Advance Program
2007 International Conference on Networking, Architecture, and Storage
Guilin, China

July 29th, 2007

8:30am – 9:00am: Breakfast[1]

9:00am – 10:00am: Welcome

Keynote speech

Virtualization, Performance, and Energy Conservation in Storage Data Centers

Peter Varman, Rice University

10:00am – 10:30am: Coffee/Tea Break[1]

10:30am – 12:00noon   Session 1A: Architecture，Chair: Qing Yang

➢ **Design of NIC Based on I/O Processor for Cluster Interconnect Network,** *Xiaojun Yang, Ninghui Sun, Institute of Computing Technology, Chinese Academy of Sciences.*

➢ **Simplified Multi-Ported Cache in High Performance Processor,** *Hao Zhang, Dongrui Fan, Institute of Computing Technology, Chinese Academy of Sciences.*

➢ **The bi-panpath connectivity of the hypercube,** *Jywe-Fei Fang, Ko-Lin Lin Department of Digital Content and Technology, National Taichung University*

➢ **The Implementation and Design of a Low-power Clock Distribution Microarchitecture,** *Rong Ji, Xianjun Zeng, Liang Chen, Junfeng Zhang, National University of Defense Technology*

10:30am – 12:00noon   Session 1B: Networks I，Chair: Xubin He

➢ **More Efficient Mechanism of Topology-Aware Overlay Construction in Application-Layer Multicast**, Jianqun Cui[1,2], Yanxiang He[1], Libing Wu[1], *[1]School of Computer, Wuhan University; [2]Institute of Computer &Communication Technology, Huazhong Normal University*

➢ **MLCC: A Multi Layered Correlative Control Mechanism for the VPN Topology,** *Kai Ouyang, School of Computer Science Wuhan Univ. of Sci. & Tech.; Xiaowen Chu, Department of Computer Science Hong Kong Baptist Univ.; Lijun Dong, School of Computer Science Huazhong Univ. of Sci. & Tech.; Hengqing Wang, School of Computer Science Wuhan Univ. of Sci. & Tech.; Ting Cai, School of Computer Science Wuhan Univ. of Sci. & Tech.;.*

➢ **The Dynamic Endpoint-Based Access Control Model on VPN,** *Lijun Dong, Shengsheng Yu, College of Computer Science,Huazhong Univ. of Sci. & Tech., Wuhan, Kai Ouyang,College of Computer Science,Wuhan Univ. of Sci. & Tech.*

12:00noon – 2:30pm Lunch[1] and Industrial Panel/Presentations

2:30pm – 4:00pm: Session 2A: Networks II, Chair: TBD

➢ **Routing Protocols Based on Double Auction for Ad Hoc Networks,** *Zhongsheng Wu, Zhide Chen, Li Xu, Fujian Normal University*

➢ **A Novel Cooperative Caching Scheme for Wireless Ad Hoc Networks: GroupCaching,** *Yi-Wei Ting , Yeim-Kuan Chang, National Cheng-Kung University*

➢ **An Optimal MPLS-TE Solution to Route Selection and Redistribution on Congested Networks,** *Chengcheng Li, Peng Li, Tijjani Mohammed , East Carolina University*

2:30pm – 4:00pm: Session 2B: Network Security I, Chair: TBD

➢ **An Improved Designated-Verifier Proxy Signature Scheme,** *Jianhong Zhang, Wei Zou, North China Universtiy of Technology*

➢ **PKI-Based Authentication Mechanisms in Grid Systems,** *Shushan Zhao, Akshai Aggarwal and Robert D. Kent, University of Windsor*

➢ **Assessing the Attack Threat by the Probability of Following Attacks,** *Zhi-tang Li, Jie Lei, Li Wang, Dong Li, and Yang-ming Ma,   Huazhong University of Science and Technology*

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[1] All breakfasts and coffee breaks, the first day lunch, and the conference banquet are provided by the conference.

