

CIT2007 Program Overview

Tuesday, 16 October 2007

8:30–16:30 **Registration**

9:00–9:20 **Opening**
Chair: Toshiaki Miyazaki
Venue: Auditorium

9:20–10:20 **Keynote Address I**
Business Intelligence – An Industrial Perspective (Meichun Hsu)
Chair: Subhash Bhalla
Venue: Auditorium

10:20–10:40
Break

10:40–11:40

Session B-1: 2
Internet and Web Performance
Chair: Chang-sung Jeong
Venue: S5

Session F-1: 3
Secure Framework
Chair: Minyi Guo
Venue: S6

Session I-1: 3
RFID Management
Chair: Zixue Cheng
Venue: S7

Session H-1: 3
Automated Testing Tools
Chair: Hironori Washizaki
Venue: S8

11:40–11:50
Break

11:50–13:10

Session B-2: 4
Web Analysis
Chair: Vitaly Klyuev
Venue: S5

Session F-2: 4
Watermarking and Encryption
Chair: Guojun Wang
Venue: S6

Session I-2: 4
Technologies for Ubiquitous Application and Network
Chair: Satoshi Kurihara
Venue: S7

Session H-2: 4
Modeling and Simulation
Chair: Sang Won Lim
Venue: S8

Session E-1: 4
Computer Graphics and Virtual Reality
Chair: Roman Đuriković
Venue: UBIC

13:10–14:20
Lunch Break: University Cafeteria

14:20–15:40

Session B-3: 4
Web Services and Applications I
Chair: Shigeru Kanemoto
Venue: S5

Session F-3: 4
Network Security
Chair: Takafumi Hayashi
Venue: S6

Session I-3: 3
Algorithms for Sensor Networks
Chair: Anh T. Pham
Venue: S7

Session H-3: 3
Application-Specific Software Engineering
Chair: Vitaly Klyuev
Venue: S8

15:40–16:30
Break

16:30–
Reception Party : University Cafeteria

Wednesday, 17 October 2007

8:30–18:00 **Registration**

9:00–10:00 **Keynote Address II**
The IUPS Physiome Project (Peter J. Hunter)
Chair: Daming Wei
Venue: Auditorium

10:00–10:10
Break

10:10–11:30

Session B-4: 4
Semantic Web
Chair: Ryuichi Oka
Venue: S5

Session I-4: 3
Energy Control Issue in
Sensor Networks
Chair: Toshiaki Miyazaki
Venue: S6

Session C-1: 3
Task and Resource
Management
Chair: Dongseung Kim
Venue: S7

Session H-4: 4
Software Product Line
Engineering
Chair: Incheon Paik
Venue: S8

11:30–11:40
Break

11:40–13:00

Session B-5: 4
Web Services and
Applications II
Chair: Alexander
Vazhenin
Venue: S5

Session I-5: 4
Sensor Network
Architecture and Model
Chair: Shiyong Zhang
Venue: S6

Session E-2: 4
Video Distribution and
Networks
Chair: Jungpil Shin
Venue: S7

Session D-1: 3
QoS and Security
Chair: Baoliu Ye
Venue: S8

13:00–14:00 **Lunch Break: University Cafeteria**
 13:10–13:50 **Luncheon Seminar : “The OpenSolaris Story” Jim Grisanzio, Sun Microsystems**
Chair: Incheon Paik

14:00–15:40

Session A-1: 5
XML and DB
Chair: Keitaro Naruse
Venue: S5

Session C-2: 5
HPC Application
Chair: Yingwen Song
Venue: S6

Session E-3: 5
Image Processing
Chair: Frank Ekpar
Venue: S7

Session D-2: 4
Protocol and Algorithms
I
Chair: Yongwoo Lee
Venue: S8

15:40–16:00
Coffee Served

16:00–18:00

Session A-2: 4
Classification
Chair: Incheon Paik
Venue: S5

Session C-3: 6
System and Architecture
Chair: Hitoshi Oi
Venue: S6

Session E-4: 5
Video Processing and
Analysis
Chair: Hirohide Demura
Venue: S7

Session D-3: 4
Application Systems
Chair: Yangwoo Ko
Venue: S8

18:00–19:00
Break

19:00–
Conference Banquet: Aizu-Wakamatsu Washington Hotel
Chair: Kazuaki Yamauchi

