Technical Program

Monday, July 10, 2006

7:00-9:00  Registration  Admiral’s Room

9:00-9:30  Opening Remarks  Parlor

Roger Lee & Naohiro Ishii, Conference Co-chairs
Brain Malloy, Program Chair

9:30-10:30  Keynote  Parlor

Session Chair: Yeong-Tae Song (Towson University, USA)

Getting in Touch With Your Feelings about Software Architecture
Dr. Rob Wojicik,
Software Engineering Institute
Carnegie Mellon University, U.S.A.

10:30-10:50  Coffee Break  Ballroom Foyer

10:50-12:30  Session 1 A & 1B  Parlor

1A: Parallel and Distributed Computing & Systems  Session Chair: Thuy Le (San Jose State University, USA)

1. A Grid Scheduling Algorithm for Bag-of-Tasks Applications Using Multiple Queues with Duplication
   Young Choon Lee and Albert Y. Zomaya (University of Sydney, Australia)

2. A VQ compression algorithm for a multiprocessor system with a global sort collective function
   Akiyoshi Wakatani (Konan Univ, Japan)
3. Optimized algorithm for computing invariants of ordinary Petri nets
   C. F. Law, B. H. Gwee, and J. S. Chang (Nanyang Tech Univ, Singapore)

   Hiroyuki Takizawa and Hiroaki Kobayashi (Tohoku Univ, Japan), Noboru Yamada Nagaca Univ of Tech, Japan) and Seigo Sakai
   (Yokohama National Univ, Japan)

5. Model the MPI Performance for Non-Contiguous Data
   Thuy T. Le (San Jose State University, USA)

1B: Software Metrics & Project Management          Board Room

Session Chair: Yeong-Tae Song (Towson University, USA)

1. An Empirical Study to Investigate Software Estimation Trend in Organizations Targeting CMMI-SM
   Mehwish Nasir (NIIT, NUST, Pakistan)

2. Decoupling Metrics for Services Composition
   Kai Qian and Frank Tsui (Southern Polytechnic State Univ, USA), Jigang Liu (Metropolitan State Univ, USA)

3. Improving Accuracy of Multiple Regression Analysis for Effort Prediction Mode
   Kazunori Iwata (Aichi Univ, Japan), Yoshiyuki Anan (Omron Software LT\td, Japan), Toyoshiro Nakashima (Sugiyama Jogakuen Univ, Japan)
   and Naohiro Ishii (Aichi Inst of Tech, Japan)

4. An Approach to analyzing the Windows and Linux Security Models
   Mark Song, Michael Stinson, Roger Lee, and Paul Albee (Central Michigan University, USA)

12:30-1:40  Luncheon (Complimentary)                       Ballroom II

1:40-3:40   Session 2A & Session 2B

2A: Communication Systems & Networks          Parlor

Session Chair:  Shang-Juh Kao (National Chung-Hsing University, Taiwan)

1. A Hierarchical Packet Scheduler for Differentiated Services in High-Speed Networks
   Chin-Chi Wu, Hsien-Ming Wu and Woei Lin (National Chung-Hsing Univ, Taiwan), Chiou Moh (Nan-Kai Inst of Tech, Taiwan)

2. Design of customer-based AQM routers to achieve fair inter-server bandwidth allocation
   Hsien-Ming Wu, Chin-Chi Wu and Woei Lin (National Chung-Hsing Univ, Taiwan)

3. Reducing the Requirement in FEC Codes via Capillary Routing
   Emin Gabrielyan and Roger Hersch (Swiss Fed Inst of Tech, Switzerland)
4. Topology Discovery for Coexisting IPv6 and IPv4 Networks
   I-Ping Hsieh and Shang-Juh Kao (National Chung-Hsing Univ, Taiwan)

