



COMPSAC 2013

KYOTO, JAPAN
JULY 22-26

The IEEE Signature Conference on Computers, Software & Applications



IEEE



IEEE

computer
society

Access Map, Lunch Places, Social Events



Nijo Castle

7/24 (WED) 15:30

(All on-board busses at 15:00
in Kyoto Terrsa parking)

ANA Hotel, Banquet

7/24 (WED) 18:00

After Nijo Castle Tour

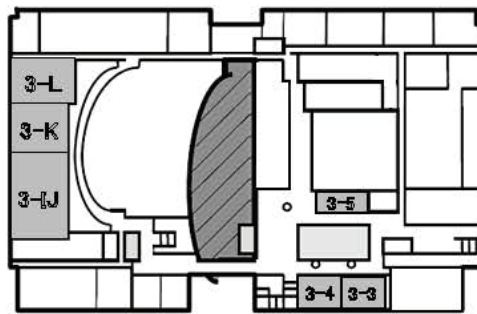


New Miyako Hotel, Reception
7/23 (TUE) 19:00

AEON Mall
Restaurants for Lunch

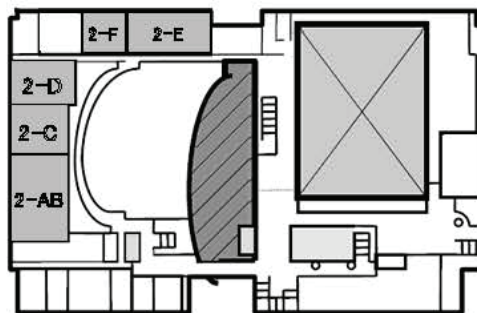
Kyoto TERRSA Floor Map

3F(East Building)



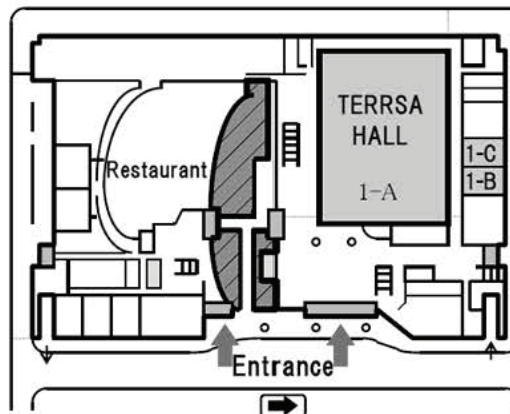
3F(West Building)

2F(East Building)

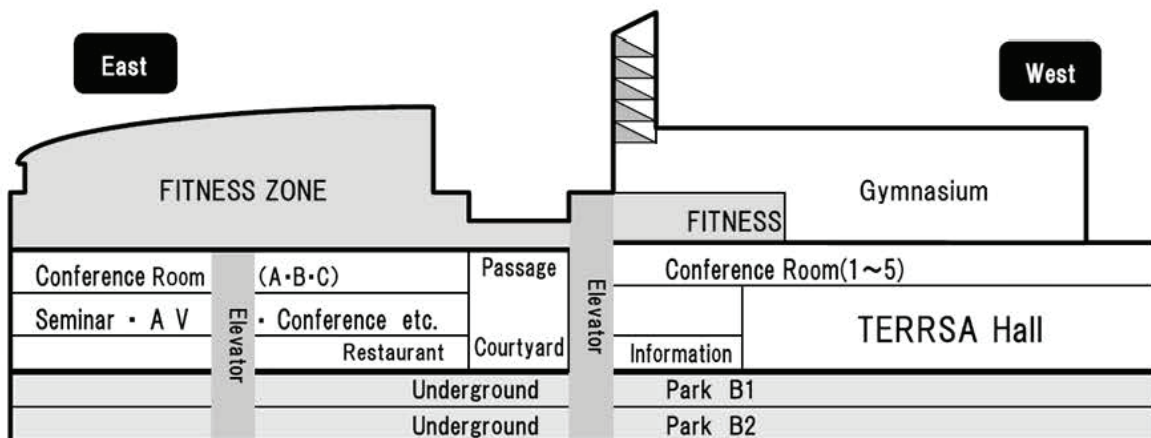


2F(West Building)

1F(East Building)



1F(West Building)



TUESDAY JULY 23

19:00 - NEW MIYAKO HOTEL

WELCOME RECEPTION

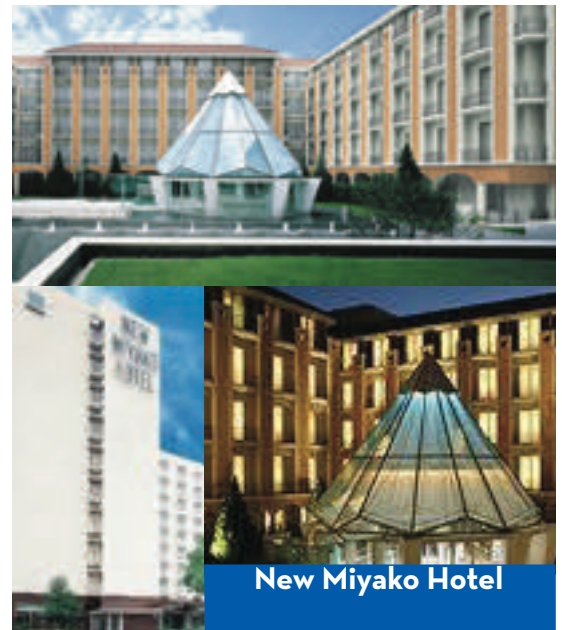
Join us on Tuesday evening at the New Miyako Hotel to get reacquainted with old friends and make new ones! Featured speakers include:

David Alan Grier (2013 IEEE Computer Society President)

Kazuo Furukawa (2012 IPSJ President and
Honorary General Chair of COMPSAC 2013)

Daisaku Kadokawa (Mayor of Kyoto City)

Toshiyuki Nakata (2013 IPSJ Vice President)



New Miyako Hotel

WEDNESDAY JULY 24

NIJO CASTLE TOUR

COMPSAC 2013 BANQUET - ANA HOTEL



Nijo Castle



Ninomaru Palace, Nijo Castle

Conference sessions end on Wednesday at 15:00 to allow time to tour Nijo Castle as part of the COMPSAC 2013 Banquet. Additional banquet tickets are available at the registration desk while quantities last. Buses will be available for boarding at 15:00 in the Kyoto Terrsa parking area. The banquet itself will begin at 18:00 at the ANA Crowne Plaza Hotel.



Nijo Castle - aerial view

WELCOME TO COMPSAC 2013!

MESSAGE FROM THE STANDING COMMITTEE CHAIR



Carl K. Chang
Chair, COMPSAC Standing Committee

Let us celebrate the 37th edition of this long-standing IEEE Annual International Computer Software and Applications Conference (COMPSAC), officially designated as the IEEE signature conference on computers, software and applications since 2006. We have also made plans to hold the 2014 (38th) COMPSAC in Sweden and 2015 (39th) COMPSAC in Taiwan - thanks to many willing and capable volunteers and organizers who have stepped up to take the lead. As a vibrant professional community, it is time to plan for the future of COMPSAC in anticipation of its 40th anniversary in 2016, and draw on the talents of many technical communities out there in our profession to jointly develop COMPSAC into a future conference that we can all get involved with and be proud of.

Here is the plan. As some of you may have already heard, the IEEE Computer Society has decided to embrace this long-standing technical forum and will officially take over its planning and execution, with the strong and dedicated support of its able staff on the logistics end. The volunteering professionals will continue to focus and lead the development of technical communities and technical programs. We expect to have completed the transformation about two years from now. We expect that the 2016 (40th) COMPSAC will be primarily driven by the Computer Society staff. That is the reason why we have not responded to some inquiries in regard to hosting the 40th COMPSAC in a competitive region. We would like to engage the Computer Society staff into both the decision making and execution process before proceeding further.

In its long history, COMPSAC has not been attached to a Technical Committee like other conferences are. Some of the old-timers may still remember that up until the mid-1990s there were two “flagship” conferences – COMPSAC and COMPCON. While COMPCON has long gone, COMPSAC has remained a robust event. I would like to again acknowledge the vision and exemplary leadership of Professor Stephen S. Yau, who envisioned the birth of COMPSAC and led its annual development from 1977-2005. At COMPSAC 2005, in Edinburgh, I promised to “take over” COMPSAC with the commitment that “I will do it for 10 years.” I plan to fulfill my promise to guide and help the development of COMPSAC through 2015. I have made it no secret that I will not drive COMPSAC after 2015, although I will continue involving myself in the technical program development as part of my profession.