Thursday, 18 October 2007

8:30–13:00 **Registration**

9:00–10:40

Session A-3: 4
Imprecise Data and Feature Selection
Chair: Junya Terazono
Venue: S5

Session G-1: 5
Scheduling and Optimization
Chair: Yuichi Okuyama
Venue: S6

Session E-5: 5
Data Processing and Interfaces
Chair: Kamen Kanev
Venue: S7

Session D-4: 3
Protocol and Algorithms II
Chair: Yangwoo Ko
Venue: S8

10:40–10:50
Break

10:50–12:50

Session A-4: 6
Novel Information Processing
Chair: Shuxue Ding
Venue: S5

Session G-2: 6
Platform and Application
Chair: Hiroshi Saito
Venue: S6

Session E-6: 4
Image Processing and Analysis
Chair: Noriaki Asada
Venue: S7

Session D-5: 3
Protocol and Algorithms III
Chair: Satoru Ohta
Venue: S8

12:50–18:00
Lunch and Sightseeing (Bus Tour)

Friday, 19 October 2007

8:30–16:00 **Registration**

9:00–10:00

Keynote Address III

Large-scale Evaluation Infrastructure for Information Access Technologies Enhancement and Creativity (Noriko Kando)

Chair: Vitaly Klyuev

Venue: Auditorium

Introduction to CIT 2008

Chair: Incheon Paik

10:00–10:20

Break

10:20–11:20

Session A-5 : 3
Intelligent Systems in Data Handling I
Chair: Ryuichi Oka
Venue: S5

Session D-6: 3
Protocols and Algorithms IV
Chair: Baoliu Ye
Venue: S6

Session G-3: 3
VLSI Design
Chair: Kenichi Kuroda
Venue: S7

Session J-1: 3
Web Services and Technologies
Chair: Li Guo
Venue: S8

11:20–11:30

Break

11:30–13:10

Session A-6 : 5
Intelligent Systems in Data Handling II
Chair: Keitaro Naruse
Venue: S5

Session D-7: 4
Analysis and Evaluation
Chair: Satoru Ohta
Venue: S6

Session E-7: 5
Text Processing and Analysis
Chair: Dejian Ye
Venue: S7

Session J-2: 4
SOA and Grid Technologies
Chair: Yuzhong Sun
Venue: S8

13:10–14:00

Lunch Break: University Cafeteria

14:00–16:00			
		Session E-8: 4 Static Image Segmentation Chair: Yue Lu Venue: S7	Session J-3: 6 Information Technology in Biomedicine Chair: Eunbo Shim Venue: S8

Technical Sessions A: Database and Data Mining

Session A-1: XML and DB

Active XML Schema Containment Checking based on Tree Automata Theory
Haitao Ma and Zhongxiao Hao

An Efficient Detection of Conflicting Updates in Valid XML
Changwoo Byun, Ilkook Yun, and Seog Park

A Journey towards More Efficient Processing of XML Data in (O)RDBMS
Irena Mlynkova

Schema-aware Keyword Search over XML Streams
Weidong Yang and Baile Shi

SemFilter: A Simple and Efficient Semantic Filtering of XML Messages
Jaehoon Kim and Seog Park

Session A-2: Classification

Ensembles of Region Based Classifiers
Sungha Choi, Byungwoo Lee, and Jihoon Yang

Neural Network for Text Classification Based on Singular Value Decomposition
Cheng Hua Li and Soon Cheol Park

An Efficient Method of Genetic Algorithm for Text Clustering Based on Singular Value Decomposition
Wei Song and Soon Cheol Park

Predicting Coronary Artery Disease from Heart Rate Variability using Classification and Statistical Analysis
Heon Gyu Lee, Ki Yong Noh, Hong Kyu Park, and Keun Ho Ryu

Session A-3: Imprecise Data and Feature Selection

Deputy Mechanism for OLAP over Imprecise Data and Composite Measure
Junqiang Liu and Xiandi Yang

CTU-Mine: An Efficient High Utility Itemset Mining Algorithm Using the Pattern Growth Approach
Alva Erwin, Raj P. Gopalan, and N.R. Achuthan

