9th IEEE/ACIS International Conference on Computer and Information Science

In Conjunction with

4th IEEE/ACIS International Workshop on E-Activity

2nd IEEE/ACIS International Workshop on Enterprise Architecture Challenges and Responses 2010

August 18th - August 20th, 2010

Tsukioka Hotel, Kaminoyama, Japan

ICIS 2010 Conference Program at a Glance

Time	Room A	Room B	Room C
August 17, 2010			
4:00 PM	Registration at Foyer (until 6:00 PM) Registration desk co-chair: Masaaki Tanaka and Katsuhide Fujita		
August 18, 2010			
7:00 AM	Breakfast for hotel guest at Foyer		
7:30 AM	Registration at Foyer (until 6:00 PM)		
8:00 AM			**IEEE/ACIS International Workshop on e-Activity 2010** Chair: Takayuki Fujimoto
10:10 AM	**Coffee break at Foyer**		
10:20 AM		**IEEE/ACIS International Workshop on Enterprise Architecture Challenges and Responses 2010** Chair: Yeong-Tae Song and Josh Dehlinger	**IEEE/ACIS International Workshop on e-Activity 2010** Chair: Maria Siebert
12:30 PM	**Lunch (Comp.) at Ballroom Zao**		
1:15 PM	**Opening Ceremony at Ballroom Sakura** **General Chair: Roger Lee** **General Chair: Naohiro Ishii** **Program Chair: Tokuro Matsuo** **Local Arrangement Chair: Takanori Terashima** **IWEA Chair: Takayuki Fujimoto** **WEACR Chair: Yeong-Tae Song**		

Time			
1:30 PM	**Plenary Session: Keynote speech 1 at Ballroom Sakura** **Sang-goo Lee (Seoul National University)** **"Research Issues in Data Intensive Semantics"** Chair: Wenying Feng		
2:30 PM	**Plenary Session: Keynote speech 2 at Ballroom Sakura** **Atsushi Togashi (Miyagi University)** **"Proposal of Ubiquitous Agricultural Service for Rural Farm Revitalization"** Chair: Yeong-Tae Song		
3:30 PM	**Coffee break at Foyer** **Poster setting at Foyer until 6:00 PM**		
3:50 PM	**Special Session 2** **Personalization** Chair: Sang-goo Lee	**Special Session 6** **Software Measurement** Chair: Juan Jose Cuadrado-Gallego	**Special Session 7** **Health Informatics** Chair: Antonio Abelha and Jose Machado
6:30 PM	**Welcome Reception at Ballroom Zao** **Chair: Roger Lee** **Welcome address: Masashi Emori (Vice President of Yamagata Convention Bureau)** **Welcome address: Yoshihiro Ohba (Dean of Yamagata University)** **Professional music entertainer: Satoru Takeya (Oboist)** **Professional music entertainer: Naomi Goto (Pianist)** **The change of ACIS Presidents** **New Journal Introduction (IJNDC)** **Upcoming Conference Introduction** **(IEEE ICIS 2011, IEEE CNSI 2011, SNPD 2011, SERA 2011, CDEE 2011)** **New Trends in Computer Science Exhibition at back of the ballroom**		

August 19, 2010

Time	Room A	Room B	Room C	Room D
7:00 AM	Breakfast for hotel guest at Foyer			
7:45 AM	Registration at Foyer (until 6:00 PM)			
8:00 AM	**Special Session 4** **Knowledge Creation and Kansei Information** Chair: Akinori Minazuki and Hidehiko Hayashi	**Technical Session 1** **Algorithm and Modeling** Chair: Satoshi Takahashi	**Technical Session 2** **Artificial Intelligence and Emerging Technology** Chair: JeongAh Kim	**Special Session 8** **Practice in Agents and Multi-agent Systems** Chair: Katsuhide Fujita
10:20 AM	**Coffee break at Foyer**			
10:30 AM	**Plenary Session: Keynote speech 3 at Ballroom Sakura** **Takayuki Ito (Nagoya Institute of Technology)** **"Multi-Agent Technologies and their Applications"** Chair: Naohiro Ishii			
11:30 AM	**Plenary Session: Keynote speech 4 at Ballroom Sakura** **Jongmoon Baik (Korea Institute of Science and Technology** **"Software Reliability: Past, Present, and Future"** Chair: Gongzhu Hu			

12:30 PM	Lunch (Comp.) at Ballroom Zao			
1:30 PM	**Special Session 3 Internet marketing and online consumer behavior** Chair: Dauw-Song Zhu	**Special Session 10 Semantic, Social, and Collaborative Intelligence** Chair: Naoki Fukuta	**Technical Session 3 Image Processing & Pattern Recognition** Chair: Katsuhide Fujita	**Technical Session 4 Innovative Technologies** Chair: Kiumi Akingbehin
3:20 PM	Coffee break at Foyer			
3:30 PM	**Technical Session 5 Applications (1)** Chair: Tadachika Ozono	**Technical Session 6 Software Engineering (1)** Chair: Shaochun Xu	**Technical Session 7 Emerging Technologies** Chair: Kiumi Akingbehin	
6:30 PM	Cocktails before dinner at Foyer			
7:00 PM	**Banquet at Ballroom Zao** **Welcome address: Chobei Yokoto (City Mayor)** **Welcome address: Akio Yuki (President of Yamagata University)** **Welcome address: Tetsuya Sakahashi (Japan National Tourism Organization)** **Presentation of plaques** **Japanese Sake/Rice Wine and Yamagata Wine Tasting Session**			

