



36th Annual International Conference on Parallel Processing

ICPP 2007 Workshops

Monday, September 10

ADET 2007

Room: B

8:30 -10:00 Session 1: *Web 2.0 and Game-Based Learning*

- Cultivating Operating System Process Concept with Card Game Wen-Chih Chang and Yi-Lung Chen
- Using Interactive Video Technology for the Development of Game-Based Learning Han-Bin Chang, Hui-Huang Hsu, and Timothy K. Shih
- A Courseware Authoring Tool for Achieving Interoperability among Various E-Learning Specifications Based on Web 2.0 Technologies Te-Hua Wang, Neil Y. Yen, Yue-Lin Du, and Timothy K. Shih

10:00 - 10:30 Break

10:30 - 12:00 Session 2: *Web-Based Learning*

- Enhancing Reusability of Learning Objects with Object-Oriented Inheritance Relationships Yung-Hui Chen, Chun-Chia Wang, Lawrence Y. Deng, Mei-Chung Chen, and Timothy K. Shih
- An On-Line Instruction/Learning Environment for Supporting Individualized Learning in Java Programming Kuan-Cheng Lin
- A Web-Based Adaptive Learning Environment for Music Appreciation in Primary School Kuan-Cheng Lin and Shu-Huey Yang
- Factors Influencing Cross-Straits High-School Students' Intention to Participate in Future Web-Based Distance Education Ying-Chi Chen

12:00 - 13:30 Lunch

13:30 - 15:00 Session 3: *Real-Time Distance Education*

- A Calculation Mechanism for Similarity Measure with Clustering an Unbalanced Hierarchical Terminology Structure MinTzu Wang, PingYu Hsu, K. C. Lin, and Jason Hung

- A Case Study: Online Operation Guidance for Real-Time Distance Education Environment Aiguo He

IWNC 2007

Room: C

8:30 - 10:00 Session 1: *IWNC1*

Chair: Baoming Bai, Xidian University

- An Algorithm to Search Minimal Subtree Graphs Jing Wang, Ying Li, and Xinmei Wang
- The Capacity Region of a Collection of Multicast Sessions in an Undirected Ring Network S. M. Sadegh Tabatabaei Yazdi, Serap A. Savari, Kelli Carlson, and Gerhard Kramer
- The Capacity Factors of a Network Haibin Kan and Xin Wang

10:00 - 10:30 Break

10:30 - 12:00 Session 2: *IWNC2*

Chair: Serap A. Savari, University of Michigan, Ann Arbor

- Network Coding Scheme Based on Key Nodes Guoqing Lin, Jing Wang, and Xinmei Wang
- Network Coding with Interleaving Zheng Huang, Xin Wang, Xueqing Chen, and Haibin Kan
- Network Coding Based Multicast in Internet Jing Wang, Ying Li, and Xinmei Wang

WSNET 2007

Room: D

8:30 - 10:00 Session 1: *Media Access Control*

- QoS Guaranteed Multi-Poll Access Scheme with Transmission Control over High Throughput Wireless LANs Hiroaki Murata, Tomotaka Wada, Tadahiro Maekawa, Kouichi Mitsuura, and Hiromi Okada

10:00 - 10:30 Break

10:30 - 12:00 Session 2: *Invited Papers*

- Fast and Secure Mobility for IEEE 802.16e Broadband Wireless Networks Chung-Kuo Chang and Chin-Tser Huang
- Minimum Local Disk Cover Sets for Broadcasting in Heterogeneous Wireless Ad Hoc Networks Chih-Wei Yi, Fang-Chun Liu, and Min-Te Sun

12:00 - 13:30 Lunch

13:30 - 15:00 Session 3: *Wireless Routing*

- Destination Clustering Geographic Multicast for Wireless Sensor Networks Gang Zhao, Xiangqian Liu, and Anup Kumar
- Fast Route Optimization for Dynamic Nested NEMO Jae-Kwon Seo, Sung-Hyun Nam, and Kyung-Geun Lee
- Energy Efficient Cooperative Nodes Selection in Wireless Sensor Networks Irfan Ahmed, Mugen Peng, and Wenbo Wang

HOT-MP2P

Room: E

8:30 - 10:00 Session 1: *HOTMP2P1*

Chair: Bo Li

- CIVIC: A Hypervisor Based Virtual Computing Environment Jinpeng Huai, Qin Li, and Chunming Hu
- Constructing Incentive Oriented Overlay on Mobile Peer-to-Peer Networks Feng Hong, Yuan Feng, Minglu Li, and Zhongwen Guo
- Modeling Analysis and Improvement for Free-Riding on BitTorrent-Like File Sharing Systems Jiadi Yu, Minglu Li, and Jie Wu

10:00 - 10:30 Break

10:30 - 12:00 Session 2: *HOTMP2P2*

Chair: Hung-Chang Hsiao

- A Novel Peer-to-Peer Overlay for Live Media Broadcasting Hung-Chang Hsiao and Hao Liao
- P2P Live Streaming with Tree-Mesh Based Hybrid Overlay Qi Huang, Hai Jin, and Xiaofei Liao
- KQStream: Kindred-Based QoS-Aware Live Media Streaming in Heterogeneous Peer-to-Peer Environments Yuan He, Tao Gu, Jiang Guo, and Jingyao Dai