An Experimental Study on Feature Subset Selection Methods
Chulmin Yun, Donghyuk Shin, Hyunsung Jo, Jihoon Yang, and Saejoon Kim

Comparison of two feature selection methods in Intrusion Detection Systems
Mohammad Javad Fadaeieslam, Behrooz Minaei, Mahmood Fathi, and Mohsen Soryani

Session A-4: Novel Information Processing

Generic Component: A Generic Programming Approach
Chen Yewang, Zhao Wenyun, and Peng Xin

Virtual Organization: A New Approach in IT
Mohammad Reza Nami and Djamshid Tavangarian

Effective Processing over Continuous Data Stream
Misook Bae

Classification Algorithm Based on Human Social Behavior
Arit Thammano and Jitraporn Moolwong

A New Trajectory Search Algorithm Based on Spatio-temporal Similarity on Spatial Network
Jae-Woo Chang, Rabindra Bista, Ji-Hee Kim, and Young-Chang Kim

An Efficient Method to Determine the Diagonal Loading Factor for PAM Communication System
Wenlong Liu and Shuxue Ding

Session A-5: Intelligent Systems in Data Handling I

Dealing with Query Contention Issue in Real-time Data Warehouses by Dynamic Multi-level Caches
Ziyu Lin, Dongqing Yang, Guojie Song, and Tengjiao Wang

The Bump Hunting Method and Its Accuracy Using the Genetic Algorithm with Application to Real Customer Data
H. Hirose, T. Yukizane, and T. Deguchi

User-oriented Materialized View Selection
Ziyu Lin, Dongqing Yang, and Tengjiao Wang

Session A-6: Intelligent Systems in Data Handling II

Implementation of the moonquake database
Junya Terazono

Walking Stability by Age — A Feature Analysis Based on a Fourteen-Linkage Model
Bofeng Zhang, Takehiro Kanno, Wenxi Chen, Gengfeng Wu, and Daming Wei

A Temporal Meta Database System for 3D Objects
Vo Thi Ngoc Chau and Suphamit Chittayasothorn

An Efficient Goalie Strategy Using Twin Hidden Markov Models
T. Srinivasan, Srikanth P. Srinivasan, Shravan Kumar Alur, and Pravin Chandrasekaran

A Mechanism for Improving Web Server Performance using Fuzzy Concept
Bumjoo Park, Kiejun Park, Dongmin Shin, and Sungsoo Kim

Technical Sessions B: Internet and Web Application

Session B-1: Internet and Web Performance

Performance Evaluation of TD-Learning Methods for Bandwidth Provisioning
Mohsen Jahanshahi and Mohammad Reza Meybodi

A Parallel Downloading Algorithm for Redundant Networks

Ke Li, Wanlei Zhou, and Shui Yu

Session B-2: Web Analysis

Web Image Annotation based on the Decision Rules Inferred by the Statistical Analysis of Web Pages
Park Joohyoun, Giseok Choi, Jongwon Lee and Nang Jongho

Semantic Retrieval of Text Documents
Vitaly Klyuev and Vladimir Oleshchuk

Worrisome Rich-get-richer? Not The True Story!
Mingda Wu, Qiancheng Jiang, and Yan Zhang

Component based Approach to handle Synonym and Polysemy in Folksonomy
Sun-Sook Lee and Hwan-Seung Yong

Session B-3: Web Services and Applications I

Automatic Web Services Composition Using Combining HTN and CSP
Incheon Paik and Daisuke Maruyama

Dynamic Personalization for Book Recommendation System using Web Services and Virtual Library Enhancements
Takanori Kuroiwa and Subhash Bhalla

Web-Based Interface Architecture for the Improvement of Accessibility to Computational Resources on a Cluster System
Huioon Kim, Kyungwon Chun, Kil Su Jung, and Youngjoo Chung

A Multi-Clustering Hybrid Recommender System
Sutheera Puntheeranurak and Hidekazu Tsuji

Session B-4: Semantic Web

Proof for Multi-Agent Communication of Semantic Web Information
Vuong Xuan Tran and Hidekazu Tsuji

Semantic Web Based Simulation Service Customization and Composition
Tong Zhang, Yun-sheng Liu, and Ya-bing Zha