August 20, 2010

Time	Room A	Room B	Room C
7:00 AM	Breakfast for hotel guest at Foyer		
7:45 AM	Registration at Foyer (until 2:00 PM)		
8:00 AM	**Special Session 1 Dependable Distributed and Network-Centric Systems** Chair: Hai Jiang	**Special Session 5 Data Mining for Broadband Services in NGN (New Generation Networking)** Chair: Motoi Iwashita	**Technical Session 8 Software Engineering (2)** Chair: Byeongdo Kang
9:50 AM	Coffee break at Foyer		
10:00 AM	**Special Session 9 Visualization** Chair: Nobuyuki Masuda	**Technical Session 9 Web Engineering, Services & Applications** Chair: Takanori Terashima	**Technical Session 10 Devices, Computer Architecture and VLSI** Chair: Naoki Fukuta
12:20 PM	Lunch (Comp.) at Zao		
1:20 PM	**Technical Session 11 Mobile/Wireless and Ubiquitous Computing** Chair: Naoki Fukuta	**Technical Session 12 Applications (2)** Chair: Katsuhide Fujita	**Technical Session 13 Software Engineering (3)** Chair: Byeongdo Kang
3:40 PM	**Coffee break and Closing Ceremony at Foyer** Chair: Tokuro Matsuo		

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Research Issues in Data Intensive Semantics

Dr. Sang-goo Lee

Professor of Computer Science and Engineering, Seoul National University, Korea

Abstract

The future Web will be an integrated network of myriad of devices such as digital cameras, cell phones, GPS navigators, sensors, and other digital devices that surround our everyday lives. As the amount and complexity of data exchange among these devices increase exponentially, realizing context-aware personal services has become one of the most important challenges in this information space. Semantic technology may help acquiring, organizing, and processing context information. However, most approaches thus far have adopted semantic technology with an ideal point of view, and they have failed to produce feasible performance and scalability. We believe the semantics embedded in the traces resulting from these interactions should be significant enough to give us new opportunities for improvement. We will examine some of the research issues related to taking advantage of these so-called 'instance-level semantics'.

Biography

Dr. Sang-goo Lee is a professor of Computer Science at Seoul National University, Seoul, Korea. He is the Director of Center for E-Business Technology which specializes in R&D in the fields of e-catalogs, ontology, and Semantic Web services. His research interests are in semantic technology, context-aware personalization, e-catalogs, and database design. He headed the product ontology development efforts for Korea's Public Procurement Services which is regarded as one of the most successful ontology implementations in the country. He serves as technical advisor to a number of leading enterprises in software and telecommunications. He is one of the premier speakers on practical approaches to semantic technology. He serves as General Chair for International Workshop on Data Engineering Issues in E-Commerce and Services (DEECS) 2005-2009 and PC Chair for DASFAA 2012.

Proposal of Ubiquitous Agricultural Service for Rural Farm Revitalization

Dr. Atsushi Togashi

Professor, School of Project Design, Miyagi University, Japan

Abstract

This talk reports a field demonstration of a broadband ubiquitous service within the rural farm. This service utilizes ICT to enhance the communication between consumers and farm producers, and offers the new agricultural business-style which targets the signature agricultural product. Recent consumers have great interest in food safety and strongly request the process or producers of agricultural products to be clarified. Meanwhile, farmers have serious issues for long, that is, a dilapidation of the land, and a decrease in income, and a shortage of young farmers after the cultivation reduction as an administrative guidance. The local governments also expect revitalization of the lands. This proposal suggests the new agricultural business style that enlarges the land use and provides the reassured products to the consumers as a solution for all involved people mentioned above. The administrator of the system, usually local government, recruits the farm owner from consumers who gives financial supports to growth the cultivation, and reports the situation of the crops and environments through the streaming camera or several types of sensors on demand. This system is running from 2010 with the aim of the revitalization of the derelict lands, increase of the farmers' income, to bring back the young farmers, and stimulates the regional economies as the results.

Biography

Dr. Atsushi Togashi received his Ph.D and MS from Tohoku University in 1984 and in 1981 respectively, and BS from Yamagata University in 1979. He worked at Tohoku University (1984-96), University of Sussex as a guest researcher (1995-96), Shizuoka University (1996-1997), and also Kyushu University, Sapporo University, The Open University of Japan, University of Tsukuba as an adjunct professor. He is a member of ACM, Information Processing Society of Japan, and The Institute of Electronics, Information and Communication Engineers.