5. Security Gateway for Accessing IPv6 WLAN
   Chih-Mou Shih and Shang-Juh Kao (National Chung-Hsing Univ, Taiwan)

2B: COMSAR Workshop I
Session Chair: Axel Korthaus (University of Mannheim, Germany)

1. Using Dynamic Slicing to Analyze Change Impact on Role Type Based Component Composition Model
   Tie Feng (Jilin University, China), and Jonathan Maletic

2. Mapping COSA Software Architecture Concepts into UML 2.0
   Tahar Khammaci, Adel Smeda and Mourad Oussalah (University of Nantes, France)

3. Multi-Agent Testing Architecture for Monitoring and Analyzing the Performance of Web Applications
   Huiming Yu (North Carolina A&T State Univ, USA), Jin Zhang, Jinsheung Xu

4. Analyzing Security Interoperability During Component Integration
   Ebenezer Oladimeji(Verizon Comm.,USA) and, Lawrence Chung (University of Texas at Dallas, USA)

5. A Distributed Topic Map Architecture for Enterprise Knowledge Management
   Axel Korthaus, Stefan Henke, Markus Aleksy and Martin Schader (Univ of Mannheim, Germany)

3:40-4:00 Coffee Break

Ballroom Foyer

4:00-6:00 Session 3A & Session 3B

3A: Data Mining, Data Warehousing & Database
Session Chair: Naohiro Ishii (Aichi Institute of Technology, Japan)

1. Fault Tolerant Non-trivial Repeating Pattern Discovering for Music Data
   Yu-lung Lo and Chun-yu Chen (Chaoyang Univ of Tech, Taiwan)

2. A Study for Forecasting Water Supply Demand in the Area-K Waterworks Service Area
   Yukio Maruyama(Japan Bio Info Research Ctr, Japan) and Hisashi Yamamoto(Tokyo Metropolitan Univ, Japan)

3. Incorporating Heterogeneous XML formats using Relational Database
   Sungchul Hong and Yeong-Tae Song (Towson Univ, USA)

4. Text Classification by Combining Grouping,LSA and kNN
   Naohiro Ishii,Tsuyoshi Murai, Takahiro Yamada and Yongguang Bao (Aichi Institute of Tech, Japan)
3B: COMSAR Workshop II
Board Room
Session Chair: Kiumi Akingbehin (University of Michigan-Dearborn, USA)

1. Enhanced Facilitated Application Specification Technique (eFAST)
   Karim Dad and Atif Neuman (Comsats Institute of Information Tech, Pakistan)

2. Representing Security Goals, Policies, and Objects
   Ebenezer Oladimeji (Verizon Communications, USA), Sam Supakkul and Lawrence Chung (Univ of Texas at Dallas, USA)

   Gilda Pour (San Jose State Univ, USA)

4. A Study on the Application of Six Sigma Tools to PSP/TSP for Process Improvement
   Youngkyu Park, Hyuncheol Park, Hojin Choi and Jongmoon Baik (Information & Communications Univ, Korea)

5. TUG: an Executable Specification Language
   Chia-Chu Chiang (Univ of Arkansas at Little Rock, USA)

Tuesday, July 11, 2006

7:00-8:00 Registration
Admiral’s Room

8:00-10:00 Session 4A & Session 4B

4A: Data Mining, and Information Management Systems
Parlor
Session Chair: Gongzhu Hu (Central Michigan University, USA)

1. Measuring the Benefits of Summarizing quantitative Information in Pervasive Computing Systems
   Faraz Rasheed, Young-Koo Lee, Sungyoung Lee (KyungHee University, Korea)

2. Mining association rules from data with missing values by database partitioning and merging
   Takahiko Shintani (Hitachi, Ltd, Japan)

3. An Extended Cellular Automata Model for Data Mining of Land Development Data
   Gongzhu Hu (Central Michigan Univ, USA) and Yichun Xie (Eastern Michigan Univ, USA)

4B: Mobile/Wireless Computing and Internet Technology and Applications
Board Room
Session Chair: Chong-wei Xu (Kennesaw State Univ, USA)