Semantic Representation and Ontology Construction in the Question Answering System
Ying-Hong Wang, Wen-Nan Wang, and Yi-Hsiang Yen

Semantic Information System based on Web Service and Ontology for Grid Computing Environment
Tae-nyon Kim and Chang-Sung Jeong

Session B-5: Web Services and Applications II

A Semi-automated Negotiation Process to Improve the Usability for Online Marketplaces
Lung Ngai, Phil Mak, Wan-Cheng Ni, and Lian-Chen Liu

SiteRank-Based Crawling Ordering Strategy for Search Engines
Qiancheng Jiang and Yan Zhang

Preserving Consistency Based on Wall-Time Precedence in P2P DVEs
Gao Liping and Gu Ning

Speech and Song Search on the Web: System Design and Implementation
Yuichi Yaguchi, Yoshiyuki Watanabe, Keitaro Naruse, and Ryuichi Oka

Technical Sessions C: High Performance Computing

Session C-1: Task and Resource Management

Web Service-based Dynamic Resource and Job Managements for Large-scale and Long-time Grid Computations

Yingwen Song, Yoshio Tanaka, Hiroshi Takemiya, and Satoshi Sekiguchi

Building single fault survivable parallel algorithms for matrix operations using redundant parallel computation

Yunfei Du, Panfeng Wang, Hongyi Fu, Haifang Zhou, and Xuejun Yang

A Job Management System for a Large Scale Grid System

Yong Woo Lee and Phil Doo Hong

Session C-2: HPC Application

Load balanced Parallel Prime Number Generator with Sieve of Eratosthenes on Cluster Computers

Soonwook Hwang, Kyusik Chung and Dongseung Kim

Evaluating the Performance of Basic Linear Algebra Subroutines on a Torus Array Processor

Ahmed Zekri and Stanislav Sedukhin

Evolutionary Programming with Operator Adaptation

Yong Liu

An Integer Partition Based Algorithm for Coalition Structure Generation

Veera Boonjing and Santit Narabin

Visualization of Message Races in MPI Parallel Programs

Mi-Young Park, Yong-Kee Jun, and Hyuk-Ro Park

Session C-3: Systems and Architecture

Design of Modular Rendering Pipeline

Tomas Agoston, Csaba Csuprai, Juraj Onderik, and Roman Durikovic

A Reliable Data Management Method for Parallel File System

Yanmei Huo, Liang Hu, Kexin Yang, and Jiubin Ju

Dedicated Disk I/O Strategies for IPTV Live Streaming Servers Supporting Timeshift Functions

Cheng Huang, Chenjie Zhu, Yi Li, and Dejian Ye

Implementation and Evaluation of Specific Data-Intensive Scientific Applications on the FT64 Stream Processor

Yu Deng, Xuejun Yang, Xiaobo Yan, Ying Zhang, and Jing Du

A Cluster File System for High Data Availability using Locality-Aware Partial Replication

Jinseok Kim, Sangman Sim, and Sungyong Park

Technical Sessions D: Networking and Mobile Computing

Session D-1: QoS and Mobile Protocol

Challenge in QoS Supporting via Integrating Differentiated Service and Multipath Routing on Mobile Ad-Hoc Network

Mostafa Esmaeili, Hamid Alipour, Maghsoud Abbaspour, and Mahshid Rahnama

Security and QoS Optimization for Distributed Real time Environment

Ahmad Jalal and Mian Ahmad Zeb

An Enhanced Dynamic and Distributed Domain-Based Handoff Scheme for Mobile IPv6

Xuebin Ma, Tao Wen, Quan Guo, and Gang Wang

Session D-2: Protocols and Algorithms I

Modeling and Simulating IPv6 Mobility

Xu Lei, YongSoo Kim, and Richard Lai

Stochastic Model of Finite Buffer Priority Queuing System with Multi-Type Batch Arrival and General Rejection