Now, let me introduce several future community leaders. Since COMPSAC maintains a rather large pool of highly active volunteers I will only introduce the Standing Committee members in alphabetical order. Elisa Bertino has served as program chair (2009) and general chair (2012) for COMPSAC and has helped many times to get us distinguished keynote and plenary speakers. Cheng-Chung (William) Chu has served COMPSAC for many years and was the 2000 program chair. William will host the 2015 COMPSAC in Taiwan. Abdelsalam (Sumi) Helal has been keynote speaker and regular contributor to COMPSAC since 2006. Both Elisa and Sumi have played key roles in the IPSJ’s Signature Conference on Internet and Applications (IEEE/IPSJ SAINT). Elisa and Sumi helped grow and sustain the SAINT community before SAINT officially “advanced” into COMPSAC to become an integrated conference this year. Bruce McMillin has been a long-time volunteer for COMPSAC, was the program chair in 2007 and general chair in 2011. You may have noticed that Bruce stepped up to take the lead and chair the 2014 Steering Committee, appointed annually by the Standing Committee. A Steering Committee exercises the oversight functions in each particular year. I am sure that many of you will appreciate partnering with Bruce in future COMPSAC activities. Sorel Reisman, 2011 Computer Society President, and John Walz, 2012 Computer Society President, have successfully advocated for COMPSAC to the Computer Society’s leadership. Last but not the least, Katsuyuki Yamazaki has been a senior and the most vocal and effective leader in the SAINT community, and is expected to continue drawing many talents from the SAINT community to COMPSAC as organizers, authors, speakers, among many other roles that require such contributions to make the integrated forum a greater success into the future.

I sincerely hope that you all enjoy this “Kyoto Edition” of COMPSAC. Attending the technical sessions aside, please do take time to visit this outstanding city with many histories and traditions.

MESSAGE FROM THE GENERAL CHAIRS



Kazuo Furukawa
Honorary General Chair
NEDO, Japan

On behalf of COMPSAC 2013 organization we would like to welcome you to the 37th annual conference on computer software and applications, COMPSAC 2013. This 37th COMPSAC is a milestone in the conference's history - for two important reasons.

The first concerns our brand new, integrated COMPSAC 2013. Since 2008, COMPSAC has been co-located with the International Symposium on Applications and the Internet (SAINT) as a partner conference. This year, thanks to the the hard work of the Information Processing Society of Japan (IPSJ) and the IEEE Computer Society, we are delighted to announce the integration of SAINT into the IEEE Computer Society's new powerful COMPSAC . Furthermore, we are very happy that IPSJ, a sister society of the IEEE Computer Society, will continue to work for COMPSAC as technical co-sponsor.

The theme of COMPSAC 2013, The Expanding Sphere of Software and Data, covers a wide range of important and exciting topics on computer software and applications, and Internet technologies and applications. The emerging technologies and applications of computing and networking will clearly be the motive force in creating the future for a global digital society. For this future to materialize, an essential component is 'big data,' and all the underlying issues related to it - practices and developments that connect data processing, data transporting, data security, etc., and methodologies concerning new, related application development methodologies. COMPSAC 2013 provides workshops, sessions, panels, and keynotes that address these and many other topics.



Yuji Oie
General Chair
Kyushu Institute
of Technology, Japan

The second reason that 2013 is a milestone for COMPSAC is that the Computer Society is discussing moving COMPSAC from being a "signature" conference to being a "flagship" conference of the Society. The concept of a "flagship conference" is not unique, but it is new for the IEEE Computer Society. Most societies within the IEEE have one or more conferences they refer to as a "flagship," in the sense that they represent what's core, best, and strongest about a particular community, technical topic or geographical area. For the Computer Society, a "flagship conference" has to be one that has a long and established history with the Computer Society, and a strong reputation for exceptional quality as both (a) a generator of technical content and discussion, and (b) a well-planned, well-organized, well-attended, and well-managed event. Any good conference will feature high-quality papers and speakers: a flagship conference does so on a more massive scale, its success measured by historically high numbers of citations and downloads. We anticipate that the Computer Society will recognize that COMPSAC meets these high standards of quality by formally recognizing COMPSAC as a flagship conference in 2014.



Sorel Reisman
General Chair
California State University
USA

We would like to thank Carl Chang, Chair of the Standing Committee of COMPSAC, and Katuyuki Yamazaki, Former Chair of the Standing Committee of SAINT, for their strong leadership, and to other committee members for the advice and support they provided in bringing us to this milestone in our history. Special thanks are extended to Axel Küpper, Hiroyuki Ohsaki, and Sahra Sedighsarvestani for their service as Technical Program co-Chairs and, Cristina Seceleanu and Kenichi Yoshida for the exciting workshop program. Also, thanks to Mohammad Zulkernine who served as mentor for this year's Technical Program co-Chairs. We are very thankful to Laurel Tweed for her tremendous efforts in organizing the conference. We also thank all the keynote speakers, panelists, workshop organizers and authors for their contribution to the exciting technical program this year.

We are confident that you will enjoy your visit to Kyoto, and benefit from the entire program. We look forward to your participation in a successful exchange of ideas and initiatives.

MESSAGE FROM THE PROGRAM CHAIRS

“The Expanding Sphere of Software and Data” is the technical theme of COMPSAC 2013, which recognizes the emergence and increasing importance of areas such as digital society, cyber-physical systems, and semantic, pervasive, and mobile computing; which now more than ever are dictating the form and function of software and applications. Associated with these paradigms are instruments, sensors, and a multitude of applications that generate and require real-time analysis of massive volumes of diverse, complex, and distributed data. Knowledge, tools, practices, and infrastructures have begun to evolve to cover this expanding sphere of software and data, while addressing grand challenges brought about by the complexities and uncertainties of the physical world and the heterogeneity and massive scale of the cyber infrastructure and the data it produces and requires. These challenges were the motivation for introducing several new tracks in COMPSAC 2013 - Big Data Analytics and Knowledge Management and Machine-to-Machine (M2M) Networking and Internet of Things are only two examples.

These emerging areas and related applications strongly rely on the Internet as a common core infrastructure and a pervasive ecosystem that binds all participating actors. The critical role serves as impetus for the strong focus of COMPSAC on Internet-related technologies, protocols, and mechanisms – the conference aims to provide a coherent view on both the Internet and the software domain. To this end, from 2013 onwards, COMPSAC subsumes and follows in the steps of the renowned International Symposium on Applications and the Internet (SAINT). SAINT was started in 2001, under the sponsorship of the IEEE Computer Society and the Information Processing Society of Japan (IPSJ). It has been co-located with COMPSAC since 2008. In this inaugural year of the merger, we are pleased to introduce to COMPSAC new Internet-related tracks that focus on Internet architectures and applications, security, trust, and privacy; as well as network middleware and cloud computing. We welcome to the COMPSAC family colleagues whose primary association was with SAINT and look forward to fruitful collaboration with them in these exciting areas.

This year, the main conference (not including workshops) received 240 submissions to 21 tracks. Following the tradition of past COMPSAC conferences, each submission underwent a rigorous double-blind review process and was discussed by the program and track chairs during the PC meeting, which took place at the University of Westminster, London, in March 2013. At the culmination of this process, we accepted 23% of the submissions as regular papers for inclusion into this year’s proceedings. We also consolidated the original tracks into 17 tracks that better reflect the focus of the accepted submissions.

The success of an event like COMPSAC always depends on the quality of submitted papers, the expertise of the participating reviewers, and the engagement of all colleagues involved in the organization of the conference. Therefore, we would like to take this opportunity to thank the authors, who submitted their valuable research results to the conference; the track chairs, who diligently oversaw the paper review process; and the members of the Program Committee and external reviewers whose dedicated and expert review is the foundation for the rich program assembled for COMPSAC 2013. We also thank all keynote speakers and panelists for further enriching the conference program with their insights. Special thanks go to this year’s conference coordinator, Mohammad Zulkernine, whose long track record of service to COMPSAC and patient assistance and advice were invaluable assets to us as program chairs. We extend our gratitude to Vladimir Getov and his team for hosting this year’s PC meeting in the beautiful main building of the University of Westminster in downtown London. We deeply appreciate the innumerable efforts of Carl Chang, Standing Committee Chair of COMPSAC, who is truly the backbone of the conference. Special thanks are extended to Katsuyuki Yamazaki, Standing Committee Chair of SAINT, for guiding a smooth and seamless migration of SAINT to COMPSAC. We thank the General Co-Chairs of COMPSAC 2013, Yuji Ole and Sorel Reisman for their ongoing support and contributions. We wish to especially thank Laurel Tweed and Yanping Chen for their invaluable work in hosting and maintaining the COMPSAC 2013 web site and conference management system. Last, but not least; we express our deepest gratitude to Yasuo Okabe and all the local organizers who spared no effort to create an extraordinary and exciting event in Kyoto, Japan.