4:30pm – 6:00pm: Session 3A: Network Security II, Chair: TBD

➢ **Mitigating Denial of Capability with An Notification Mechanism,** *Guang Jin, Jiangang Yang, Wei Wei and Yabo Dong, Zhejiang University*

➢ **HKM：A Hybrid Key Management Scheme for Secure Mobile Multicast,** *Lin Lin and XueMin Li, Chongqing University*

➢ **Discovering Novel Multistage Attack Patterns in Alert Streams,** *Ai-fang Zhang, Zhi-tang Li Dong Li and Li Wang, Huazhong University of Science and Technology*

➢ **Safeguarding Against Sybil Attacks via Social Networks and Multipath Routing,** Chittaranjan Hota, Janne Lindqvist, Kristiina Karvonen, Antti Ylä-Jääski, and Mohan C.K.J, *Birla Institute of Technology & Science*

4:30pm – 6:00pm: Session 3B: Sensor Networks and Others, Chair: TBD

➢ **Mining Two Dimensional Attributes Patterns in Sensor Networks,** *Yuanguo Cheng[1,2], Guohui Li[1], [1]Huazhong University of Science and Technology,[2]Navy Engineering University*

➢ **An Active Region-based Storage Mechanism in Large Wireless Sensor Networks,** *Xiongzi Ge, Dan Feng, Lei Tian, Huazhong University of Science and Technology*

➢ **A Novel Network Management Architecture for Self-organized Network,** *Li Jun[1,2], Zhang Shunyi[1],Zhang Zailong[1,] Wang Pan[1],[1].Nanjing University of Posts and Telecommunication [2]Zhejiang Wanli University*

Conference Banquet and Keynote Speech:

Current Status of China's Data Storage Research and Development

Changsheng Xie, Huazhong University of Science and Technology

8:30am – 9:00am: Breakfast[1]

9:00am – 10:00am: Keynote speech

Exploring NoC Design Space for Multicore Architectures

Chita Das, Penn State University

10:00am – 10:30am: Coffeee/Tea Break[1]

10:30am – 12:00noon   Session 4A: Distributed Computing and Software Testing, Chair: Rich Sincovec

- **An Peer-To-Peer Traffic Identification Method Using Machine Learning,** *Hui Liu, Wenfeng Feng, Yongfeng Huang, Xing Li, Tsinghua University*

- **GSM-R: A Hybrid Scheduling Approach to Dynamic Load Balancing in Hierarchical Cluster of Servers,** *Jincai Chen, Gongye Zhou, Huazhong University of Science & Technology*

- **Priority Strategy of Software Fault Localization,** *SUN Ji-Rong,LI Zhi-Shu,NI Jian-Cheng,Sichuan University, YIN Feng, Southwest University for Nationalities, Sichuan University*

10:30am – 12:00noon   Session 4B: Storage I, Chair: TBD

- **An Efficient SAN-Level Caching Method Based on Chunk-Aging,** *Yang Wang, Wei Xue, Yifeng Luo, Jiwu Shu, Tsinghua University*

- **FTRAID: A Fat-tree Based Parallel Storage Architecture for Very Large Disk Array,** *Zhikun Wang, Ke Zhou, Dan Feng, Lingfang Zeng, Junping Liu, Huazhong University of Science & Technology*

- **A new data format and error control scheme for Optical Storage Systems,** *Wei Hu, Diqing Hu, Changsheng Xie, Fan Chen, Huazhong University of Science & Technology*

- **iSAN: Storage Area Network Management Modeling Simulation,** *Ramani Routray, Sandeep Gopisetty, Pallavi Galgali, Amit Modi, Shripad Nadgowda, IBM Research*

12:00noon – 2:00pm Lunch[2]

2:00pm – 3:30pm: Session 5A: Storage II, Chair: TBD

- **Dynamics Process of Long-running Allocation/Collection in Linear Storage Space,** *Cao Qiang, Guo Tian-jie, Xie Chang-sheng, Huazhong University of Science & Technology*