Attila Kőrösi, Balázs Székely, and Csaba Lukovszki

Fast Recovery from Hidden Node Collision for IEEE 802.15.4 LR-WPANs

Shengzhi Zhang and Sang-Jo Yoo

Word Indexing for Mobile Device Data Representations

Henry Larkin

Session D-3: Application Systems

KadStreaming: A Novel Kademlia P2P Network -based VoD Streaming Scheme

Jie Wu, BiSheng Liu, ShiYong Zhang, ZhiHui Lu, and YiPing Zhong

Development of i-appli for Women's Health Information Management System

Takehiro Kanno, Wenxi Chen, and Masumi Kitazawa

An Efficient Shared Learning Scheme for Layered Video Streaming over Application Layer Multicast

Jongmin Park, Seungik Lee, Yangwoo Ko, and Dongman Lee

A Context-Aware Framework for Mobile Navigation Service

Wonik Choi, Hyunduk Kim, Jinsu Kim, and Jinseok Chae

Session D-4: Protocols and Algorithms II

A Predictive and Synchronized Neighborhood Tracking Scheme for Mobile Ad Hoc Networks

Hui Xu, Jinsung Cho, and Sungyung Lee

A Fast Path Recovery Scheme for Publish/Subscribe in Mobile Ad Hoc Networks

Sang-chul Moon, Yangwoo Ko, and Dongman Lee

Scalable and Statistically Secure Fingerprinting Scheme for Mobile Game Content Distribution

Jae Min Seol and Seong Whan Kim

Session D-5: Protocols and Algorithms III

A Novel Method for Leader Election Algorithm

Mehdi Mirakhorli, Amir Azim Sharifloo, and Abolfaz Haghighat

Task Allocation Adaptable to Network Topology among Cooperative Heterogeneous Agents

Zheng Xiao, ShiYong Zhang, and Chengrong Wu

Adapting Superpeer Size Using Particle Swam Optimization for Self-Organizing Superpeer Ring with Loosely-Consistent DHT

Saeyoung Han and Sungyong Park

Session D-6: Protocols and Algorithms IV

Overview of LDPC Codes

Zongjie Tu and ShiYong Zhang

Optimal Zero-Correlation Zone Sequence Set Constructed from a Perfect Sequence

Takafumi Hayashi

Computing the Availability and MTTF of Shared Protection Systems

Hirokazu Ozaki and Atsushi Kara

Session D-7: Analysis and Evaluation

Performance of SD-method Compare with OFDM Method

Rongzhen Jin, Naoki Suehiro, and Changgao Han

Innovative Mobile Phone Services Based on Next Generation Infrastructure in Japan — A Survey

Akira Sasaki, Kazuaki Yamauchi, Wenxi Chen, Michael Cohen, Daming Wei, and Zixue Cheng

Performance Evaluation of Handling Interrupts Schemes in Gigabit Networks

Salman AlQahtani

Performance Comparison of Contention-Based Channel Access Mechanism of IEEE 802.11 and 802.11e

Mayank Kanthali, Apurva Gaiwak, and Prakash D Vyavahare

Technical Sessions E: Data, Multimedia, and Virtual Reality

Session E-1: Computer Graphics and Virtual Reality

Spin-Around: Phase-locked Synchronized Rotation and Revolution in Multistandpoint Panoramic Browsers

Michael Cohen, Ishara Jaysingha, and Julián Villegas

Control of Navigable Panoramic Imagery with Information Furniture: Chair-Driven 2.5D Steering Through Multistandpoint QTVR Panoramas with Automatic Window Dilation

Michael Cohen, Kunihiko Doi, Takayuki Hattori, Yoriobu Mine

Synæsthetic Music, or the Ultimate Ocular Harpsichord

Julián Villegas and Michael Cohen

A Shader for Virtual X-Ray Imaging

Shin Hasegawa, Hidetaka Funayama, and Daming Wei

Session E-2: Video Distribution and Networks

The Design and Implementation of a Scalable Wireless Video Streaming System Adopting TCP Transmission Mode

Ying Chai and Dejian Ye

Clear P2P IPTV Live Streaming System for Set-top Box Clients

Chenjie Zhu and Dejian Ye

A Stochastic Differential Equation Model for Queues on Network Video Traffic

Wenyan Hu and Dejian Ye

Packet Reversed Packet Combining Scheme

Chandan Bhunia

Session E-3: Image Processing

Content and Illumination Invariant Blur Measures for Realtime Video Processing

Sebastien Harasse, Laurent Bonnaud, and Michel Desvignes

Automatic Lung Segmentation in CT Images using Anisotropic Diffusion and Morphology Operation