Axel Küpper
Technische Universität
Berlin & Telekom Innovation
Laboratories
Germany



Hiroyuki Ohsaki
Kwansei Gakuin University
Japan



Sahra Sedigh
Missouri University of
Science & Technology
USA

MESSAGE FROM THE WORKSHOP CHAIRS



COMPSAC 2013 Workshops Chairs:

Cristina Secoleanu, Mälardalen University, Sweden

Kenichi Yoshida, University of Tsukuba, Japan

It is our great pleasure to welcome you to the workshops associated with the 37th IEEE International Computer Software and Applications Conference, COMPSAC 2013, organized this year in the wonderful city of Kyoto, Japan. Following the COMPSAC tradition, we host a number of high-quality workshops that are held on the first day (22nd of July) and the last day (26th of July) of the main conference. As many as 22 workshops have been selected this year, out of which 2 are joint, whose topics cover important and modern aspects of designing computer-based systems and their applications, which complement well the main conference program.

The workshops aim to provide a venue for presenting and discussing research and experience results focusing on various aspects of computing, software development, software systems engineering, service-oriented systems, web technologies, and their applications and methodologies. This year the PC members of the organized workshops have selected more than 120 papers for presentation and publication in the workshops proceedings. In addition, the prestigious invited speakers surely increase the attractiveness of the workshops.

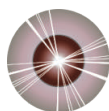
We thank all the authors who submitted papers to COMPSAC 2013 workshops, and we look forward to an extended academic and industrial reach in the following years. We also thank the members of all workshop Program Committees, for their careful assessment of the submissions. The whole process of recruiting and organizing the workshops benefited from the COMPSAC 2013 organization and steering committees, to whom we are grateful.

We would like to thank all the chairs of the workshops for the great work that they have invested in planning and organizing the events. We hope that the participants will enjoy the lively workshops atmosphere, and will leave the events with new, challenging ideas.

COMPSAC Sponsors



COMPSAC 2013 Technical Co-Sponsors



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COMPSAC 2013 Conference Supporters



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KYOTO UNIVERSITY



IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY



PROGRAM AT A GLANCE

MONDAY JULY 22	09:00-10:30	11:00-12:30	14:00-15:30	16:00-17:30
3-IJ		STPSA	STPSA	STPSA
2-AB		MVDA	MVDA	MVDA
3-L	CFSE	CFSE	EUCASS	EUCASS
2-D	IWSC	IWSC	IWSC	IWSC
2-E	STA	STA	ITeS	ITeS
2-C		SAPSE	ESAS	ESAS
3-K		METHOD	CIF	CIF
2-F		NETSAP	MidArch	MidArch
Lobby (Main Hall)	Registration (from 08:30)		Exhibitions (set-up)	Exhibitions (set-up)

TUESDAY JULY 23	09:00-10:30	11:00-12:30	14:00-15:30	16:00-17:30	19:00 - 21:00
3-IJ	Opening Session: Keynote 1: Dr. Kazuhiko Kushima - Main Hall, 1st Floor	Software Testing 1	Software Testing 2	Exhibitor Presentations: Main Hall, 1st Floor	COMPSAC Welcome Reception: New Miyako Hotel
2-AB		Internet Architecture & Applications 1	Internet Architecture & Applications 2		
3-L		Big Data Analytics & Knowledge Management 1	Big Data Analytics & Knowledge Management 2		
2-D		Mobile & Pervasive Computing 1			
2-E		Network Middlewares, Cloud Architecture & Computing 1	Reliability Monitoring & Model-based Evaluation		
2-C		Poster #1	Poster #2		
3-K		(Committee)	(Committee)		
2-F		(Committee)	(Committee)		
Lobby (Main Hall)	Registration (from 08:30)	Exhibitions	Exhibitions		

WEDNESDAY JULY 24	09:00-10:30	11:00-12:30	13:30-15:00	15:00-17:00	18:00-21:00
3-IJ	Keynote 2: Dr. Raj Rajkumar - Main Hall, 1st Floor	Software Life Cycle, Evolution & Maintenance	Plenary Panel: Software Assurance - Main Hall, 1st Floor	COMPSAC Banquet: Nijo Castle Tour (15:00) / ANA Crowne Plaza Hotel (18:00)	
2-AB		Internet Architecture & Applications 3			
3-L		Security, Trust & Privacy			
2-D		Semantic Web & Web Services			
2-E		Requirements Engineering			
2-C		Doctoral (Posters)			
3-K		(Committee)			
2-F		(Committee)			
Lobby (Main Hall)	Registration (from 08:30)	Exhibitions			

THURSDAY JULY 25	09:00-10:30	11:00-12:30	13:30-14:00	14:00-15:30	16:00-17:30
3-IJ	Plenary Panel: Big Data - Main Hall, 1st Floor	Software Testing 3	COMPSAC Planning Meeting - All Welcome - Main Hall, 1st Floor	Software Testing 4	
2-AB		Formal Methods 1		Formal Methods 2	M2M Networking & Internet of Things
3-L		Real-time and Embedded Systems		HCI & Usability	Applications
2-D		Software Architecture & Design 1		Software Architecture & Design 2	Software Architecture & Design 3
2-E				Industry Papers #1	Industry Papers #2
2-C		Fast Abstract #1		Fast Abstract #2	Fast Abstract #3
3-K		(Committee)		(Committee)	(Committee)
2-F		(Committee)		(Committee)	(Committee)
Lobby (Main Hall)	Registration (from 08:30)	Exhibitions		Exhibitions	Exhibitions

FRIDAY JULY 26	09:00-10:30	11:00-12:30	14:00-15:30
3-IJ	SSS	SSS	SSS
2-AB	QUORS	QUORS	QUORS
3-L	CDS	CDS	CDS
2-D	ADMNET	ADMNET	ADMNET
2-E	ADMNET	ADMNET	
2-C	IEESD&TIP	IEESD&TIP	IEESD&TIP
3-K	HSNCE	HSNCE	
2-F	IWFIT	IWFIT	
Lobby (Main Hall)	Registration (from 08:30)		

IEEE COMPSAC International Workshops: Monday, July 22

09:00-10:30 Workshop Sessions

CFSE 2013: The 5th IEEE International Workshop on Computer Forensics in Software Engineering

Session 1 Chairs: Ryoichi Sasaki, Tetsutaroh Uehara, Jigang Liu

Location: 3-L

Customizing k-gram Based Birthmark through Partial Matching in Detecting Software Thefts

Hyun-il Lim

Fingerprint Clustering for Forensic Data Indexing

Wei-Ho Tsai, Cin-Hao Ma

Cloud Server Aided Computation for ElGamal Elliptic Curve Cryptosystem

Narn-Yih Lee, Zih-Ling Chen

IWSC 2013: The 10th IEEE International Workshop on Software Cybernetics

Session 1 Chair: Keynhyuk Yeom

Location: 2-D

Opening Remarks

Stephen S. Yau

Understanding Requirements for Online Services Based on Users Behavioural Data Analysis

Qing Zhou and Lin Liu

An Adaptive Control Strategy for Managing Concurrent Service Requests in Service-based Systems

Wen-Long Zhu, Bei-Bei Yin, Kai-Yuan Cai, Dazhi Huang and Stephen S. Yau

STA 2013: The 5th IEEE International Workshop on Software Test Automation

Session 1 Chair: Johnny Wong

Location: 2-E

Reducing the Number of Initial Database States for Integration Testing

Haruto Tanno, Takashi Hoshino

Opportunities for Clone Detection in Test Case Recommendation

Mostafa Erfani, Iman Keivanloo, Juergen Rilling

10:30-11:00 Morning Break

11:00-12:30 Workshop Sessions

STPSA 2013: The 8th IEEE International Workshop on Security, Trust and Privacy for Software Applications