Introduction to Multi-Agent System and its Applications

Dr. Takayuki Ito[1,2,3]

[1] Nagoya Institute of Technology, Techno-Business School, Japan

[2] MIT Sloan School of Management, Massachusetts Institute of Technology, USA

[3] JST PREST, Japan

Abstract

Multi-agent system is agents which cooperatively or competitively solve shared or distributed problems. While agents could be acting on behalf of human users, agents could be intelligent entities in the virtual world. In this talk, I would like to introduce what is "multi-agent systems", and show the state of the art of theoretical researches and practical results. Also, I would like to mention about the application to cloud computing and collective intelligence.

Biography

Dr. Takayuki Ito received the B.E., M.E, and Doctor of Engineering from the Nagoya Institute of Technology in 1995, 1997, and 2000, respectively. From 1999 to 2001, he was a research fellow of the Japan Society for the Promotion of Science (JSPS). From 2000 to 2001, he was a visiting researcher at USC/ISI (University of Southern California/Information Sciences Institute). From April 2001 to March 2003, he was an associate professor of Japan Advanced Institute of Science and Technology (JAIST). He joined Nagoya Institute of Technology as an associate professor of Graduate School of Engineering in April 2003. From 2005 to 2006, he is a visiting researcher at Division of Engineering and Applied Science, Harvard University and a visiting researcher at Sloan School of Management, Massachusetts Institute of Technology. From 2008 to 2009, he is, again, a visiting researcher at Sloan School of Management, Massachusetts Institute of Technology (MIT). He is a researcher of JST PREST. His main research interests include multi-agent systems, intelligent agents, group decision support systems, collective intelligence, agent-mediated electronic commerce, and cloud computing.

Software Reliability: Past, Present, and Future

Dr. Jongmoon Baik

Dept. of Computer Science, Korea Advanced Institute of Science and Technology, Korea

Abstract

According to IEEE 610.12, software reliability is defined as 典 he ability of a system or component to perform its required functions under stated conditions for a specified period time . In the late of 1930s, during the World War 2, hardware-based reliability studies were launched to assess the probability of success of ballistic rockets. Researches on software reliability was begun in 1960s when software was commercialized. Since 1970s, rapid advances in computing environments brought more attention to software reliability engineering, software testing, and software process improvement to assure that the produced products have high quality. Recently, the portion of software in embedded systems has been increased in many industries such as telecommunications, automobile, aerospace, and medical. Software reliability has become the most important quality attribute since software failures in these industries can bring big ripple and economic effects. In addition, the recent change of a computing environment like cloud computing, a lightweight distributed computing environment, raised several issues such as security, reliable operations, and available services. In this talk, I will present how reliability goal has been changed according to the changes of computing environments. I will discuss how to evaluate and assure the reliability of provided services, components, services, platforms, and infra-structures in the changing computing environment, especially in cloud computing.

Biography

Dr. Jongmoon Baik is an associate professor of Computer Science Department at Korea Advanced Institute of Science and Technology (KAIST). Before joining the KAIST, he worked as principal research scientist for Software and Systems Engineering Research Laboratory at Motorola Labs. from 2001 to 2005. He received his Ph.D. from University of Southern California in 2000. His interests include software reliability modeling, software cost estimation, software process modeling and simulation, and software metrics.

ICIS 2010 Conference Program

August 18   8:00 AM – 10:10 AM

4th IEEE/ACIS International Workshop on E-Activity (1)

Chair: Takayuki Fujimoto

Behavioral Verification in Hichart Development Environment for Embedded Software

Takaaki Goto, Yasunori Shiono, Tetsuro Nishino, Takeo Yaku, Kensei Tsuchida

An Attribute Graph Grammar Enabling Narrower Drawings of Trees

Tadaaki Kirishima, Takaaki Goto, Takeo Yaku, Kensei Tsuchida

Comparative Analysis of the people's character of Japanese prefectures

Yuka Yamazaki, Kenji Kumasaka

Realization of an Expandable Search Function for an E-Learning Web Portal

Maria Siebert, Christoph Meinel

Information Visualization System Using Internet for Activation of Shopping Streets

Ippei Torii, Yousuke Okada, Takahito Niwa, Manabu Onogi, Naohiro Ishii

Flexible Curricula for e-Learning of SME Staff in Electronic Engineering

Zoja Raud, Valery Vodovozov

Highly Efficient Transport Protocol for Large Capacity Data Files and its Visualizing Methods

Tomoo Sumida, Takaaki Goto, Katsuyoshi Ito, Kensei Tsuchida

August 18   10:20 AM – 12:30 PM

IEEE/ACIS 2nd International Workshop on Enterprise Architecture Challenges and Responses 2010 (WEACR 2010)

Chair: Yeong-Tae Song

What is an Enterprise Architecture Design Principle? Towards a consolidated definition

Christian Fischer, Robert Winter, Stephan Aier

On Applying the Theory of Structuration in Enterprise Architecture Design

Dominic M. Mezzanotte, Sr., Josh Dehlinger, Suranjan Chakraborty

Synchronization Enterprise Model for Harmonizing presentation

Svetlana Kim, YoungIk Yoon

Enterprise Architecture Institutionalization and Assessment

Yeong-Tae Song

A Mechanism to prevent RP Phishing In OpenID System

Jae-Hwe You, Moon-Seog Jun

Enterprise Architecture in the Supply Chain

Torben Tambo, Christian Koch

Security Protocol Design for Electronic-Cash Transactions in a Mobile-PKI Environment