Hyesuk Kim and Gueesang Lee

Flame Temperature Field Measurement Using Improved Generalized Cross-Validation Method

Yinghui Zhou and Dezhong Zheng

Implementation and Evaluation of a High Speed License Plate Recognition System on an FPGA

Takamasa Kanamori, Masatoshi Arai, Daisuke Konno, Tomomichi Nanba, Yoshiaki Ajioka, and Hideharu Amano

Motion Estimation for Real Time Transmission on H.264/AVC

Hyosun Yoon

Session E-4: Video Processing and Analysis

Reducing Spatial Resolution for MPEG-4 / H.264 Transcoding with Efficient Motion Reusing

Toan Nguyen, GueeSang Lee, JaeMyung Yoo, and Sangchan Park

Template-Based Adaptive Video Coding Algorithm in High Resolution Laptop Video Conference Systems

Chundong Wang and Dejian Ye

Gradient Based Error Concealment for H.264 Inter Frames

Toan Nguyen Dinh, JaeMyeong Yoo, and GueeSang Lee

Tracking and Motion Analysis of Impact Fragments

Naoto Miura, Hirohide Demura, Naru Hirata, and Noriaki Asada

Design and Implementation of A Novel P2P-based VOD System Using Media File Segments Selecting Algorithm

ZhiHui Lu, ShiYong Zhang, Jie Wu, WeiMing Fu, and YiPing Zhong

Session E-5: Data Processing and Interfaces

Methods and Technologies for Enhancing and Optimizing Power Plant Inspection Procedures

Kamen Kanev, Zixue Cheng, and Nikolay Mirenkov

Design of a Clinical Knowledge Base for Heart Disease Detection
Ki-Hyeon Kim and Ho-Jin Choi

Performance Evaluation of a Temporal Sequence Learning Spiking Neural Network
Taiki Ichishita and Robert H. Fujii

Design and Implementation of a Real-time Video Player on Tiled-Display System
Giseok Choe, Jeongsoo Yu, Jeonghoon Choi, and Jongho Nang

On the Interactive Visualization of Very Large Image Data Sets
Frank Ekpár, Masaaki Yoneda, and Hiroyuki Hase

Session E-6: Image Processing and Analysis

A Leaf Image Retrieval Scheme Based On Partial Dynamic Time Warping and Two-Level Filtering
Yoon-Sik Tak and Een-Jun Hwang

Local Binary Patterns on Hexagonal Image Structure
Xiangjian He, Jianmin Li, Wenjing Jia, Qiang Wu and Tom Hintz

A Flexible Non-Linear PCA Encoder for Still Image Compression
Lu Chuanfeng, Zhao Qiangfu and Liu Zhiwen

Influence of Imaging Condition on Matching Point Detection
Tomoki Hodokuma, Naru Hirata, Hirohide Demura and Noriaki Asada

Session E-7: Text Processing and Analysis

Identification of Japanese and English Script from a Single Document Page
Sukalpa Chanda, Umapada Pal, and Fumitaka Kimura

Word Segmentation for the Sequences Emitted from a Word-Valued Source
Takashi Ishida, Toshiyasu Matsushima, and Shigeichi Hirasawa

Using Contour Analysis to Improve Feature Extraction in Thai Handwritten Character Recognition Systems
Jarernsri Mitranont and Urairat Limkonglap

Statistical Evaluation of Measure and Distance on Document Classification Problems in Text Mining
Masayuki Goto, Takashi Ishida, and Shigeichi Hirasawa

Image Skew Detection for Formulas without Fraction Bars Using Connected Components Analysis
Lichun Zhang, Yue Lu, and Patrick Wang

Session E-8: Static Image Segmentation

Recognition Algorithm for Topographic Features
Naoto Harada, Takafumi Hayashi, Naru Hirata, Hirohide Demura, and Noriaki Asada

Unsupervised Image Segmentation Using Automated Fuzzy c-Means
Supatra Sahaphong and Nualsawat Hiransakolwong

Vector Image Segmentation for Content-Based Vector Image Retrieval
Takahiro Hayashi, Rikio Onai, and Koji Abe