- **A New Method Pefetching I/O Requests Area,** *Li Huai Yang, Xie Chang Shen, Liu Yan, Huazhong University of Science & Technology*

- **Performance Evaluation of A Load Self-Balancing Method for Heterogeneous Metadata Server Cluster Using Trace-Driven and Synthetic Workload Simulation,** *Bin Cai, Changsheng Xie, Guangxi Zhu, Huazhong University of Science & Technology*

- **DiskGroup: Energy Efficient Disk Layout for RAID1 Systems,** *Lanyue Lu and Peter Varman, Rice Universit, Jun Wang, University of Central Florida*

2:00pm – 3:30pm: Session 5B: Short Papers I: Architecture and Storage, Chair: TBD

- **M2SI A improved Coherency Protocol in CMP,** *Pengyong Ma,National University of Defense Technology*

- **An Adaptive Arbitration Algorithm for SoC Bus,** *Haishan Li , Ming Zhang , Wei Zheng , Dongxiao Li,Zhejiang University*

- **The System Design and Performance Analysis of WiMAX Base Station MAC Based on Intel Network Processor,** *Ming Wu, Changsheng Xie, Fei Wu,Huazhong University of Science and Technology*

- **Dynamic Power Management and Dynamic Voltage Scaling in Real-time CMP Systems,** *Lei Miao, Yong Qi , Di Hou,Xi'an Jiaotong University*

- **Research and Implementation of RAID algorithm base on RAID controller,** *Jiang Guo-song, Xie Chang-sheng, Wang Bo, Huazhong University of Science and Technology*
- **B+ Tree Management Method of Object Attributes for Object-Based Storage,** *Gongye Zhou, Lanlan Yuan, Jincai Chen, Huazhong University of Science and Technology*

3:300pm – 4:00pm Coffee/Tea Break[1]

4:00pm – 5:30pm   Session 6A: Short Papers II: Networks, Chair: TBD
- **An analytical model for evaluating utilization of TCP TAHOE using markovian model,** *mehdi hassani, Iran University of Science and Technology*
- **A Sliding Window Based Security Event Correlation,** *Jiafu Hu, Information Engineering University, Yongliang Dong, Henan Normal Univeristy*
- **Safety Critical Network Based on Fibre Channel,** *Yue Wang, WanDong Cai, Qi Duan,Northwestern Polytechnical University*
- **Distributed Fault Monitoring Scheme based on optical power for Optical Burst Switching Network,** *Ruyan Wang[1,2], Jiaofa Chang[1], Keping Long[1,2], Xiaolong Yang[1], [1]Special Research Centre for Optical Internet & Wireless Information Networks, [2]Univ. of Electronic Science and Technology of China*
- **A scalable multicast key management to expel a malicious reciever in MARKS,** *Ma Xiaojing, Li Zhitang, Li Yao, Zhang Jiping, Huazhong University of Science and Technology*

4:00pm – 5:30pm   Session 6B: Short Papers III, StoragesChair: TBD
- **RH-SCSI: A Reliable HyperSCSI Protocol for Networking Storage,** *Gongye Zhou, Peng Chen, Huazhong University of Science and Technology*
- **A New Method for RAID Consistency Initialization ,** *Zhihu Tan Changsheng Xie Jiguang Wan,, Huazhong University of Science and Technology, Wuhan National Laboratory for Optoelectronics*
- **Implementation and performance evaluation of an iSCSI-Based Storage Virtualization,** *Guang Yang，Jingli Zhou，Chao Liu, Huazhong University of Science and Technology*
- **An Object-based Storage Controller Based on Switch Fabric,** *Shuibing He, Dan Feng, Huazhong University of Science and Technology*
- **Design and Implementation of an Efficient Multi-version File System,** *XIANG Xiao-Jia, SHU Ji-Wu, XUE Wei, ZHENG Wei-Min,Tsinghua University*