1. K-Interleaving Rendezvous Overlay Network Construction Scheme
   Khaled Ragab, Yoshihiro Oyama and Akinori Yonezawa (Tokyo Univ, Japan)
2. Session Initiation Protocol (SIP) based Event Notification System Architecture for Telemedicine Applications
   Golam Sorwar (Southern Cross Univ, Australia), Anwar sadat (Bangladesh Open Univ, Bangladesh) and Morshed U. Chowdhury (Deakin Univ, Australia)

3. Hoarding and prefetching for mobile databases
   Mariano Cravo Teixeira Neto and Ana Carolina Salgado (Federal Univ of Pernambuco, Brazil)

4. Enhancing the Horizons of Mobile Computing with Mobile Agent Components
   Gilda Pour (San Jose State Univ, USA) and Nivedita Laad (CISCO Systems, USA)

5. A Framework for Developing Wireless Mobile Online Applications
   Chong-wei Xu (Kennesaw State Univ, USA)

10:00-10:20 Coffee Break  Ballroom Foyer

10:20-12:20 Session 5A & Session 5B

5A: Software Engineering and Information Engineering I
Session Chair: Walter Dosch (University of Lubeck, Germany)  Parlor

1. A Method to Generate C# Code from MDA PSM
   Soo Dong Kim and Deuk Kyu Kum (Soongsil Univ, Korea)

2. Eliciting an Enhancive Maintenance Model in Three Organisations in Ghana
   Mira Kajko-Mattsson and Michael Bosu (Stockholm Univ & Royal Inst. Of Tech, Sweden)

3. Searching Pareto Solutions of Bi-objective NVP System Design Problem with Breadth First Search Method
   Hidemi YANACHI, Hisashi YAMAMOTO, Yasuhiro TSUJIMURA and Yasushi RAMBAYASHI

4. Project Automation: Case study on the NeOSS Project
   Yong-kee Jeong, Jun-Suk Oh

5. Raising Local Density for Object Reconstruction using Auxiliary Points
   Bin-Shyan Jong, Pai-Feng Lee, and Juin-Ling Tseng (Chung Yuan Christian Univ, Taiwan)

6. On History-Sensitive Models of Interactive Queues
   Walter Dosch (Univ of Lubeck, Germany), Pornsiri Muenchaisri and Wuttipong Ruanthong (Chulalongkorn Univ, Thailand)

5B: Information Management Systems and Management Information Systems & Technology Education and Training  Board Room
Session Chair: Naohiro Ishii (Aichi Institute of Technology, Japan)

1. Application Services based on Personal Data Ontology
   Yu-Chen Chen and Shang-Juh Kao (National Chung-Hsing Univ, Taiwan)
2. Content Validating the B2E Portal User Satisfaction Instrument
Dewi Rooslani Tojib and Ly-Fie Sugianto (Monash University, Australia)

3. A Web- and Problem-Based Learning System in Artificial Intelligence
Victor R.L. Shen (National Formosa Univ, Taiwan) and Tong-Ying Juang (National Taipei Univ, Taiwan)

4. Enhancing Undergraduates' Capabilities of Practice and Innovation to Meet the Regional Needs
Zhu yangqin, yang jiwen and Zhu qiaoming (Soochow Univ, China)

5. New Network Management System with Communication Control of the Client
Kazuya Odagiri, Rihito Yaegashi and Masaharu Tadauchi (Toyota Tech. Inst, Japan), Naohiro Ishii (Aichi Inst of Tech, Japan)

12:20-1:20  Lunch (on your own)

1:20-3:20  Session 6A

6A: Image Processing & Pattern Recognition
Parlor
Session Chair: Gongzhu Hu (Central Michigan University, USA)