Session 1 Chair: Tian Huang

Location: 3-IJ

Using Security and Domain ontologies for Security Requirements Analysis

Amina Souag, Camille Salinesi, Isabelle Wattiau, Haris Mouratidis

A Petri Net based Model for Trustworthy Software Process Composition

Xuan Zhang, Tong Li, Zhong-Wen Xie, Fei Dai, Jin-Zhuo Liu

Transparent Security-Sensitive Process Protection via VMM-Based Process Shadowing

Xiaoguang Wang, Yong Qi, Yuehua Dai

MVDA 2013: The 2nd IEEE Workshop on Modeling and Verifying Distributed Applications

Session 1 Chair: Leila Jemni Ben Ayed

Location: 2-AB

An Abstraction Method of Behaviors for Process Algebra

Jinho On, Yeonbok Choe, Moonkun Lee,

Cost Optimization Strategy for Iterative Integration of Multi-Critical Functions in IMA and TTEthernet Architecture

Michael Lauer, John Mullins, Moez Yeddes

Conceptual Modeling of the Organisational Aspects for Distributed Applications: The Semantic Lifting Approach

Vedran Hrgovic, Dimitris Karagiannis, Robert Woitsch

A Practical Software Model for Content Aggregation in Browsers using Recent Advances in HTML5

Marat Zhanikeev

CFSE 2013: The 5th IEEE International Workshop on Computer Forensics in Software Engineering

Session 2 Chairs: Ryoichi Sasaki, Tetsutaroh Uehara, Jigang Liu

Location: 3-L

Keynote Speech: Trend on Digital Forensic Technologies and Business in Japan

Hideki Takeda, CTO, UBIG, Japan

Towards a Better Similarity Measure for Keyword Profiling via Clustering

Y. Liang, K.P. Chow, L.C.K Hui, J. Fang, S.M. Yiu, Shuhui Hou

Development and Evaluation of Guideline Total Support System for Evidence Preservation

by Using an Android Phone

Wataru Takahashi, Ryoichi Sasaki, Tetsutaro Uehara

IWSC 2013: The 10th IEEE International Workshop on Software Cybernetics

Session 2 Chair: Lin Liu

Location: 2-D

A Feedback-based Approach to Validate SWRL Rules for Developing Situation-aware Software

Joonseok Park, Keunhyuk Yeom

A Case Study of Adaptive Combinatorial Testing

Changhai Nie, Siyang Chen, Hareton Leung, Kai-Yuan Cai

Cloud Computing

Yoshinobu Tamura and Shigeru Yamada

STA 2013: The 5th IEEE International Workshop on Software Test Automation

Session 2 Chair: Cristina Secoleanu

Location: 2-E

Using Dependency Relations to Improve Test Case Generation from UML Statecharts

Valentin Chimisliu, Franz Wotawa

Incrementally Applicable t-wise Combinatorial Test Suites for High-Strength Interaction Testing

Andrea Calvagna, Emiliano Tramontana

SAPSE 2013: The 5th IEEE International Workshop on Security Aspects in Processes and Service Engineering

Session 1 Chair: Stelvio Cimato

Location: 2-C

Predictive Notification Service of Privacy Invasion on Posting Pictures to SNS

Shigeru Shimada, Isao Echizen

Towards Privacy-Friendly Transparency Services in Inter-Organizational Business Processes

Meiko Jensen

An LOF-based Adaptive Anomaly Detection Scheme for Cloud Computing

Tian Huang, Yan Zhu, Qiannan Zhang, Yongxin Zhu, Dongyang Wang, Meikang Qiu, Lei Liu

A File-distribution Approach to Achieve High Availability and Confidentiality for Data Storage on Multi-cloud

Yuuki Kajiuira, Atsushi Kanai, Shigeaki Tanimoto, Hiroyuki Sato

METHOD 2013: The 2nd IEEE International Workshop on Methods for Establishing Trust with Open Data

Session 1 Chair: Edzard Höfig

Location: 3-K

Easy Access to Provenance: An Essential Step Towards Trust on the Web

Tom De Nies, Sam Coppens, Ruben Verborgh, Miel Vander Sande, Erik Mannens, Rik Van de Walle, Danus

Michaelides, Luc Moreau

Formal Modeling of Trust-Based Access Control in Dynamic Coalitions

Nadim Sarrouh

Investigating the Relevance of Linked Open Data Sets with SPARQL Queries

Thomas Holst, Edzard Höfig

Implementation of Metadata Quality Metrics and Application on Public Government Data

Konrad Johannes Reiche, Edzard Höfig

NETSAP 2013: The 4th IEEE International Workshop on Network Technologies for Security,

Administration and Protection

Session 1 Chair: Masashi Eto

Location: 2-F

A Device for Transparent Probabilistic Packet Marking

Masayuki Okada, Nasato Goto, Akira Kanaoka, Eiji Okamoto
Towards Unified Vulnerability Assessment With Open Data
Akihito Nakamura
Using a Trust Model to Reduce False Positives of SIP Flooding Attack Detection in IMS
Noppawat Chaisamran, Takeshi Okuda, Suguru Yamaguchi
Security Software based on Windows NDIS Filter Drivers
Shin-Shung Chen, Yu-Wen Chen, Tzong-Yih Kuo

12:30-14:00 Lunch
14:00-15:30 Workshop Sessions

STPSA 2013: The 8th IEEE International Workshop on Security, Trust and Privacy for Software Applications
Session 2 Chair: Dong Chen

Location: 3-IJ

Privacy-Preserving Two-Party k-Means Clustering in Malicious Model
Rahena Akhter, Rownak Jahan Chowdhury, Keita Emura, Tamzida Islam, Mohammad Shahriar Rahman, Nusrat Rubaiyat
Privacy-aware Community Sensing using Randomized Response
Shunsuke Aoki, Masayuki Iwai, Kaoru Sezaki

MVDA 2013: The 2nd IEEE International Workshop on Modeling and Verifying Distributed Applications
Session 2 Chair: Ahlem Ben Younes

Location: 2-AB

Building Adaptive Accessible Context-Aware for User Interface Tailored to Disable Users
Lamia Zouhaier, Yousra Hlaoui Ben Daly, Leila Jemni Ben Ayed
An Integrated Formal Model for Context-Aware Systems
Eun-Sun Cho, Tae-Seob Yoon, Joong-Hyun Choi, Joon-Young Paik, Sumi Helal
ArgoAWS-UML: Modeling Tool for Adaptive Web Services
El Hog Chiraz, Ben Djemaa Raoudha, Amous Ikram

EUCASS 2013: The 4th IEEE International Workshop on Enablers for Ubiquitous Computing
Session 1 Chair: Susumu Takeuchi

Location: 3-L

A Patrol Guidance Mechanism in a Context-aware Environment
Chin-Chih Chang, Judy C. R. Tseng, Hao-Yun Chang
System Evolution for Unknown Context through Multi-action Evaluation
Asanga Nimalasena, Vladimir Getov
A Knowledge-Based Development Approach with Fact and Service for End-User in Cloud Computing
Rui Zhou, Jing Li, Jinghan Wang, GuoWei Wang

IWSC 2013: The 10th IEEE International Workshop on Software Cybernetics
Session 3 Chair: Kai-Yuan Cai

Location: 2-D

IWSC Panel
Panelists include William Chu, Tunghai University, Taiwan; Lin Liu, Tsinghua University, China; Yoshinobu Tamura, Yamaguchi University, Japan; and Keynhyuk Yeom, Pusan National University, South Korea

ITeS 2013: The 5th IEEE International Workshop on IT-enabled Services
Location: 2-E

Welcome and Keynote
Shiro Uesugi
The Service Design of Intelligent Robot (iRobot) for Entertainment
Tung-Hsiang Chou
Game Theoretic Analysis of the Value Exchange System
Sumiko Miyata, Hirotsugu Kinoshita, Tetsuya Morizumi, Chao Li

ESAS 2013: The 8th IEEE International Workshop on Engineering Semantic Agents - Intelligence & Robotics

Session 1 Chair: Atilla Elçi

Location: 2-C

A Problem Solver for Scheduling Workflows in Multi-agents Systems based on Petri nets