Joo-Kwan Lee, Moon-Seog Jun

4th IEEE/ACIS International Workshop on E-Activity (2)

Chair: Maria Siebert

Automatic Generation of SVG Program Documents with Animation Based on Attribute Graph Grammars

Takaaki Goto, Tomoo Sumida, Tadaaki Kirishima, Takeo Yaku, Kensei Tsuchida

The Trial Result of System that Supports PBL

Makio Fukuda, Michinori Yamashita, Toshiyuki Ueyama, Minae Nishimoto

Mobile Web Usability Evaluation - Combining the Modified Think Aloud Method with the Testing of Emotional, Cognitive and Conative Aspects of the Usage of a Web Application

Franka Moritz, Christoph Meinel

Current status of university students' awareness of information technologies

Mieko Yamauchi

Development of a System for Drawing Test

Yasunori Shiono, Megumi Uetsuhara, Hideo Shibutani, Chieko Kato, Kensei Tsuchida

Consruction of Decision Model for a Sysytem to Start Cummunicating with a Human using hidden Markov model

Makoto Murakami, Yoshito Ogawa, Jungo Katsuyama, Takahiro Miyajima, Katsuhiko Shirai

Healing Effects of Pet Robots at an Elderly-Care Facility

Toyoshiro Nakashima, Goro Fukutome, Naohiro Ishii

SS2: Personalization

Chair: Sang-goo Lee

Effect of Latent Semantic Indexing for Clustering Clinical Documents

Choonghyun Han, Jinwook Choi

Building Concept Network-based User Profile for Personalized Web Search

Han-joon Kim, Sungjick Lee, Byungjeong Lee, Sooyong Kang

Temporal Dynamics in Music Listening Behavior: A Case Study of Online Music Service

Chan Ho Park, Minsuk Kahng

Exploiting Contextual Information from Event Logs for Personalized Recommendation

Dongjoo Lee, Sung Eun Park, Minsuk Kahng, Sang-goo Lee

SS6: Software Measurement

Chair: Cuadrado-Gallego, J.J

Modelling Software Project Monitoring with Stakeholders

Tsunoda, M., Matsumura, T., Matsumoto, K.

Early functional size estimation with IFPUG unit

Cuadrado-Gallego, J.J., Rodríguez, P., Castelo D., Gonzalez, A., Hakimudin, S., Mitani, Y.

Empirical evaluation of cost overrun prediction with unbalanced data

Tsunoda, M., Momdeu, A., Shibata, J., Matsumoto, K.

SS7: Health Informatics

Chair: António Abelha, José Machado

Collaborative Group Support in e-Health

Paulo Novais, Àngelo Costa, Ricardo Costa and Luís Lima

The Inference Process with Quality Evaluation in Healthcare Environment

Jorge Ribeiro, José Neves, José Machado, António Abelha and Manuel Fernandez-Delgado

A Logic Programming Based Adverse Event Reporting and Learning System

Susana Rodrigues, Paulo Brandão, Luis Nelas, José Neves and Victor Alves

Electronic Health Records in the Emergency Room

Filipe Portela, Marta Vilas-Boas, Manuel Santos, António Abelha, José Machado, Alexandra Cabral and Irene Aragão

Data Quality Evaluation of Electronic Health Records in the Hospital Admission Process

Júlio Duarte, Maria Salazar, Cesar Quintas, Manuel Santos, António Abelha and José Machado

Modeling Intelligent Behaviors in Multi-Agent Based HL7 Services

Miguel Miranda, Gabriel Pontes, Pedro Gonçalves, Hugo Peixoto, Manuel Santos, António Abelha and José Machado

August 18   6:30 PM – 8:30 PM

New Trends in Computer Science

Chair: Gonzhu Hu

Ontology-Based Conflict Analysis Method in Non-Functional Requirements

Chi-Lun Liu

Fundamental Abilities of Rotor Associative Memory

Michimasa Kitahara and Masaki Kobayashi

Design and Implementation of a Language for Web Exploring and Mashup

Mao Ito and Mitsugu Suzuki

Human Fine Motion Analysis Using Biological Signals

Masashi Iemoto, Masashi Toda, Shigeru Sakurazawa, Jyunichi Akita, Kazuaki Kondo and Yuichi Nakamura

Ecological sectorization process improvement through neural networks: synthesis of vegetation data from satellite images using RBFs

Manuel Cruz, Rosa Ayala, Moises Espinola, Mercedes Peralta and Jose Antonio Torres

Improving User Interface of Spreadsheet Functions by Object-Oriented Design

Jiro SUZUKI, Seiji MATSUMOTO

The development of the tool for understanding contents of a large amount of text by means of user-generated word network