1. A New Approach to Persian/Arabic Text Steganography
Mohammad Hassan Shirali-Shahreza (Yazd Univ, Iran) and Mohammad Shirali-Shahreza (Sharif Univ of Tech, Iran)

2. Collage Steganography
Mohammad Shirali-Shahreza and Sajad Shirali-Shahreza (Sharif Univ of Tech, Iran)

3. Fast Polygonal Approximation Based On Genetic Algorithms
Yao-Hong Tsai (Hsuan Chuang Univ, Taiwan)

4. Image Features Extraction for Multimedia Database Content Description
Shu-Sheng Hao (National Defense University, Taiwan)

5. Irregular Patch for Image Synthesis
Changzhen Xiong (Sun Yat-Sen Univ, China) and Jing Huang (Beijing Normal Univ, China)

6. Gradient Non-Linearity Correction of MR Images for Functional Radiosurgery
Tom S. Lee and Keith E. Schubert (Cal State Univ, USA) and Reinhard W. Schulte (Loma Linda Univ Med Center, USA)

3:20-3:40  Coffee Break
Ballroom Foyer

3:40-5:40  Session 7A

7A: Computer Architecture, and Software Testing and Tools
Parlor
Session Chair: Kiumi Akingbehin (University of Michigan-Dearborn, USA)
1. A New Computer Architecture Using a New Program Driving Method
   Xiaobo Li, Ke Luo, Xiangdong Cui, Lalín Jiang, Huiping Zhou,
   Xiaoqiang Ni, Chiyuan Ma, Jinghui Jiang, Zhou Zhou (Changsha Univ
   of Science and Tech, China)

2. Analysis and Performance Results of a fluid dynamics Application on
   MASA Stream Processor
   Mei Wen, Nan Wu, Changqing Xun, Wei Wu, Chunyuan Zhang (National
   Univ of Defense Tech, China)

3. Efficient BISR Techniques for Word-Oriented Embedded Memories with
   Hierarchical Redundancy
   Shyue-Kung Lu (Fu Jen Catholic Univ, Taiwan)

4. Performance of PGA (Programmable Graph Architecture) for Matrix
   Multiplication
   Muling Peng, Sreekanth Ramani, K. Wendy Tang (SUNY at Stony Brook,
   USA), A. Yavuz Oruc (Univ of Maryland, USA)

5. Program Analysis and Testing of Database Applications
   S. K. Gardikiotis and N. Malevris (Athens Univ of Economics and
   Business, Greece)

6. Towards Destructive Software Testing
   Kiumi Akingbehin (Univ of Michigan-Dearborn, USA)

6:00-7:30  Dinner Banquet (Complimentary)  Ballromm I

Wednesday, July 12, 2006

7:00-8:00  Registration  Admiral’s Room

8:00-9:40  Session 8A & Session 8 B

8A: Software Engineering and Information Engineering II
   Session Chair: Cui Zhang (California State Univ Sacramento, USA)  Parlor

   1. Enabling Multiple Conferences in Recordable Virtual Collaboration
      Meekyeong Kim and Chuleui Hong (Sang Myung Univ, Korea) and Yeong-
      Tae Song (Towson Univ, USA)

   2. Software Source Code Correlation
      Robert Zeidman (Zeidman Consulting, USA)

   3. Writing Use-Case with a Minimal Set of Words
      Takao Osaki, Atsushi Kobayashi, Takuo Kato (NEC Corp, Japan)

   4. Mapping between Temporal Scripts of Animation Component and SMIL
      Document using UML Sequence Diagram
      Yan Ha (Kyungin Women's College, Korea) and Roger Lee (Central
      Michigan Univ, USA)
5. Generating Java Skeletal Code with Design Contracts from Specifications in a Subset of Object Z.
Sowmiya Ramkarthik and Cui Zhang (California State Univ Sacramento, USA)

8B: Artificial Intelligence, Image and Signal Processing
Chair: Walter Dosch (University of Lubeck, Germany) Board Room