Segmentation by Morphological Reconstruction and Non-Linear Diffusion
JaeMyeong Yoo and GueeSang Lee

Technical Sessions F: Information Security

Session F-1: Secure Framework

The Automatic Defense Mechanism for Malicious Injection Attack

Jin-Cherng Lin and Jan-Min Chen

Botnet Detection by Monitoring Group Activities in DNS Traffic

Hyunsang Choi, Hanwoo Lee, Heejo Lee, and Hyogon Kim

An Internet Voting Protocol with Receipt-free and Coercion-Resistant

Bo Meng

Session F-2: Watermarking and Encryption

Towards Quantization Index Modulation Strategies on Content-based Watermarking Schemes

Pedro Martins and Paulo Carvalho

Exploiting X.509 Certificate and Multi-Agent System Architecture for Role-based Access Control and Authentication Management

Somchart Fugkeaw, Piyawit Manpanpanich, and Sekpon Juntapremjitt

Implementation of an Audio Watermarking System using CDMA Modulations

Ghnimi Said and Cherif Adnen

DWT-Based Audio Watermarking Resistant to Desynchronization

Haiyan Liu, Xuefeng Zheng, and Ying Wang

Session F-3: Network Security

An Effective Trust Establishment Scheme for Authentication in Mobile Ad-Hoc Networks

Guojun Wang, Qiong Wang, Jiannong Cao, and Minyi Guo

Home Network Framework based on OSGi Service Platform Using SSL Component Bundle

Eun-Ae Cho, Chang-Joo Moon, Dae-Ha Park, and Doo-Kwon Baik

An Approach for Network Security Analysis using Logic Exploitation Graph

Mao Handong, Zhang Weiming, and Chen Feng

Information Security: End User Behavior and Corporate Culture

Steven Woodhouse

Technical Sessions G: Embedded Systems and VLSI Design

Session G-1: Scheduling and Optimization

A Dataflow Analysis for Mode Set Optimization in DSP Instruction Sets

Jiho Chu, Youngsun Han, and Seon Wook Kim

Name-based Write Barriers in Real-Time Java

Teresa Higuera-Toledano

Swap-aware Garbage Collection for NAND Flash Memory Based Embedded Systems
Ohhoon Kwon and Kern Koh

Deadline Scheduling with Processor Affinity and Feasibility Check on Uniform Parallel Machines
Vahid Salmani, Mahmoud Naghibzadeh, and Mohsen Kahani

System-level Power Management for Mobile Devices
Gerard Bosch Creus and Petri Niska

Session G-2: Platform and Application

A Visual Modeling Environment for Embedded Component Systems
Takuya Azum, Shimpei Yamada, Hiroshi Oyama, Yukikazu Nakamoto, and Hiroaki Takada

Enabling Reconfigurable SoC in Multimedia Processing
Ying Wang, Wei-Nan Chen, Xiao-Wei Wang, Hong-Jun You, and Cheng-Lian Peng

A Low-Power Application Specific Instruction Set Processor Architecture Using Asynchronous Function Units
Yong Li, Zhi-ying Wang, and Kui Dai

Implementation of Architecture Concepts for Hardware Agent Systems
Joerg Schneider, Marcel Naggatz, and Rainer Spallek

Compiler Construction for Lockstep Execution of Multithreaded Processors
Huong Giang Nguyen, Seokjoong Hwang, and Seon Wook Kim

Performance Comparison of Camera Interface Methods in a Mobile Handset
Minyoung Eom, Yeoung Kyu Lim, and Tae-ik Kang

Session G-3: VLSI Design

Indirect Tag Search Mechanism for Instruction Window Energy Reduction
Shingo Watanabe, Akihiro Chiyonobu and Toshinori Sato

A Control Circuit Synthesis Method for Asynchronous Circuits in Bundled-Data Implementation
Takao Konishi, Naohiro Hamada, and Hiroshi Saito

Adaptive Optical Proximity Correction Using an Optimization Method
Tetsuaki Matsunawa, Hirokazu Nosato, Hidenori Sakanashi, Masahiro Murakawa, Eiichi Takahashi, Tsuneo Terasawa, Toshihiko Tanaka, Osamu Suga, and Tetsuya Higuchi

