

## ADVANCED PROGRAM OF APPT2005

<b>26 OCT 2005</b>			
<b>16:00 ~ 19:30</b>	<b>Registration</b>		
<b>18:30 ~ 21:30</b>	<b>Reception (Maman Room 3/F Regal Kowloon Hotel)</b>		
<b>27 OCT 2005</b>			
<b>08:30 ~ 17:00</b>	<b>Registration</b>		
<b>08:30 ~ 09:00</b>	<b>Opening Ceremony</b>		
<b>09:00 ~ 10:00</b>	<p><b>Keynote Speech 1</b>  Balancing System Resource Supply and Demand for Cost Effective High Performance Computing  <i>Xiaodong Zhang</i>  Ohio State University</p>		
<b>10:00 ~ 10:20</b>	<b>Coffee Break</b>		
<b>10:20 ~ 12:00</b>	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><b>Session A.1 (Architecture 1)</b></p> <ol style="list-style-type: none"> <li>1. A Data Transformations Based Approach for Optimizing Memory and Cache Locality on Distributed Memory multiprocessors <i>Jun Xia, Xuejun Yang</i></li> <li>2. A Frech Policy Maximizing Throughput and Fairness for Two-Context SMT Processors <i>Caixia Sun, Hongwei Tang, Minxuan Zhang</i></li> <li>3. A Loop Transformation Using Two Parallel Region Partitioning Method <i>Sam Jin Jeong, Jung Soo Han</i></li> <li>4. Criticality Based Speculation Control for Speculative Multithreaded Architectures <i>Rahul Nagpal, Anasua Bhowmik</i></li> <li>5. Design and Implementation of Semantic Caching Coherency Control Scheme toward Distributed Environment <i>Hai Wan, Lei Li</i></li> </ol> </td> <td style="width: 50%; vertical-align: top;"> <p><b>Session A.2 (Networking 1)</b></p> <ol style="list-style-type: none"> <li>1. A Hybrid Integrated QoS Multicast Routing Algorithm in IP/DWDM Optical Internet <i>Xingwei Wang, Jia Li, Min Huang</i></li> <li>2. An Efficient Distributed Broadcasting Algorithm for Ad Hoc Networks <i>Qiang Sun, Layuan Li</i></li> <li>3. Chaos-based Dynamic QoS Scheme and Simulating Analysis <i>Qigang Zhao, Qunzhan Li</i></li> <li>4. Dynamic Delaunay Triangulation for Wireless Ad Hoc Network <i>Ming Li, Xicheng Lu, Wei Peng</i></li> <li>5. Energy Efficient Multipath Routing in Large Scale Sensor Networks with Multiple Sink Nodes <i>Yuequan Chen, Edward Chan, Song Han</i></li> </ol> </td> </tr> </table>	<p><b>Session A.1 (Architecture 1)</b></p> <ol style="list-style-type: none"> <li>1. A Data Transformations Based Approach for Optimizing Memory and Cache Locality on Distributed Memory multiprocessors <i>Jun Xia, Xuejun Yang</i></li> <li>2. A Frech Policy Maximizing Throughput and Fairness for Two-Context SMT Processors <i>Caixia Sun, Hongwei Tang, Minxuan Zhang</i></li> <li>3. A Loop Transformation Using Two Parallel Region Partitioning Method <i>Sam Jin Jeong, Jung Soo Han</i></li> <li>4. Criticality Based Speculation Control for Speculative Multithreaded Architectures <i>Rahul Nagpal, Anasua Bhowmik</i></li> <li>5. Design and Implementation of Semantic Caching Coherency Control Scheme toward Distributed Environment <i>Hai Wan, Lei Li</i></li> </ol>	<p><b>Session A.2 (Networking 1)</b></p> <ol style="list-style-type: none"> <li>1. A Hybrid Integrated QoS Multicast Routing Algorithm in IP/DWDM Optical Internet <i>Xingwei Wang, Jia Li, Min Huang</i></li> <li>2. An Efficient Distributed Broadcasting Algorithm for Ad Hoc Networks <i>Qiang Sun, Layuan Li</i></li> <li>3. Chaos-based Dynamic QoS Scheme and Simulating Analysis <i>Qigang Zhao, Qunzhan Li</i></li> <li>4. Dynamic Delaunay Triangulation for Wireless Ad Hoc Network <i>Ming Li, Xicheng Lu, Wei Peng</i></li> <li>5. Energy Efficient Multipath Routing in Large Scale Sensor Networks with Multiple Sink Nodes <i>Yuequan Chen, Edward Chan, Song Han</i></li> </ol>
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<b>12:00 ~ 13:20</b>	<b>Lunch (Maman Room 3/F Regal Kowloon Hotel)</b>		
<b>13:20 ~ 14:20</b>	<p><b>Keynote Speech 2</b>  Research Issues in Adapting Computing to Small Devices  <i>Francis C.M. Lau</i>  The University of Hong Kong</p>		