Fu-Shiung Hsieh and Jim-Bon Lin

Social Network Data Retrieving Using Semantic Technology

Reen-Cheng Wang, Ting-Han Su, Cheng-Peng Ma, Shih-Hung Chen, Hsi-Ho Huang

Design and Implementation of a Novel Weighted Shortest Path Algorithm for Maze Solving Robots

Behnam Rahnama, Makbule Canan Özdemir, Yunus Kiran, Atilla Elçi

CIF 2013: The 4th International Workshop on Complex Information Flows

Session 1 Chair: Hiroyuki Ohsaki

Location: 3-K

Agent-based Modelling and Simulation on Supercomputers in Japan (invited talk)

A. Yonezawa

Efficiency of Parallelisation of Genetic Algorithms in the Data Analysis Context

D. Perrin and C. Duhamel

MidArch 2013: The 7th International Workshop on Middleware Architecture in the Internet

Session 1 Chair: Shigeaki Tanimoto

Location: 2-F

Welcome Address

Shigeaki Tanimoto, Toyokazu Akiyama

Invited Talk: Heterogeneous Closed Information Sources and Open Services

Teruhisa Hochin

Privacy Preserved Attribute Aggregation to Avoid Correlation of User Activities Across Shibboleth SPs

Motonori Nakamura, Takeshi Nishimura, Kazutsuna Yamaji, Hiroyuki Sato, Yasuo Okabe

15:30-16:00 Afternoon Break
16:00-17:30 Workshop Sessions

STPSA 2013: The 8th IEEE International Workshop on Security, Trust and Privacy for Software Applications

Session 3 Chair: Lin Liu

Location: 3-IJ

A Multi-Order Markov Chain Based Scheme for Anomaly Detection

Wenyao Sha, Yongxin Zhu, Tian Huang, Meikang Qiu, Yan Zhu, Qiannan Zhang

Hybrid Authorization Conflict Detection by Inferring Partial Data in RDF Access Control

Jaehoon Kim

Heuristic path pruning algorithm based on error handling pattern recognition in detecting vulnerability

Dong Chen, Yang Zhang, Liang Cheng, Yi Deng, Xiaoshan Sun

MVDA 2013: The 2nd IEEE Workshop on Modeling and Verifying Distributed Applications

Session 3 Chair: Leila Jemni Ben Ayed

Location: 2-AB

Modeling and Verification of Call Setup Dynamics of LTE Communication Systems

Ishtiaq Ahmed Choudhry, Nazir Ahmad Zafar, Mohammed Al-Zahrani

Model Checking for SpaceWire Link Interface Design Using Uppaal

Ping Luo, Rui Wang, Xiaojuan Li, Yong Guan, Jie Zhang, Hongxing Wei

Refinement Based Modeling of Workflow Applications using UML Activity Diagrams

Ahlem Ben Younes, Yousra Bendaly Hlaoui, Leila Jemni Ben Ayed, Rahma Jlassi

EUCASS 2013: The 4th IEEE International Workshop on Enablers for Ubiquitous Computing

Session 2 Chair: Hideya Ochiai

Location: 3-L

UBI-Tree: Indexing Method for Schema-less Search

Yutaka Arakawa, Takayuki Nakamura, Motonori Nakamura, Hajime Matsumura

A P2P Delivery Method for Sensor Data Stream Based on Load Estimation from Collection Cycles

ITeS 2013: The 5th IEEE International Workshop on IT-enabled Services

Location: 2-E

Closed-Circuit Television-Enabled Service - A Review of Security and Privacy Issues

Yu-Lung Wu, Chi-Jui Chang, Yu-Hui Tao

The Study of Brand Perception through Social Network Sites and Corporate Social Responsibility Programs

Rungsiman Nararatwong, Nagul Cooharajanane, Nattarat Pongsupankij, Rajalida Lipikorn,

Kanokwan Atcharyachanvanich

Panel Discussion

Panelists T.B.A.

ESAS 2013: The 8th IEEE International Workshop on Engineering Semantic Agents - Intelligence & Robotics

Session 2 Chair: Behnam Rahnama

Location: 2-C

Towards an Information Extraction System based on Ontology to Match Résumés and Jobs

Duygu Celik, Aşkın Karakaş, Gülşen Bal, Cem Gültunca, Atilla Elçi, Başak Buluz, Murat Can Alevli

Round Table and Conclusion

CIF 2013: The 4th International Workshop on Complex Information Flows

Session 2 Chair: Ray Walshe

Location: 3-K

Toward an mHealth Intervention for Smoking Cessation

T. Ahsan, I. Addo, S. Ahamed, D. Petereit, S. Kanekar, L. Burhansstipanov and L. Krebs

Performance Evaluation of Cloud-based Parallel Computing

Y. Nakai, D. Perrin, H. Ohsaki and R. Walshe

Automatic Indexing and Creating Semantic Networks for Agricultural Science Papers in the Polish Language

P. Wrzeciono and W. Karwowski

MidArch 2013: The 7th International Workshop on Middleware Architecture in the Internet

Session 2 Chair: Toyokazu Akiyama

Location: 2-F

Implementation and Evaluation of the Well-distribution Algorithm for an Overlay Network

Takuma Oide, Atsushi Takeda, Takuo Suganuma, Akiko Takahashi

Privacy Enhancing Proxies in Attribute Release: Two Approaches

Hiroyuki Sato, Yasuo Okabe, Motonori Nakamura, Takeshi Nishimura, Kazutsuna Yamaji

Flexible Access and Priority Control System Based on 802.1X Authentication in Time of Disaster

Toshiki Watanabe, Shunichi Kinoshita, Yasuhiro Yamasaki, Hideaki Goto, Hideaki Sone

IEEE COMPSAC Main Conference: Tuesday, July 23

09:00-10:30 Opening Session

Location: Main Hall (1st floor)

Keynote: Dr. Kazuhiko Kushima, NTT, Japan

Toward Advanced User Experiences based on Intelligent Media Processing

10:30-11:00 Morning Break

11:00-12:30 Parallel Sessions

Software Testing I

Chair: T.H. Tse

Location: 3-IJ

Monitoring Based on IOSTS for Testing Functional and Security Properties: Application to an Automotive Case Study

Pramila Mouttappa, Stephane Maag, Ana Cavalli

ARIGUMA Code Analyzer: Efficient Variant Detection by Identifying Common Instruction Sequences

in Malware Families

Yang Zhong, Hirofumi Yamaki, Yukiko Yamaguchi, Hiroki Takakura

Verifying Access Control Properties with Design by Contract: Framework and Lessons Learned

Carlos E. Rubio Medrano, Gail-Joon Ahn, Karsten Sohr

Mining Test Oracles for Test Inputs Generated from Java Bytecode

Weifeng Xu, Tao Ding, Hanling Wang, Dianxiang Xu

Internet Architecture & Applications I

Chair: Motonori Nakamura

Location: 2-AB

CLINEX: An Inter-node Cross-Layer Cooperation Architecture to Adapt to Dynamically Changing Network Situation

Kazuma Yonemura, Kunitake Kaneko, Fumio Teraoka

GenRe: A General Replication Scheme over an Abstraction of DHTs

Jingtao Li, Jie Zhang, Zhen Cao, Wengang Pei

Modeling and Analysis of Multi-version Concurrent Control

Chao Luo, Hiroyuki Okamura, Tadashi Dohi

Fuzzy C-means Clustering Based Polarization Assessment in Intelligent Argumentation System for collaborative decision support

Ravi Santosh Arvapally, Xiaoqing (Frank) Liu, Donald C. Wunsch II

Big Data Analytics & Knowledge Management I

Chair: Mei Kobayashi

Location: 3-L

Dynamical Re-striping Data on Storage Servers in Parallel File Systems

Jianwei Liao, Xiaoyan Liu, Yingshen Chen

Nested Pattern Queries Processing Optimization over Multi-Dimensional Event Streams

Fuyuan Xiao and Masayoshi Aritsugi

Parallelizing Probabilistic Streaming Skyline Operator in Cloud Computing Environments

Xiaoyong Li, Yijie Wang, Xiaoling Li, Yuan Wang, Rubing Huang

Mobile & Pervasive Computing

Chair: Ali Hurson

Location: 2-D

A Device Specification Method Using Doppler Effect of Acoustic Waves

Yasutaka Nishimura, Kiyohito Yoshihara

Agent Redeployment and Missing Data Regathering in Mobile Wireless Sensor Networks