1. Index Fund Optimization Using by GA Based on Coefficients of Determination
Yukiko Orito and Jun Takano (Ashikaga Inst of Tech, Japan), Manabu Takeda and Hisashi Yamamoto (Tokyo Metropolitan Univ, Japan)

2. ACOUSTIC PRESSURE MINIMIZATION USING H2 CONTROL
Wen-Kung Tseng, Ying-Pin Chang and Shun-Cheng Lien (Nan Kai Inst of Tech, Taiwan)

3. Adaptive Sampling via Histogram Equalization using an Active Walker Model
Oladipo O. Fadiran and Peter Molnar (Clark Atlanta Univ, USA) and Lance M. Kaplan (US Army Reasearch Lab, USA)

9:40-10:00 Coffee Break Ballroom Foyer

10:00-11:00 Session 9A & Session 9 B

9A: Information Assurance Parlor
Session Chair: Cui Zhang (California State Univ Sacramento, USA)

1. Information Relevance Management Model - a New Strategy in Information Security Management in the Outsourcing Industry
Li Shi Ying, Luo Yi & Dai Yu Lin (I-SOMTRI, China)

Lianxing Jia, Zhifeng Chen and Chenhui Li (Communications Command Acad, China) and Feng Dan (Huazhong Univ of Sci & Tech, China)

3. Improving the Usability of a Virtual Environment with the Integration of Multi-sensory Feedback
Y. Zhang (Cambridge Univ, United Kingdom), A. Travis (Clare College, Cambridge, United Kingdom) and T. Fernando (Univ of Salford, United Kingdom)

9B: Intelligent Agent Technology, and Agent Based Systems Board Room
Chair: Walter Dosch (University of Lubeck, Germany)

1. Behavior Coordination Mechanism for Intelligent Home
Minkyoung Kim and Hyun Kim (Electronics & Telecommunications Research Institute, Korea)

2. Solving Distributed Mutual Exclusion using Cooperating Mobile Agents
F. Ahmad and N. Santoro (Carleton Univ, Canada), N. Goel (Cistel Tech Inc, Canada) and A. Nayak (University of Ottawa, Canada)
3. Towards successful automated negotiations based on Neural Networks
   Ioannis V. Papaioannou, Ioanna G. Roussaki and Miltiades E.
   Anagnostou (National Tech Univ of Athens, Greece)

11:00-12:20  Session 10A & Session 10B

10A: Web Engineering & Applications  Parlor
Session Chair:  Roger Lee (Central Michigan University, USA)

1. Browser Compatible XLink Processing
   Tseng-Chang Yen, Felix Hsu, and Shang-Juh Kao (National Chung-Hsing
   Univ, Taiwan)

2. Integration of QoS Queuing Schedules to QoS Caching Schemes
   Yong Zhang and Wenying Feng (Trent Univ, Canada)

3. Web-Based System for Electronic Navigational Charts Using GML and
   SVG
   Seong Chul Kam, Seong Dae Lee, Hyu Chan Park, Xiaofang Zhou (Korea
   Maritime University, Korea)

10B: Data Mining, Software Engineering, and Intelligent Agent
    Technology  Board Room
Session Chair:  Naohiro Ishii (Aichi Institute of Technology, Japan)

1. Modeling the Network of Loyalty-Profit Chain in Chemical Industry
   Carl Lee, Olga Tabolina, James Mentele and Tim Fletcher (Central
   Mich Univ, USA), Tim Rey (Dow Chemical Co)

2. Empirical Validation of Test-Driven Pair Programming in Game
   Development
   Shaochun Xu and Vaclav Rajlich (Laurentian Univ, Canada)

3. Web-Based Intelligent Tutoring Systems in K-12 Settings: A Case
   Study on Approach and Outcomes
   State Univ, USA)

12:20-1:20  Lunch (on your own)

1:20-6:00  Individually arranged tours (see hotel tour guide)