Takaichi Ito, Masaki Suwa

Adaptive Interface Model for Lecture Allocation System

Yuji Hashiura, Tokuro Matsuo and Takanori Terashima

Decomposing a Partially Ordered Set into Chains

Yangjun Chen

Recent Developments in the Russian Speech Recognition Technology

Daria Vazhenina and Konstantin Markov

User-model-based Evaluation for Interactive Image Retrieval

Masashi Inoue

Examination of the Podcasting System in Second Language Acquisition

Yuichi Ono

Enhancements for A Simple Authenticated SIP Request Management

Hisashi Takahara

Analysis of Bid Structures in GSP

Yosuke Motoki and Tokuro Matsuo

An Improvement of Instructional Methods for Nutrition Education

Masaaki Tanaka, Azusa Kanda, Tokuro Matsuo

An Incentive Mechanism Design in E-trade Evaluation Systems

Koki Murakata and Tokuro Matsuo

SS4: Knowledge Creation and Kansei Information

Chair: Akinori Minazuki and Hidehiko Hayashi

Development of Experience-based Learning Support System for Realization of Exact Cardiopulmonary Resuscitation

Naoya FUJIOKA, Kazuhiro WATANABE, Masaya SUZUKI, Kohei HARADA, Satomi TOITA, Aya SASAKI, Hikaru KOMUKAI, Yuzuru KATO, Hidehiko HAYASHI, Akinori MINAZUKI

A Study about the Process of Knowledge-Creation through Observation Photographs and Reproduction Experiment

Yuta WATANABE, Issei KODAMA, Hidehiko HAYASHI, Akinori MINAZUKI

A Study of the Support System for Displaying Food Products in Convenience Stores

Yusuke ITAKURA, Akinori MINAZUKI

A Study on Knowledge-Creation of "Moshiokuri" among Nurses

Mitsuru SAKIYAMA, Kazuki HASEGAWA, Yuya SATO, Kazuhiro WATANABE, Naoki OGAWA, Mayumi MATSUSHITA, Hidehiko HAYASHI, Akinori MINAZUKI

A Consideration Concerning Continued Difference in Learning Process of Programming Language

Koichi NISHIMURA, Hikaru OKI, Dai SAWANOBORI, Akinori MINAZUKI

Study for management of research organizations and the effect on presentations of information processing at an academic meeting, by students in the humanity course

Ayumu TORIYABE, Akinori MINAZUKI

Consideration of the Organized Knowledge Sharing in the Emergency Team of the Emergency Medical Service Helicopter

Natsuko SANO, Haruka MATSUMOTO, Hidehiko HAYASHI, Akinori MINAZUKI

TS1: Algorithm and Modeling

Chair: Satoshi Takahashi

Risk-Oriented Group Decision Making in Multi-Criteria Analysis

Santoso Wibowo and Hepu Deng

Node Compression Techniques based on Cache-Sensitive B+-tree

Rize Jin and Tae-Sun Chung

Mapping of Dynamic Language Constructs into Static Abstract Syntax Trees

Jakub Misek and Filip Zavoral

WSIM: Detecting Clone Pages based on 3-Levels of Similarity Clues

Woosung Jung, Eunjoo Lee and Chisu Wu

XML based Virtual Disk Modeling Language for Constructing Large-Scale Storages

Minoru Uehara

TS2: Artificial Intelligence and Emerging Technology

Chair: JeongAh Kim

Case-based Classification System with clustering for Automotive Engine Spark Ignition Diagnosis

Chi-man VONG, Pak-kin WONG and Weng-fai IP

Least Squares Support Vector Prediction for Daily Atmospheric Pollutant Level

W.F. Ip, C.M. Vong, J.Y. Yang and P.K. Wong

On Influence of Refractory Parameter in Incremental Learning

Keisuke Matsuno, Toshinori Deguchi and Naohiro Ishii

LEAF: leave-one-out forward selection method for cancer classification using gene expression data

Kentaro Fukuta, Yoshifumi Okada and Tomomasa Nagashima

Finger Motion Classification Using Surface-electromyogram Signals

Keisuke Ishikawa, Masashi Toda, Shigeru Sakurazawa, Junichi Akita, Kazuaki Kondo and Yuichi Nakamura

Detection of Muscle Fatigue by the Surface Electromyogram and its Application

Takayuki Sakurai, Masashi Toda, Shigeru Sakurazawa, Junichi Akita, Kazuaki Kondo and Yuichi Nakamura

SS8: Practice in Agents and Multi-agent Systems

Chair: Katsuhide Fujita

Filtering Harmful Sentences based on Multiple Word Co-occurrence

Satoshi Ando, Yutaro Fujii, Takayuki Ito

An Efficient Real-Time Search Algorithm with Forecasting in Uncertain Problem Spaces

Yuya Takahashi, Takayuki Ito

Issue Clustering and Distributed Genetic Algorithms for Multi-issue Negotiations

Nobuyasu Mizutani, Katsuhide Fujita, Takayuki Ito

A Mobile Agent Approach for Flexible Peer-to-Peer File Retrieval

Naoki Fukuta

Agent-aided 3D Symbiotic Space

Akira Sakatoku, Toshiaki Osada, Gen Kitagata, Norio Shiratori, Tetsuo Kinoshita

Design of an Assisting Agent Using a Dynamic Ontology

Alexis Koutero, Shigeru Fujita and Kenji Sugawara

An Architecture of Extended Network Management System: Autonomous Cooperation between Knowledge Resource and Network Equipments