Technical Sessions H: Software Engineering

Session H-1: Automated Testing Tools

An Automatic Tool for Generating Test Cases from the System's Requirements
Rosziati Ibrahim, Mohd Zainura Saringat, Noraini Ibrahim, and Noraida Ismail

An automatic software test-data generation scheme based on data flow criteria and genetic algorithms
Andreas Andreou, Kypros Economides, and Anastasis Sofokleous

Generating Wizards for Initializing Software Components
Hironori Washizaki, Takao Adachi, and Yoshiaki Fukazawa

Session H-2: Modeling and Simulation

FMBP (A Method to Generate Feature Model from Business Process Model for Business Applications)
Jongsu Bae and Sungwon Kang

The Value Gap Model: Value-Based Requirements Elicitation
Sang Won Lim, Taek Lee, and Hoh Peter In

Runtime Service Discovery and Reconfiguration using OWL-S based Semantic Web Service
Jinhan Kim, Jaejeong Lee, and Byungjeong Lee

Constructing a Reference Model of a Grouped-Metadata Object and its Change Model
Liangli Ma and Yongjie Li

Session H-3: Application-Specific Software Engineering

A Robot Programming Based on Frame Representation of Knowledge
Shigeto Aramaki, Tatsuichirou Nagai, Masato Kawamura, and Yasutaka Hatada

Representation and Programming for Robotic Assembly Task Using an Assembly Structure
Tatsuichiro Nagai, Shigeto Aramaki, and Isao Nagasawa

A Method for Solving a Bipartite-graph Clustering Problem
Keiu Harada, Takuya Ishioka, Ikuo Suzuki, and Masashi Furukawa

Session H-4: Software Product Line Engineering

Towards a Formal Framework for Product Line Test Development
Sungwon Kang, Jihyun Lee, Myungchul Kim, and Woojin Lee

A Metamodeling Approach to Tracing Variability between Requirements and Architecture in Software Product Lines
Mikyeong Moon and Heung Seok Chae

A Formal Approach to Verify Mapping Relation in a Software Product Line
Tonny Kurniadi Satyananda, Danhyung Lee, and Sungwon Kang

The Design of a Multimedia Protocol Analysis Software Environment
Tony Tsang, Yong Soo Kim, and Richard Lai

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Jung-Hyun Oh, Hyun-Seok Kim, and Jin-Young Choi

Design of an Aspect-Based Framework to Improve the Dynamic Management of RFID Middleware
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Effective Service Decision using Ambient-based HHMM in Smart Home System

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A Novel Reference Node Selection Algorithm Based on Trilateration for Indoor Sensor Networks

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Bao Nguyen Nguyen and Deokjai Choi

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A System Architecture for Monitoring Sensor Data Stream

Yang Koo Lee, Ling Wang, and Keun Ho Ryu

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e-Petri Net Model for Programming Integrated Network of Wireless Sensor Networks and Grids

Adi Mallikarjuna Reddy V, A V U Phani Kumar, and D. Janakiram

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Ying Song, Yuzhong Sun, Hui Wang, and Xining Song

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A Formal Framework for Description of Semantic Web services

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Hao-peng Chen and Cheng Zhang

Enabling QoS for Service-Oriented Workflow on GRID

L. Guo, A. S. McGough, A. Akram, D. Colling, J. Martyniak, and M. Krznic

A Messaging Network to Realize an SOA-based System

Takafumi Hayashi, Hideyuki Fukuhara, Ryutaroh Fuijta, Toshiaki Miyazaki, and Senroh Saito

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Tung Tran, Hwa-Sun Kim, and Hune Cho

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Hirofumi Ishita, Motoki Sakai, Ji'nei Watanabe, Wenxi Chen, and Daming Wei

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Ce Peng, Wenxi Chen, Xin Zhu, Baikun Wan, and Daming Wei

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Achala Upendra Jayatilleke, Chandrajith Ashubodha Marasinghe, Shinji Nakahara, ST Nandasara, Achini Jayatilleke, and Masamine Jimba

R β Hpred: Prediction of Right-Handed β -helix Fold from Protein Sequence Using SVM and Protein Threading

Siddharth Singh, Krishnan Hajela, and Ashwini Ramani

Development of Digital Image Surface and Its Application to Derived 12-lead ECG

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