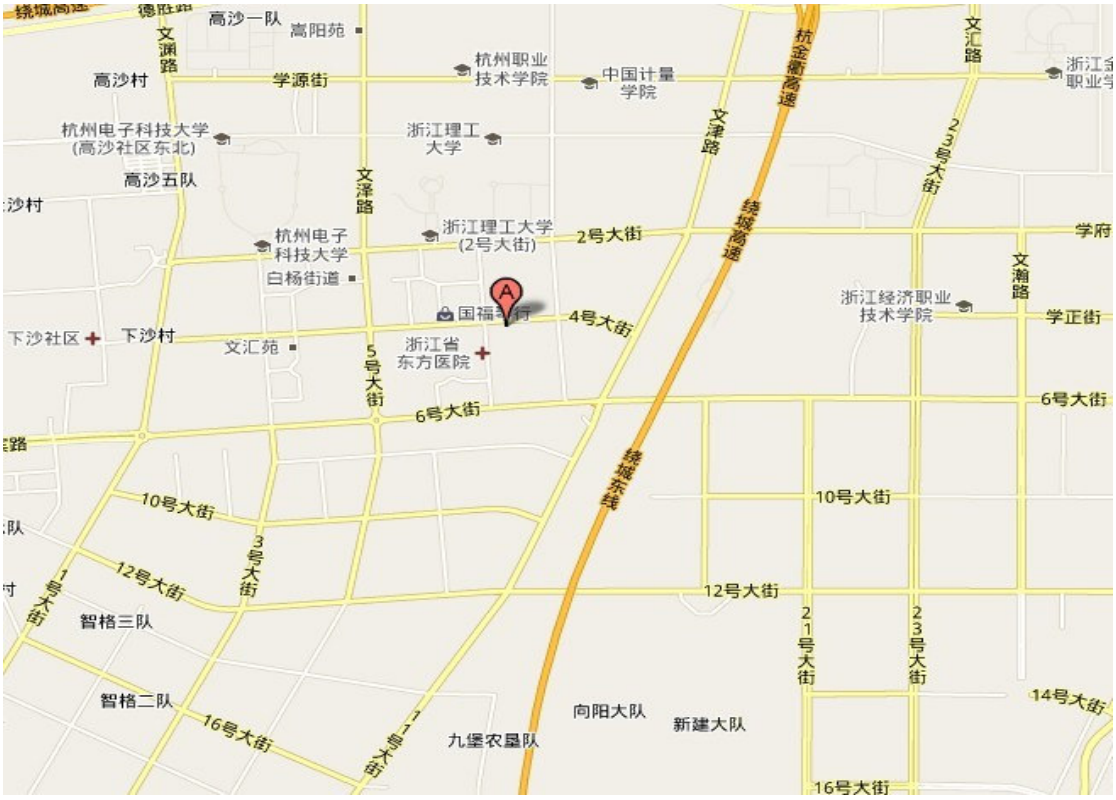
Conference Maps





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