Kazuto Sasai, Naoyuki Tanji, Yusuke Takahasi, Gen Kitagata, Tetsuo Kinoshita

August 19   1:30 PM – 3:20 PM

SS3: Internet marketing and online consumer behavior

Chair: Dauw-Song Zhu

An Exploration of the Intention to Use Online Store

Dauw-Song Zhu, Chung-Hung Tsai, Song-Sheng Huang

The Study on the Determinants of the Online Consumers' Intention to Return

Cheng-Tsung Lu, Dauw-Song Zhu

A Study on the Customer-Based Brand Equity of Online Retailers

Dauw-Song Zhu, Min-Jone Kuo

The Impact of Website Attractiveness, Consumer-Website Identification, and Website Trustworthiness on Purchase Intention

Zui-Chih Lee, Jennifer Yurchisin

Potentials of 3D-Web-Applications in E-Commerce - Study about the Impact of 3D-Product-Presentations

Franka Moritz

SS10: Semantic, Social, and Collaborative Intelligence

Chair: Naoki Fukuta

Automatic Mining of Human Activity Attributes from Weblogs

Nguyen Minh The, Takahiro Kawamura, Hiroyuki Nakagawa, Yasuyuki Tahara, and Akihiko Ohsuga

Preventing Fake Web Pages Using Push Delivery --- Defending against Theft Crawlers

Tadachika OZONO, Shun SHIRAMATSU, Toramatsu SHINTANI

A Corpus-based Analysis of Coreferential Recency Effect in Japanese Discourse for Tracking Dynamic Topic

Shun Shiramatsu, Tadachika Ozono, Toramatsu Shintani, Hiroshi G. Okuno

Constraint-based Clustering of Image Search Results Using Photo Metadata and Low-level Image Features

Masaharu Hirota, Shohei Yokoyama, Naoki Fukuta, Hiroshi Ishikawa

Proposal of Spatiotemporal Data Extraction and Visualization System Based on Wikipedia for Application to Earth Science

Akihiro OKAMOTO, Shohei YOKOYAMA, Naoki FUKUTA, Hiroshi ISHIKAWA

TS3: Image Processing & Pattern Recognition

Chair: Katsuhide Fujita

Efficient Characteristics Vector Extraction Algorithm using Auto-seeded Region-Growing

Pablo Revuelta Sanz, Belén Ruiz Mezcua and José M. Sánchez Pena

Shape based automatic annotation and fuzzy indexing of video sequences

Vinay Chander and Shashikala Tapaswi

Face/Non-face Classification Method Based on Partial Face Classifier Using LDA and MLP

Sung-Hoon Kim and Hyon-Soo Lee

Towards Fast Gabor Wavelet Computation for Texture Segmentation by Filter Approximation

Wai-Man Pang

Fast and Accurate Template Matching with Silhouette Masking

Takahiro Hayashi and Yuto Kadosaki

TS4: Innovative Technologies

Chair: Kiumi Akingbehin

Study of the Key Techniques for Implementing Barcode Network

Jing Sun, Huiqun Zhao and Gongzhu Hu

Movement Tracking in Real-time Hand Gesture Recognition

Hong-Min Zhu and Chi-Man Pun

Deadlock Detection for Parallel Composition of Components

Hongwei Zeng and Huaikou Miao

HMM-Based Predictive Power Saving Mechanism in WiMAX

Jia Liu

An effective optimization of reference pixel arrangement in the lossless coding for HDTV image

Yuya Yamaguchi, Takashi Otsuki, Ken-ichi Iwata and Shuichi Itoh

Closing the Blackbox? A status on Enterprise Resource Planning (ERP) studies in information systems research

Christian Koch

August 19   3:30 PM – 5:50 PM

TS5: Applications (1)

Chair: Tadachika Ozono

WebServices Security Issues in Healthcare Applications

Saphina Mchome, Shelly Sachdeva and Subhash Bhalla

Model-based Dynamic Cost Estimation and Tracking Method for Agile Software Development

Sungjoo Kang, Okjoo Choi and Jongmoon Baik

On the Security of Outsourced and Untrusted Databases

Johannes Heurix and Thomas Neubauer

Design and Implementation of WSN based Stable Management System

Hyun Yoe, Jeong-hwan Hwang and Hyun-joong Kang

Development of Retrieval Methods for RESTful Web Services Using Semantic Technologies

Seung-Jun Cha, Yun-Jeong Choi and Kyu-Chul Lee

A Novel Fuzzy Ant System For Edge Detection

Om Prakash Verma, Madasu Hanmandlu, Ashish Sultania and Dhruv Talra

TS6: Software Engineering (1)