Kazuya Matsuo, Keisuke Goto, Akimitsu Kanzaki, Takahiro Hara, Shojiro Nishio

RSSI based Indoor Localization for Smartphone using Fixed and Mobile Wireless Node

Md. Osman Gani, Casey O'Brien, Sheikh I. Ahamed, Roger O Smith

Assisted Human-in-the-Loop Adaptation of Web Pages for Mobile Devices

Chenjie Wei, Heesung Lee, Luke Molnar, Michael Herold, Rajiv Ramnath, Jay Ramanathan

Network Middleware, Cloud Architectures & Computing

Chair: Morris Chang

Location: 2-E

A Relationship-based VM Placement Framework of Cloud Environment

Xiaodong Zhang, Ying Zhang, Xing Chen, Kai Liu, Gang Huang, Jianfeng Zhan

Cloud Client Prediction Models Using Machine Learning Techniques

Samuel A. Ajila, Akindele A. Bankole

A Mashup-based Approach for Virtual SDN Management

Oscar Mauricio Caicedo Rendon, Felipe Estrada Solano, Lisandro Zambenedetti Granville

Posters I

Chair: Shigehiro Ano

Location: 2-C

Image Encryption Based on Fuzzy Synchronization of Chaos Systems

Chao-Lin Kuo, Lung-Chuan Huang, Shun-Jih Wang, Jui-Sheng Lin, Cheng-Chi Wang, Jun-Juh Yan
Inferring Directed Static Networks of Influence from Undirected Temporal Networks
 Taro Takaguchi, Nobuo Sato, Kazuo Yano, Naoki Masuda
Speed Control for Permanent Magnet Synchronous Motor System via Quasi-Sliding Mode Control
 Hsin-Chieh Chen, Yi-You Hou, Meei-Ling Hung, Zhang-Lin Wan
*Maximum Power Tracking Controller for a Wind-Driven Permanent-Magnet Synchronous Generator:
 Using an Approach of Chaos Synchronization*
 Jian-Liung Chen, Chia-Hung Lin, Bo-Wun Gu, Ming-Jyi Jang
Support Vector Machine-based Fuzzy Inference Systems for Service Restoration Strategy in Micro-distribution Systems
 Whei-Min Lin, Chia-Sheng Tu, Chia-Hung Lin
Data Hiding Technique By Ternary Hamming Codes
 Jyun-Jie Wang, Hong-Da Chen, Ting-Ya Yang, Houshou Chen, Chi-Yuan Lin
SoR-based Programmable Network for Future Software-Defined Network
 Kenichi Takagiwa, Shinichi Ishida, Hiroaki Nishi
Autonomous Data Transmission Using Off-peak Hours for Cellular-based M2M Communications
 Takeshi Kitahara, Yasuhiko Hiehata, Hideyuki Koto, Norhiro Fukumoto, Hajime Nakamura, Shigehiro Ano

12:30-14:00 Lunch Break
14:00-15:30 Parallel Sessions

Software Testing II

Chair: Bruce McMillin

Location: 3-IJ

Adaptive Test Case Prioritization Guided by Output Inspection
 Dan Hao, Xu Zhao, Lu Zhang
*Evaluation and Analysis of Spectrum-Based Fault Localization with Modified Similarity Coefficients
 for Software Debugging*
 Yi-Sian You, Chin-Yu Huang, Kuan-Li Peng and Chao-Jung Hsu
*Bypassing Code Coverage Approximation Limitations via Effective Input-Based
 Randomized Test Case Prioritization*
 Bo Jiang, W.K. Chan

Internet Architecture & Applications II

Chair: Hiroshi Yamamoto

Location: 2-AB

Solving the Distributed Trigger Counting Problem without Any Global Assumption
 Che-Cheng Chang, Jichiang Tsai
HACCS : Home Appliance Control Concierge System
 Tomoki Watanabe, Rika Mochizuki, Toru Kobayashi, Masao Isshiki
PROMIS: A Management Platform for Software Supply Networks Based on the Liked-Data and OSLC
 Mikio Aoyama, Kazuo Yabuta, Tsutomu Kamimura, Souichi Inomata, Toshiya Chiba, Takashi Niwa, Koji Sakata
Design of Cooperative Load Distribution for Addressing Flash Crowds Using P2P File Sharing Network
 Hiroki Okamoto, Ryosuke Matsumoto, Yasuo Okabe

Big Data Analytics & Knowledge Management II

Chair: Mihhail Matskin

Location: 3-L

Recursive Segmentation Procedure Based on the Akaike Information Criterion Test
 Aki-Hiro Sato
Further Theoretical Contributions to a Privacy Preserving Distributed OLAP Framework
 Alfredo Cuzzocrea, Elisa Bertino
pLSM: A Highly Efficient LSM-Tree Index Supporting Real-Time Big Data Analysis
 Jin Wang, Yong Zhang, Yang Gao, Chunxiao Xing

Reliability Modelling & Model-based Evaluation

Chair: Mohammad Zulkernine

Location: 2-E

Generalized Logit-based Software Reliability Modeling with Metrics Data

Daisuke Kuwa, Tadashi Dohi

A Dynamic SQL Injection Vulnerability Test Case Generation Model Based on the Multiple Phases Detection Approach

Lei Liu, Jing Xu, Minglei Li, Jufeng Yang

A Rigorous and Comprehensive Analysis of Effort for Modeling Aspect State Machines

Shaukat Ali, Tao Yue

Toward Practical Software Reliability Assessment with Change-Point Based on Hazard Rate Models

Shinji Inoue, Shiho Hayashida, Shigeru Yamada

Posters II

Chair: Shigehiro Ano

Location: 2-C

Interaction Physical-Activity Housekeeper for Silver-Haired Citizen Using Wireless Sensor and Mobile Healthcare iPhone

Chia-Hung Lin, Chun-Chao Wang, Jian-Liung Chen, Yi-Pin Kuo, Wei-Ling Chen, Che-Wei Chang

Design and Implementation of the Dual-axis Solar Tracking System

Tung-Sheng Zhan, Whei-Min Lin, Ming-Huang Tsai, Guo-Shiang Wang

Integrating SVM Classifier and Distribution State Estimation for Detection and Identification of AMI Customer's Meter Data

Shi-Jaw Chen, Chia-Hung Lin

Logical Analysis of Weighted Social Networks—An Extended Abstract

Tuan-Fang Fan, Churn-Jung Liao

The Relationships Among Presentation Mode, Product Type, Consumers' Product Knowledge, and Consumers' Purchase Intention in the E-commerce Environment

Yu-Min Wang, Yi-Shun Wang, Ching-Hsuan Yeh, Min-Quan Xia

A Framework for Providing Dynamic Context-Aware User Interface of Second Screen Devices in Home Network Environment

Jaewon Moon, Tae-Beom Lim, Kyung Won Kim, Seung Woo Kum, Myunghyun Yoon, Kwangsu Cho

Automatic Redemption of Free Parking in Shopping Malls

Chi-Lok Tsang, Yiu-Wing Leung

A Practical Behavior Analysis of Video Application Users on Smart Phones

Norihiro Fukumoto, Shigehiro Ano, Shigeki Goto

Junosphere: Towards Professional Networks Education

Maria Salama, Ahmed Shawish

15:30-16:00 Afternoon Break

16:00-17:00 Exhibitors' Presentation

Main Hall (1st floor)

Development of Fault Management Functions

KDDI R&D Laboratories Inc., Japan

Off-peak Communications

KDDI R&D Laboratories Inc., Japan

Resource-manageable Virtual Networks for QoS Control by Service Providers

National Institute of Information & Communications Technology (NICT), Tokyo Institute of Technology, Kyushu Institute of Technology, Japan

Integration Technology of Information Communication and Energy, ICE-IT

National Institute of Information and Communication Technology (NICT), Advanced Telecommunications Research Institute International (ATR), Kyoto University, Kobe University, Daiwa House Industry Co. Ltd., Enegate Co. Ltd., Trans New Technology, Inc., Japan

Novel and Innovative R&D Making Use of Brain Structures

Advanced Telecommunications Research Institute International (ATR), NTT Corporation, Sekisui House, Ltd., Shimadzu Corporation, Keio University, Japan

Inter-University Authentication and Authorization Platform for Japanese Cyber Science Infrastructure

19:00-21:00 Reception - New Miyako Hotel

IEEE COMPSAC Main Conference: Wednesday, July 24

09:00-10:30 Keynote 2: *Intelligent Transportation with Cyber-Physical Technologies*