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<b>14:20 ~ 15:20</b>	<p><b>Session B.1 (Networking 2)</b></p> <ol style="list-style-type: none"> <li>1. FLC: A Novel Dynamic Buffer Tuner for Shortening Service Roundtrip Time over the Internet by Eliminating User-Level Buffer Overflow on the Fly <i>Wilfred W.K. Lin, Allan K.Y. Wong, Tharam S. Dillon</i></li> <li>2. Intelligent Congestion Avoidance in Differentiated Service Networks <i>Farzad Habibipour, Mehdi Glily, Ali Yazdian, Masoum Fardis</i></li> <li>3. Transaction of Web Services Based on Struts <i>Gongxuan Zhang, Pingli Wang, Wen Chen</i></li> <li>4. Rule-based Anomaly Detection of Inter-domain Routing System <i>Peidong Zhu, Xin Liu, Mingjun Yang, Ming Xu</i></li> </ol>	<p><b>Session B.2 (Software &amp; System 1)</b></p> <ol style="list-style-type: none"> <li>1. A High Availability Mechanism for Parallel File System <i>Hu Zhang, Weiguo Wu, Xiaoshe Dong, Depei Qian</i></li> <li>2. A User-guided Semi-automatic Parallelization Method and Its Implementation <i>Chuliang Weng, Zhongguo Chen, Xinda Lu, Minglu Li, Yong Yin</i></li> <li>3. CAPU: Enhancing P2P File Sharing System with Capacity Aware Topology <i>Hongliang Yu, Weimin Zheng, Dongsheng Wang, Haitao Dong, Lu Li</i></li> </ol>
<b>15:20 ~ 15:40</b>	<b>Coffee Break</b>	
<b>15:40 ~ 17:00</b>	<p><b>Session C.1 (Architecture 2)</b></p> <ol style="list-style-type: none"> <li>1. Energy Efficient United L2 Cache Design With Instruction/Data Filter Scheme <i>Zhiqiang Ma, Zhenzhou Ji, Mingzeng Hu, Yi Ji</i></li> <li>2. Improving Latency Tolerance of Network Processors through Simultaneous Multithreading <i>Bo Liang, Hong An, Fang Lu, Rui Guo</i></li> <li>3. RIMP: Runtime Implicit Predication <i>YuXing Tang, Kun Deng, Xiaodong Wang, Yong Dou, Xingming Zhou</i></li> <li>4. Static Partitioning vs Dynamic Sharing of Resources in Simultaneous MultiThreading Microarchitectures <i>Liu Chen, Jean-Luc Gaudiot</i></li> </ol>	<p><b>Session C.2 (Software &amp; System 2)</b></p> <ol style="list-style-type: none"> <li>1. Load Balancing Design Issues on Prefetch-Based DSM Systems <i>Hsiao-Hsi Wang, Kuan-Ching Li, Kuo-Jen Wang, Ssu-Hsuan Lu, Chun-Chieh Yang</i></li> <li>2. Task Assignment for Network Processor Pipelines Using GA <i>Shoumeng Yan, Xingshe Zhou, Lingmin Wang, Fan Zhang, Haipeng Wang</i></li> <li>3. Test-Suite Reduction Using Genetic Algorithm <i>Xueying Ma, Binkui Sheng, Chengqing Ye</i></li> <li>4. Implementing Component Persistence in CCM based on StarPSS <i>Jingbin An, Yan Jia, Zhiying Wang</i></li> </ol>
<b>18:15 ~ 18:30</b>	<b>Boarding Coach for Banquet (3/F Regal Kowloon Hotel)</b>	
<b>19:30 ~ 21:30</b>	<b>Banquet (Hung Kee Seafood Restaurant, Sai Kung)</b>	