Chair: Shaochun Xu

Axiomatic Assessment of FSM-Based Test Adequacy Criteria for Web Application

Xiaokang Zhou and Huaikou Miao

Bridging Software Product Line to Service-Oriented Architecture for Service Identification using BPM and FM

Dongsu Kang and Doo-Kweon Baik

Calculating the Order Relations of Workflow Net with Invariant Method

Jidong Ge

Development of the IT Convergence using Power Line Communication

Jung-Sook Kim

A Study on Crosscutting Refactoring Using Progam Dependency Relation

Seung-Hyung Lee, Byoung-Hyoun Cho and Young-Jae Song

An Approach to Defining Value-based Software Development Process

Atabek Murtazaev, Sungwon Kang, Jongmoon Baik, In-Young Ko and Jihyun Lee

TS7: Emerging Technologies

Chair: Kiumi Akingbehin

Quantitative Comparison by the Function Point of Beginner's Programming Ability in the Animation Creation

Chieko Matsuyama, Toyoshiro Nakashima and Naohiro Ishii

Evaluation of Student's Physiological Response Towards E-Learning Courses Material by Using GSR Sensor

Santoso Handri, Shusaku Nomura, Yoshimasa Kurosawa, Kuniaki Yajima, Nobuyuki Ogawa and Yoshimi Fukumura

An Active Learning System for Auction Agent Programming with Competitions

Ronnie Cheung, Calvin Wan and Calvin Cheng

Synchronization E-learning Model for Harmonizing presentation

Svetlana Kim and YongIk Yoon

Predictive Air-Ratio Controller for Automotive Engines based on Online Neural Network: design and experimental evaluation

Pak Kin Wong, Chi Man Vong, Weng Fai Ip and Hang Cheong Wong

Intelligent Data Prefetching for Hybrid Flash-Disk Storage Using Sequential Pattern Mining Technique

Han-joon Kim, Un-Keun Yoon and Jae-Young Chang

SS1: Dependable Distributed and Network-Centric Systems

Chair: Hai Jiang

SFS: A Secure File System with Scalability and Reliability Features on Distributed Storage Devices

Feng Shen, Hai Jiang

The Comparison of the Relative Entropy for Intrusion Detection on CPU and GPU

Hongyi Che ,Quan Qian, Rui Zhang

DataXchg: A Portable Data Exchange Toolkit for Heterogeneous Computing

Zhu Wang, Chonglei Mei, Hai Jiang

A Carbon 2.0 Framework based on Cloud Computing

Jiandun Li, Wu Zhang, Junjie Peng, Zhou Lei, Yu Lei

DCMTs: Supporting Dynamically Created Migratory Threads

Yueting Zhu, Wu Zhang, Hai Jiang, Yu Lei

CUDA/MPI Power Model on Multi-core and GPU Clusters for Performance Tuning of Large Scale SIMD Computation

DaQi Ren, Reiji Suda

SS5: Data Mining for Broadband Services in NGN

Chair: Motoi Iwashita

Method for Analyzing Sociodynamics of Telecommunication-based Services

Shinsuke Shimogawa, Motoi Iwashita

General Flow Characteristics of P2P Streaming Considering Impact to Network Load

Hiroyuki Kitada, Takumi Miyoshi, Akihiro Shiozu, Masayuki Tsujino, Motoi Iwashita, Hideaki Yoshino

Internet Traffic Classification Using Score Level Fusion of Multiple Classifier

Masatsugu Ichino, Hiroaki Maeda, Takeshi Yamashita, Kentaro Hoshi, Naohisa Komatsu, Kei Takeshita, Masayuki Tsujino, Motoi Iwashita, Hideaki Yoshino

Customer Segmentation in Mobile Carrier Choice Modeling

Yuuki Takano, Akiya Inoue, Takeshi Kurosawa, Motoi Iwashita, Ken Nishimatsu

Reference Traffic for Network Resource Dimensioning in the FMC Environment

Takashi Satake

TS8: Software Engineering (2)

Chair: Byeongdo Kang

Adaptive Practice on Software Reliability based on IEEE Std. 1633 in Frequent Requirement Modifications

Taewan Gu, Sejun Kim and Jongmoon Baik

Evaluating Software Maintainability Using Fuzzy Entropy Theory

Lizhi Cai, zhenyu Liu and Juan Zhang

A Study on Defect Density of Open Source Software

Cobra Rahmani and Deepak Khazanchi

Programming Expertise during Incremental Software Development: An Empirical Study

Shaochun Xu

Identifying the process capaiblity of the ontolgoy development processes

Jeong Ah Kim and Seung Young Choi

August 20   10:00 AM – 12:20 PM

SS9: Visualization

Chair: Nobuyuki Masuda

Image type computer-generated hologram of shaded object

Hiroshi Yoshikawa, Takeshi Yamaguchi, Tadashi Miyahara

3D Holo TV System Based on Multi-view Images

Yuji Sakamoto, Noriyuki Hayashi, Atsushi Kato, Masao Kinoshita

Three-dimensional TV using holographic stereogram

Koki Sato, Masataka Tozuka, Makoto Ohki, Kunihiko Takano

Examination about Expansion of Displaying Volume in Projection Type Electro-Holography(II)