Location: Main Hall (1st floor)

Dr. Raj Rajkumar, Carnegie Mellon University, USA

10:30-11:00 Morning Break
11:00-12:30 Parallel Sessions

Software Life Cycle, Evolution and Management

Chair: Hongji Yang

Location: 3-IJ

Automated Transformation of Template-Based Web Applications into Single-Page Applications

Jaewon Oh, Woo Hyun Ahn, Seunggho Jeong, Jinsoo Lim, Taegong Kim

Popularity, Interoperability, and Impact of Programming Languages in 100,000 Open Source Projects

Tegawende F. Bissyande, Ferdian Thung, David Lo, Lingxiao Jiang, Laurent Reveillere

Optimization of Object Queries on Collections Using Annotations for the String Valued Attributes

Venkata Krishna Suhas Nerella, Sanjay Madria, Thomas Weigert

Internet Architecture & Applications III

Chair: Kenichi Yoshida

Location: 2-AB

S-MAIDS: A Semantic Model for Automated Tuning, Correlation, and Response Selection in Intrusion Detection Systems

Chris Strasburg, Samik Basu, Johnny S. Wong

ProViNet - An Open Platform for Programmable Virtual Network Management

Wanderson Paim de Jesus, Juliano Araujo Wickboldt, Lisandro Zambenedetti Granville

A Portable Method for Improving Available Bandwidth of PC Cluster

Takafumi Fukunaga

Security, Trust & Privacy

Chair: Hiroki Takakura

Location: 3-L

Clustering of Similar Malware Behavior via Structural Host-sequence Comparison

Horng-Tzer Wang, Ching-Hao Mao, Te-En Wei, Hahn-Ming Lee

Efficient General Policy Decision by Using Mutable Variable Aware Cache

Liangxing Liu, Weili Han, Elisa Bertino, Tao Zhou, Xinyi Zhang

A Multiple Security Domain Model of a Drive-by-Wire System

Gerry Howser, Bruce McMillin

EINSPECT: Evolution-Guided Analysis and Detection of Malicious Web Pages

Birhanu Eshete, Adolfo Villafiorita, Komminist Weldemariam, Mohammad Zulkernine

Semantic Web & Web Services

Chair: Jurgen Rilling

Location: 2-D

Domain Hyponymy Hierarchy Discovery by Iterative Web Searching and Inferable Semantics based

Concept Selecting

Lili Mou, Ge Li, Zhi Jin

Semantic-enabled Clone Detection

Iman Keivanloo, Juergen Rilling

Distributed Coordination of IoT-based Services by using a Graph Coloring Algorithm

Jang-Ho Choi, Jae-Hyun Cho, Han-Gyu Ko, In-Young Ko

Ontology-Based Classification of Non-Functional Requirements in Software Specifications:

A New Corpus and SVM-Based Classifier

Abderahman Rashwan, Olga Ormandjieva, Rene Witte

Requirements Engineering

Chair: Lin Liu

Location: 2-E

The ReqWiki Approach for Collaborative Software Requirements Engineering with Integrated Text Analysis Support

Bahar Sateli, Elia Angius, René Witte

Finding Optimal Solution for Satisfying Non-Functional Requirements via 0-1 Programming

Bin Yin, Zhi Jin, Wei Zhang, Haiyan Zhao, Bo Wei

Evaluation of Ontology-based Checking of Software Requirements Specification

Dang Viet Dzung, Atsushi Ohnishi

Deriving Requirements Specification With Time: A Software Environment Ontology based Approach

Xiaohong Chen, Ronghua Ye, Haiying Sun, Hong Lu

Software Requirements Elicitation - A Controlled Experiment to Measure the Impact of a Native Natural Language

Sajjad Mahmood, Samuel A. Ajila

Doctoral Symposium

Chair: Yuuichi Teranishi

Location: 2-C

Timing Synchronization of ZigBee Sensor Network for Ecology Observation

Atsushi Morikawa, Hiroshi Yamamoto, Katsuyuki Yamazaki

Using Autonomous Air Vehicle in DTN Sensor Network for Environmental Observation

Phuong Tran Thi Ha, Hiroshi Yamamoto, Katsuyuki Yamazaki

Realtime Guidance System in Hospital using PHS and Android Device

Ryoji Aoki, Hiroshi Yamamoto, Kei-ichi Iguchi, Katsuyuki Yamazaki

Browser Synchronization System for Supporting Elderly People and IT Shortfalls

Naoya Hongo, Hiroshi Yamamoto, Katsuyuki Yamazaki

Congestion Detection in Mobile Network towards Complex Event Processing

Tatsuya Takahashi, Hiroshi Yamamoto, Norihiro Fukumoto, Shigehiro Ano, Katsuyuki Yamazaki

Data management and User Interface for a Call For Paper Manager

Laurent Issertial, Hiroshi Tsuji

Enhancing Control Model to Ease off Centralized Control of Flow-based SDNs

Othman M.M., Koji Okamura

Multiple Home Agent Placement Considerations Based on Internet Service Provider Perspective in MobileIPv6

H.R.O.E. Dayaratna, K.Kaneko, F. Teraoka

OpenFlow Network Visualization Software with Flow Control Interface

Yasuhiro Watashiba, Seiichiro Hirabara, Susumu Date, Hirotake Abe, Kohei Ichikawa, Yoshiyuki Kido, Shinji

Shimojo, Haruo Takemura

12:30-13:30 Lunch Break

13:30-15:00 Plenary Panel: Software Assurance -What Should We Do Next?

Main Hall (1st floor)

Coordinator and Chair: Mohammad Zulkernine

Panelists: Ivica Crnkovic (School of Innovation, Design & Engineering, Mälardalen University, Sweden); **T.H. Tse** (Department of Computer Science, The University of Hong Kong, Hong Kong); **Bruce McMillin** (Dept. of Computer Science, Missouri University of Science & Technology, USA); **Tetsutaro Uehara** (Ritsumeikan University, Japan)

15:00-17:00 Tour of Nijo Castle; 18:00-21:00 Conference Banquet

IEEE COMPSAC Main Conference: Thursday, July 25

09:00-10:30 Plenary Panel: Big Data

Main Hall (1st floor)

Coordinator and Chair: Alfredo Cuzzocrea

Panelists: **I-Ying Yen** (University of Texas at Dallas, USA); **Kohichi Takeda** (IBM, Japan); **Yutaka Yasuda** (KDDI, Japan); **Makoto Yasuda** (Hitachi, Japan)

10:30-11:00 Morning Break
11:00-12:30 Parallel Sessions

Software Testing III

Chair: Kenji Takahashi

Location: 3-IJ

A Replicated Study on Random Test Case Generation and Manual Unit Testing: How Many Bugs

Do Professional Developers Find?

Rudolf Ramler, Klaus Wolfmair, Theodorich Kopetzky

Expose: Discovering Potential Binary Code Re-Use

Beng Heng Ng, Atul Prakash

Prioritizing Variable-strength Covering Array

Rubing Huang, Jinfu Chen, Tao Zhang, Rongcun Wang, Yansheng Lu

Formal Methods I

Chair: Dianxiang Xu

Location: 2-AB

Formal Modelling of PLC Systems By BIP Components

Rui Wang, Yong Guan, Liming Luo, Jie Zhang

Interactive Verification of Safety-Critical Software

Daniela da Cruz, Pedro Rangel Henriques, Jorge Sousa Pinto

Modeling and Optimizing Resource Scheduling for Service Composition based on Queuing Petri Nets

Guisheng Fan, Huiqun Yu, Liqiong Chen, Dongmei Liu

Real-time & Embedded Systems

Chair: Tiberiu Seceleanu

Location: 3-L

Cyber/Physical Co-Verification for Developing Reliable Cyber-Physical Systems

Yu Zhang, Fei Xie, Yunwei Dong, Xingshe Zhou, Chunyan Ma

Verification and Implementation of the Protocol Standard in Train Control System

Yu Jiang, Hehua Zhang, Xiaoyu Song, William N. N. Hung, Ming Gu, and Jianguang Sun

File-based Memory Management for Non-Volatile Main Memory

Shuichi Oikawa, Satoshi Miki

Software Architecture & Design I

Chair: Ivica Crnkovic

Location: 2-D

Component-based Modeling and Code Synthesis for Cyclic Programs

Min Zhou, Hai Wan, Chen Su, Liangze Yin, Lianyi Zhang, Fei He, Ming Gu

From Sub-patterns to Patterns: an Approach to the Detection of Structural Design Pattern Instances by Subgraph