- A Measurement of a Large-Scale Peer-to-Peer Live Video Streaming System Susu Xie, Gabriel Y. Keung, and Bo Li

12:00 - 13:30 Lunch

13:30 - 15:00 Session 3: *HOTMP2P3*

Chair: Guangtao Xue

- Shift Coding: Efficient State Update in Mobile Peer-to-Peer Multiplayer Games Yanmin Zhu, Yunhuai Liu, Hoilun Ngan, Quanbin Chen, Chen Qian, Jian Ma, and Dian Zhang
- Improve Peer Cooperation Using Social Networks Victor Ponce, Jie Wu, and Xiuqi Li
- Semantic Web Services Discovery in P2P Environment Bin Xu and Dewei Chen

15:00 - 15:30 Break

15:30 - 17:00 Session 4: *HOTMP2P4*

Chair: Tao Gu

- Efficient Multi-source Location in Unstructured P2P Systems Xucheng Luo, Zhiguang Qin, Ji Geng, and Qiang Wang
- A Distributed Cut Set Discovery Algorithm in P2P Environment Hao Ren, Nong Xiao, and Zhiying Wang
- A New Semantic-Based Query Processing Architecture Guangtao Xue, Qunhua Pan, and MingLu Li

Friday, September 14th

ADPNA 2007

Room: B

8:30 - 10:00 Session 1: *P2P Networks*

Chair: Yoshitaka Shibata, Iwate Prefectural University

- Making an Agreement in an Order Heterogeneous Group by Using a Distributed Coordination Protocol Ailixier Aikebaier, Tomoya Enokido, and Makoto Takizawa
- An Approach to Dynamic Ontology Integration for P2P/DAKS Coalitions S. M. Deen, K. Ponnampereuma, and M. Takizawa
- An Experimental Study on Peer Selection in a P2P Network over PlanetLab Fatos Xhafa, Leonard Barolli, Raul Fernandez, and Thanasis Daradoumis
- Cooperation of Trustworthy Peers in P2P Overlay Networks Yoshio Nakajima, Kenichi Watanabe, Alireza Goudarzi Nemati, Tomoya Enokido, Makoto Takizawa, and S. Misbah Deen

10:00 - 10:30 Break

10:30 - 12:00 Session 2: *Wireless Sensors Networks and Security*

Chair: Tomoya Enokido, Rissho University

- Wireless Dynamic Token Protocol for MANET Xianpu Sun, Yanling Zhang, and Jiandong Li
- Performance Behavior of AODV, DSR and DSDV Protocols for Different Radio Models in Ad Hoc Sensor Networks Tao Yang, Makoto Ikeda, Giuseppe De Marco, and Leonard Barolli
- Performance Evaluation of Large Scale Disaster Information Network Yoshitaka Shibata and Kazuo Takahata

12:00 - 13:30 Lunch

13:30 - 15:00 Session 3: *Distributed Systems*

Chair: Leonard Barolli, Fukuoka Institute of Technology

- Design and Evaluation of a Legal Information Flow (LIF) Scheduler in a Role-Based Access Control Model Tomoya Enokido and Makoto Takizawa
- A Quality-Driven Algorithm for Resource Scheduling Based on Market Model on Grid Lei Tang, Zhiyi Yang, Zhiwen Yu, and Yunlan Wang
- Data Exchanging in Hierarchical Infostation Systems Mazen Tlais and Frederic Weis
- An Enhanced Marketable Quality and Profitability Model for Network Service Pricing: Some Numerical Analysis Valbona Barolli, Heihachiro Fukuda, Leonard Barolli, and Makoto Takizawa

15:00 - 15:30 Break

15:30 - 17:00 Session 4: *Multimedia Communications and Applications*

Chair: Leonard Barolli, Fukuoka Institute of Technology

- Efficient Scheduler for the Growing VoIP Traffic Shawish Ahmed, Xiaohong Jiang, and Susumu Horiguchi
- Sensibility Retrieval Method That Uses Amount of Physical Feature of Traditional Craft Object Akihiro Miyakawa, Kaoru Sugita, and Yoshitaka Shibata
- A Student Experiment Method for Embedded System Education Based on Incremental Upgrade Hiroyasu Mitsui, Hidetoshi Kambe, Dilmurat Tilwaldi, and Hisao Koizumi
- A Proposal of Service System Development Framework with Multi-agents Jun Sawamoto, Dilmurat Tilwaldi, Tsutomu Okawa, Hidekazu Tsuji, and Hisao Koizumi

EPDC 2007

Room: C

8:30 - 10:00 Session 1: *EPDC1*

Chair: Yian Zhu, Northwestern Polytechnical University

- Survivable Embedded Mission-Critical Network Base on Fibre Channel Yue Wang, WanDong Cai, and Qi Duan
- Embedded Hardware/Software Design and Cosimulation Using User Mode Linux and SystemC Yung-Tai Hsu, Yuan-Jin Wen, and Sheng-De Wang
- Application of Policies in Autonomic Computing System Based on Partition-Able Server Wen-jie Liu and Zhan-huai Li
- A New Dynamic Threshold Secret Sharing Scheme from Bilinear Maps Wei Chen, Xiang Long, Yuebin Bai, and Xiaopeng Gao