## ADVANCED PROGRAM OF APPT2005

<b>28 OCT 2005</b>			
<b>08:30 ~ 17:00</b>	<b>Registration</b>		
<b>09:00 ~ 10:00</b>	<b>Keynote Speech 3</b> Mobile Context-Aware Systems - Linking the Physical and Digital World <i>Kurt Rothermel</i> Universität Stuttgart		
<b>10:00 ~ 10:20</b>	<b>Coffee Break</b>		
<b>10:20 ~ 12:00</b>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;"> <b>Session D.1 (Applied Technology 1)</b>            1. A Method of Aggregate Query Matching in Semantic Cache for Massive Database Applications  <i>Jianyu Cai, Yan Jia, Shuqiang Yang, Peng Zou</i>            2. A Parallel Modular Exponentiation Scheme For Transformed Exponents  <i>Chin-Chen Chang, Yeu-Pong Lai</i>            3. Content Selection Model for Adaptive Content Delivery  <i>Chen Ding, Shutao Zhang, Chi-Hung Chi</i>            4. Dynamic Service Provisioning for Multiplayer Online Games  <i>Jens Muller, Rafael Schwerdt, Sergei Gorlatch</i>            5. Principal Component Analysis for Distributed Data Sets with Updating  <i>Zhengjian Bai, Raymond H. Chan, Franklin T. Luk</i> </td> <td style="width: 50%; vertical-align: top; padding: 5px;"> <b>Session D.2 (Algorithm &amp; Theory 1)</b>            1. Autonomous-Centered Problem Allocation Oriented to Cooperation  <i>Xiping Liu, Wanchun Dou, Guihai Chen, Shijie Cai, Jiashan Tang</i>            2. Contention-Free Communication Scheduling for Irregular Data Redistribution in Parallelizing Compilers  <i>Kun-Ming Yu, Chi-Hsiu Chen, Ching-Hsien Hsu, Chang-Wu Yu, Chiu-Kuo Liang</i>            3. Experiments on Asynchronous Partial Gauss-Seidel Method  <i>Hiroshi Nishida, Hairong Kuang</i>            4. Improved Program Dependence Graph and Algorithm for Static Slicing Concurrent Programs  <i>Jianyu Xiao, Deyun Zhang, Haiquan Chen, Hao Dong</i>            5. Parallelisation of Sequential Programs by Invasive Composition and Aspect Weaving  <i>Mikhail Chalabine, Christoph Kessler</i> </td> </tr> </table>	<b>Session D.1 (Applied Technology 1)</b> 1. A Method of Aggregate Query Matching in Semantic Cache for Massive Database Applications <i>Jianyu Cai, Yan Jia, Shuqiang Yang, Peng Zou</i> 2. A Parallel Modular Exponentiation Scheme For Transformed Exponents <i>Chin-Chen Chang, Yeu-Pong Lai</i> 3. Content Selection Model for Adaptive Content Delivery <i>Chen Ding, Shutao Zhang, Chi-Hung Chi</i> 4. Dynamic Service Provisioning for Multiplayer Online Games <i>Jens Muller, Rafael Schwerdt, Sergei Gorlatch</i> 5. Principal Component Analysis for Distributed Data Sets with Updating <i>Zhengjian Bai, Raymond H. Chan, Franklin T. Luk</i>	<b>Session D.2 (Algorithm &amp; Theory 1)</b> 1. Autonomous-Centered Problem Allocation Oriented to Cooperation <i>Xiping Liu, Wanchun Dou, Guihai Chen, Shijie Cai, Jiashan Tang</i> 2. Contention-Free Communication Scheduling for Irregular Data Redistribution in Parallelizing Compilers <i>Kun-Ming Yu, Chi-Hsiu Chen, Ching-Hsien Hsu, Chang-Wu Yu, Chiu-Kuo Liang</i> 3. Experiments on Asynchronous Partial Gauss-Seidel Method <i>Hiroshi Nishida, Hairong Kuang</i> 4. Improved Program Dependence Graph and Algorithm for Static Slicing Concurrent Programs <i>Jianyu Xiao, Deyun Zhang, Haiquan Chen, Hao Dong</i> 5. Parallelisation of Sequential Programs by Invasive Composition and Aspect Weaving <i>Mikhail Chalabine, Christoph Kessler</i>
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<b>12:00 ~ 13:20</b>	<b>Lunch (Maman Room 3/F Regal Kowloon Hotel)</b>		
<b>15:00 ~ 16:30</b>	<b>Annual Working Conference of Architecture Professional Committee, China Computer Federation (PQ703, The Hong Kong Polytechnical University)</b>		