Kunihiko TAKANO, Hideto ISHII, Asuka WATANABE, Tomoyuki SEINO, Koki SATO, Makoto OHKI, Kikuo ASAI

Wave-Field Rendering in Computational Holography

Kyoji Matsushima

Real-Time Reconstruction System Using High-Performance Computer for Electroholography

Yasuyuki Ichihashi, Hirotaka Nakayama, Shin Awazu, Tomoyoshi Shimobaba, Nobuyuki Masuda, Tomoyoshi Ito

High performance computing of Digital-Holographic PTV

Shin-ichi Satake, Tomoaki Kunugi, Kazuho Sato, Nobuyuki Masuda, Tomoyoshi Ito

TS9: Web Engineering, Services & Applications

Chair: Takanori Terashima

A Service-based Approach to Designing Cyber Physical Systems

Hyun Juna La and Soo Dong Kim

An Engineering Process for Autonomous Fault Management in Service-Oriented Systems

Du Wan Cheun and Soo Dong Kim

A Method to Enhancing Fault Tolerance in Run-Time

Hyun Min Lee and Soo Dong Kim

Modeling and Verifying Web Service Applications with Time Constraints

Jia Mei, Huaikou Miao, Qingguo Xu and Pan Liu

Establishing an expandable architecture for a tele-teaching portal

Maria Siebert, Franka Moritz and Christoph Meinel

TS10: Devices, Computer Architecture and VLSI

Chair: Naoki Fukuta

Improving NoC performance by non-contention ejection architecture

Shijun Lin and Jianghong Shi

H/S Collaborative Development of a Ubiquitous Processor Free from Instruction Scheduling and Pipeline Disturbance

Masa-aki Fukase and Tomoaki Sato

A binary MEMS Optically Reconfigurable Gate Array

Hironobu Morita and Minoru Watanabe

Thermal Analysis for 3D Multi-core Processors with Dynamic Frequency Scaling

Min Zeng, Byeong-Seok Lee, Young Jin Park, Cheol Hong Kim and Jeong-A Lee

Comprehensive Evaluation of Packet Flow Control Methods for a Ring Nework of Processors on Chip

Akiko Narita, Kenji Ichijo and Yoshio Yoshioka

Pipeline Architecture of Particle Swarm Optimization

Xiao CAI, Syahrulanuar NGAH, Hui ZHU, Yuji TANABE and Takaaki BABA

August 20   1:20 PM – 3:40 PM

TS11: Mobile/Wireless and Ubiquitous Computing

Chair: Naoki Fukuta

A Dual-Threshold Power Saving Mechanism in WiMAX

Jia Liu

Solving Multicast QoS Routing Problem in the context V2I Communication Services using DCA

Anh Son Ta, Hoai An Le Thi, Dijamel Khadraoui and Tao Pham Dinh

Testing the Capabilities of Mobile Device Processors: Some Interesting Benchmark Results

Richard Fox and Ngozi Uti

Smart Gesture Sticker: Smart Hand Gestures Profiles for Daily Objects Interaction

Ayman Atia, Jiro Tanaka and Shin Takahashi

One-finger Interaction for Ubiquitous Environment

Takashi Nakamura, Shin Takahashi and Jiro Tanaka

New interface using palm and fingertip without marker for ubiquitous environment

Seokhwan Kim, Shin Takahashi and Jiro Tanaka

TS12: Applications (2)

Chair: Katsuhide Fujita

An Approach to Multi-Stage Calculation Method for Multiple Items B2B E-Commerce

Satoshi Takahashi and Tokuro Matsuo

Examining the Uncertainty Unique to E-Business Companies' Business Continuity in Japan

Soichi Nishikiori and Kunihiko Higa

A study on the effectiveness of short-selling regulation in view of regulation period using artificial markets

Isao Yagi

Augmented Reality System for Accelerometer Equipped Mobile Devices

Mateusz Skoczewski and Hitoshi Maekawa

A Method for Describing Structure of System Security Based on Trust and Authentication

Tsukasa Maeda and Masahito Kurihara

A Generalization of Boundary Value Analysis for Input Parameters with Functional Dependency

Wenying Feng

TS13: Software Engineering (3)

Chair: Byeongdo Kang

The Pushdown Automaton and its Coverage Criterion for Testing Undo/Redo Functions of Software

Tomohiko Takagi and Zengo Furukawa

Concurrent N-switch Coverage Criterion for Generating Test Cases from Place/Transition Nets

Tomohiko Takagi, Naoya Oyaizu and Zengo Furukawa

A Cooperative Service Architecture for Digital Library Federation Based on Grid

Huang Mengxing and Du Wencai

A Structured Framework for Software Metrics Based on Three Primary Metrics

Kiumi Akingbehin

A Scheme for Systematically Selecting an Enterprise Architecture Framework

Agnes Odongo, Sungwon Kang and In-Young Ko

An Ontology-Based Approach for Multiperspective Requirements Traceability between Analysis Models

Namfon Assawamekin