10:00 - 10:30 Break

10:30 - 12:00 Session 2: *EPDC2*

Chairs: Laurence T. Yang, St. Francis Xavier University and XiaoYa Fan, Northwestern Polytechnical University

- An Architecture of Dynamically Reconfigurable Processing Unit (RPU) Guochang Zhou and Xubang Shen
- A Similar Resource Auto-Discovery Based Adaptive Fault-Tolerance Method for Embedded Distributed System Kailong Zhang, Ke Liang, Xingshe Zhou, Kaibo Wang, Xiao Wu, and Zhiyi Yang
- Mutual Effect of Instruction Layout Optimization and Instruction Memory Hierarchy Yu-Ying Wang and Xing-She Zhou

MCSoc 2007

Room: D

8:30 - 10:00 Session 1: *Embedded MCSoc's*

Architectures I

- Memory Optimization for Embedded Systems: Running H.264/AVC Video Encoder Tao Sheng, Mudar Sarem, Jingli Zhou, and Shuai Hu
- Camera Interface Method in Mobile Handset and Its Performance Comparison Minyoung Eom, Jaegeun Oh, and Seon Wook Kim

10:00 - 10:30 Break

10:30 - 12:00 Session 2: *Low Power MCMs and Synthesis Techniques*

- Power Management of Multicore Multiple Voltage Embedded Systems by Task Scheduling Gang Qu
- One New In-Operation Self-Testability Mechanism Designed for SoC Microchips following IEEE STD 1500 Tianjia Sun and Li Guo
- Mathematical Model for Multiobjective Synthesis of NoC Architectures Ben A. Abderazek, Mushfiqzaman Akanda, Tsutomu Yoshinaga, and Masahiro Sowa

12:00 - 13:30 Break

13:30 - 15:00 Session 3: *Embedded MCMs Architectures II*

- 3D Caricature Generation System on the Mobile Handset Using a Single Photograph Yeong-Kyu Lim, Alexander Fedorov, and Shin-Dug Kim
- Memory Efficient and Low Complexity Variable Length Decoding for MPEG-4 Applications Tao Sheng, Mudar Sarem, and Jingli Zhou

uPADS 2007

Room: E

8:30 - 10:00 Session 1: *Middleware*

- Incremental In-Network RNN Search in Wireless Sensor Networks Yung-Chiao Tseng, Chao-Chun Chen, Chiang Lee, and Yuan-Ko Huang
- Event Processing Middleware for Wireless Sensor Networks S. Selvakennedy, Uwe Rohm, and Bernhard Scholz
- PAS: Prediction-Based Adaptive Sleeping for Environment Monitoring in Sensor Networks Zheng Yang, Bin Xu, Jingyao Dai, and Tao Gu
- A Support Method Method for Improving Learner's Learning Habit Using Behavior Analysis in a Ubiquitous Environment Mianxiong Dong, Kaoru Ota, Zixue Cheng, and Guojun Wang

10:00 - 10:30 Break

10:30 - 12:00

Session 2: *Deployment and Protocols*

- Maximal Coverage Scheduling in Randomly Deployed Directional Sensor Networks Weifang Cheng, Shanshan Li, Xiangke Liao, Shen Changxiang, and Haitao Chen
- Cooperative Localization with Pre-knowledge Using Bayesian Network for Wireless Sensor

Networks Shih-Hsiang Lo, Chun-Hsien Wu, and Yeh-Ching Chung

- On Energy Efficient Communications over Rayleigh Fading Channel with Delivery Rate and Delay Constraints in Wireless Sensor Networks Xiao-Hui Lin and Yu-Kwong Kwok
- A Unified TCP Enhancement for Wireless Mesh Networks Chunlei Liu, Fangyang Shen, and Min-Te Sun
- RSB-Topo: A Topology Adaptation Algorithm for Unstructured P2P Networks Yilin Wang, Wenzhong Li, Jianzhong Chen, Sanglu Lu, Fang Wang, and Daoxu Chen

12:00 - 13:30 Break

13:30 - 15:00 Session 3: *Routing and Tracking*

- Wireless Mesh Sensor Networks in Pervasive Environment: A Reliable Architecture and Routing Protocol Feilong Tang, Minyi Guo, Minglu Li, Yanqin Yang, Daqiang Zhang, and Yi Wang
- OMR: An Opportunistic Multi-path Reliable Routing Protocol in Wireless Sensor Networks Junzhao Du, Hui Liu, and Ping Chen
- Source Routing for Overlay Multicast in Wireless Ad Hoc and Sensor Networks Chi-Kuo Chiang and Chung-Ta King
- RARE: An Energy-Efficient Target Tracking Protocol for Wireless Sensor Networks Elizabeth Olule, Guojun Wang, Minyi Guo, and Mianxiong Dong