## ADVANCED PROGRAM OF APPT2005

<b>13:20 ~ 15:20</b>	<b>Session E.1(Grid Computing 1)</b> 1. An Effective Information Service Architecture in Grid Environment <i>Huashan Yu, Yin Luo, Xingguo Zhu, Xiaoming Li</i> 2. An Efficient Data Management System with High Scalability for ChinaGrid Support Platform <i>Hai Jin, Wenjun Gong, Song Wu, Muzhou Xiong, Li Qi, Chengwei Wa</i> 3. CGSP: An Extensible and Reconfigurable Grid Framework <i>Yongwei Wu, Song Wu, Huashan Yu, Chunming Hu</i> 4. Grid Developing Environment in CGSP System <i>Weimin Zheng, Lisen Mu, Qing Wang, Yongwei Wu</i> 5. Grid Job Support System in CGSP <i>Jinpeng Huai, Yu Wan, Yong Wang, Haifeng Ou</i>	<b>Session E.2 (Algorithm &amp; Theory 2)</b> 1. Revisiting the Election Problem in Asynchronous Distributed Systems <i>SungUoon Bauk</i> 2. Scheduling Scheme with Fairness and Adaptation in the Joint Allocation of Heterogeneous Resources <i>Yu Hua, Chanle Wu, Mengxiao Wu</i> 3. Solving the Symmetric Tridiagonal Eigenproblem Using MPI/OpenMP Hybrid Parallelization <i>Yonghua Zhao, Jiang Chen, Xuebin Chi</i> 4. Trust Management with Safe Privilege Propagation <i>Gang Yin, Huaimin Wang, Tao Liu, Mingfeng Chen, Dianxi Shi</i> 5. Vector Space Based On Hierarchical Weighting: A Component Ranking Approach to Component Retrieval <i>Gui Gui, Paul Scott</i>
<b>15:20 ~ 15:40</b>	<b>Coffee Break</b>	
<b>15:40 ~ 17:00</b>	<b>Session F.1 (Grid Computing 2)</b> 1. OOML-Based Ontologies and Its Services for Information Retrieval in UDMGrid <i>Xixi Luo, Xiaowu Chen</i> 2. JFreeSim: A Grid Simulation Tool Based on MTMSMR Model <i>Hai Jin, Jin Huang, Xia Xie, Qin Zhang</i> 3. A Constellation Model for Grid Resource Management <i>Yinfeng Wang, Xiaoshe Dong, Xiuqiang He, Hua Guo, Fang Zheng, Zhongsheng Qin</i> 4. Early Experience of Remote and Hot Service Deployment with Trustworthiness in CROWN Grid <i>Hailong Sun, Yanmin Zhu, Chunming Hu, Jinpeng Huai, Yunhao Liu, Jianxin Li</i>	<b>Session F.2 (Applied Technology 2)</b> 1. Priority Conscious Transaction Routing in a Real-Time Shared Disks Cluster <i>Kyungoh Ohn, Sangho Lee, Haengrae Cho</i> 2. Probabilistic Continuous Update Scheme in Location Dependent Continuous Queries <i>Song Han, Edward Chan</i> 3. SIP-based Adaptive Multimedia Transmissions for Wired and Wireless Networks <i>Weijia Jia, Man-Ching Yuen</i> 4. WM+ : An Optimal Multi-Pattern String Matching Algorithm Based On the WM Algorithm <i>Xunxun Chen, Binxing Fang, Lei Li, Yu Jiang</i>
<b>29 OCT 2005</b>		
<b>08:30 ~ 14:00</b>	<b>Half-Day Tour of Hong Kong (Free of Charge)*</b>	

\*Please inform us in advance via email [appt05@comp.polyu.edu.hk](mailto:appt05@comp.polyu.edu.hk), if you want to join the Half-Day Tour of Hong Kong on 29 OCT 2005.