Mining and Merging

Dongjin Yu, Yanyan Zhang, Jianlin Ge, Wei Wu

DBPowder: A Flexible Object-Relational Mapping Framework based on a Conceptual Model

Tadashi Murakami, Toshiyuki Amagasa, Hiroyuki Kitagawa

Fast Abstracts I

Chair: Ali Hurson

Location: 2-C

Conversation Characteristics during Pair Work in Computer Literacy Education

Kimiko Uchida, Yoshihiko Oya, Takashi Okuda

Evaluation of Software Architectures Reliability based on Hypergraph Grammar

Xu Li, Linpeng Huang

Supporting Keyword Selection in Generating Earth Science Metadata

Toshiyuki Shimizu, Tomo Sueki, Masatoshi Yoshikawa

Describing Component Behavior Using Improved Chemical Abstract Machine

Jinfu Chen, Qing Li, Huanhuan Wang, Rubing Huang

Development of Model Checker of Dynamic Linear Hybrid Automata

Ryo Yanase, Tatsunori Sakai, Makoto Sakai, Satoshi Yamane

12:30-13:30 Lunch Break

13:30-14:00 COMPSAC Planning Meeting - All Welcome - Main Hall (1st floor)

14:00-15:30 Parallel Sessions

Software Testing IV

Chair: Rene Witte

Location: 3-IJ

An If-While-If Model-based Performance Evaluation of Ranking Metrics for Spectrabased Fault Localization

Chunyan Ma, Tian Tan, Yibo Chen, Yunwei Dong

Testing versus Static Analysis of Maximum Stack Size

Mahdi Eslamimehr, Jens Palsberg

On the Gain of Measuring Test Case Prioritization

Junpeng Lv, Beibei Yin, Kai-Yuan Cai

Isolating and Understanding Program Errors Using Probabilistic Dispute Model

Rong Chen, Yaqing Liu, Zhichun Jia, Jian Gao

Formal Methods II

Chair: Cristina Seceleanu

Location: 2-AB

Towards Formal Verification of a Commercial Wireless Router Firmware

Zheng Lu, Christopher Steinmuller, Supratik Mukhopadhyay

A Divide & Conquer Approach to Model Checking of Liveness Properties

Kazuhiro Ogata, Min Zhang

Formalising Middleware Systems: A Design Pattern-based Approach

Nelson Rosa

HCI & Usability

Chair: Eun-Sun Cho

Location: 3-L

Examining Privacy Concern in Social-driven Location Sharing: An Empirical Study on Chinese Popular SNSs

Jingtao Li, Chao Zhong, Zhen Cao, Wengang Pei, Xi Zhou

Implementation Considerations in Enabling Visually Impaired Musicians to Read Sheet Music Using a Tablet

Laura Housley, Thomas Lynch, Rajiv Ramnath, Jayashree Ramanathan, Peter F Rogers

Delineato: a Diagramming User Interface Designed using a "What You Get Is What You Need" Approach

Pedro Campos, Fernando Miguel Campos, Joao Pestana

Toward Collective Intelligence for Fighting Obesity

Ivor D. Addo, Sheikh I. Ahamed, William C. Chu

Software Architecture & Design II

Chair: Susumu Takeuchi

Location: 2-D

A Software Architecture for High-Level Development of Component-Based Distributed Virtual Reality Systems

Vasily Y. Kharitonov

Supporting Integration of COTS Components from a Perspective of Adaptive Software Architecture

Shan Tang, Qiang Liu

Industry Papers I

Chair: Norihiro Fukumoto

Location: 2-E

The New Verification Method of Authenticity for Pottery and Porcelain Products

Masaki Fujikawa, Fumihiko Oda, Kengo Moriyasu, Shingo Fuchi, Yoshikazu Takeda

Promising XMPP Based Applications for Military and Defense Systems

Oral Gurel, Mehmet Ulas Cakir

A Market-in-Market Collaborative Model towards Application Marketplaces

Shih-Fang Chang

Application of the O-1 Programming Model for Cost-Effective Regression Test

Hirohisa Aman, Manami Sasaki, Kei Kureishi, Hideto Ogasawara

Fast Abstracts II

Chair: Bruce McMillin

Location: 2-C

Test Strategies Using Operational Profiles based on Decision Tables

Tomohiko Takagi, Zengo Furukawa, Yoshinobu Machida

SQAF-DS: A Software Quality Assessment Framework for Dependable Systems

Junbeom Yoo, Sanghyun Yoon

Support System for Software Development Exercise that Utilizes Activity Data Collected in Real Time from the Development Environment

Takafumi Tanaka, Kazuki Mori, Hiroaki Hashiura, Atsuo Hazeyama, Seiichi Komiya

On Simplifying Mobile Mashup Application Development

Guan-Zhong Wu, Chen-Che Huang, Yui-Chey Teng, Jiun-Long Huang, Wei-Chih Ting, Yi-Yu Su,

Pin-Chuan Liu

A Dynamic Countermeasure Method to Android Malware by User Approval

Makoto Kato, Saeko Matsuura

15:30-16:00 Afternoon Break

16:00-17:30 Parallel Sessions

M2M Networking & Internet of Things

Chair: Kazutoshi Fujikawa

Location: 2-AB

Through the Internet of Things - a Management by Delegation Smart Object Aware System (MbDSAS)

Marcelo Antonio Marotta, Felipe Jose Carbone, Jose Jair Cardoso de Santanna,

Liane Margarida Rothenbach Tarouco

A Hexagonal Coverage LED-ID Indoor Positioning Based on TDOA with Extended Kalman Filter

Attaphongse Taparugssanagorn, Siwaruk Siwamogsatham, Carlos Pomalaza-Raez

A IoT Application of Safe Building in IPv6 Network Environment

Tseng-Yi Chen, Hsin-Wen Wei, Nien-I Hsu, Wei-Kuan Shih

A Scalable and High-efficiency Discovery Service In IoT Using a New Storage Schema

Minbo Li, Zhu Zhu, Guangyu Chen

Applications

Chair: Sheikh Iqbal Ahmed

Location: 3-L

Stability of a Cyber-Physical Smart Grid System using Cooperating Invariants

Ashish Choudhari, Harini Ramaprasad, Tamal Paul, Jonathan W. Kimball, Maciej Zawodniok, Bruce McMillin,

Sriram Chellappan

QTime: A Queuing-Time Notification System Based on Participatory Sensing Data

Yasha Wang, Jiangtao Wang, Xiaoyu Zhang

A Perspective on Computer-Based Training, CBT

Takafumi Yoshida

Building A Body of Knowledge on Model Checking for Software Development

Kenji Taguchi, Hideaki Nishihara, Toshiaki Aoki, Fumihiko Kumeno, Koji Hayamizu, Koichi Sinozaki

Software Architecture & Design III

Chair: Alfredo Cuzzocrea

Location: 2-D

Industrial Experiences of Organizing Hackathon to Assess Device-Centric Cloud Ecosystem

Mikko Raatikainen, Marko Komssi, Vittorio Dal Bianco, Klas Kindström, Janne Järvinen

Breeze/ADL: Graph Grammar Support for an XML-Based Software Architecture Description Language

Chen Li, Linpeng Huang, Luxi Chen, Chengyuan Yu

Software Architecture Decomposition Using Clustering Techniques

Abdulaziz Alkhalid, Chung-Horng Lung, Duo Liu, Samuel Ajila

Analysis of the Key Factors for Software Quality in Crowdsourcing Development:

An Empirical Study on TopCoder.com

Ke Li, Junchao Xiao, Yongji Wang, Qing Wang

Industry Papers II

Chair: Yuuichi Teranishi

Location: 2-E

A Scalable DTN Routing Protocol for an Infra-less Communication System

Kazumine Ogura, Hirofumi Ueda, Norihito Fujita

A Retrospection on Building a Custom Tool for Automated System Testing

Rudolf Ramler, Werner Putschogl

Fault-Tolerant Wireless LAN Roaming System Using Client Certificates

Shunichi Kinoshita, Toshiki Watanabe, Yasuhiro Yamasaki, Hideaki Goto, Hideaki Sone

CASAT-HOOMT: Computer Aided Software Analysis Tool Based on High Order Object-oriented Modeling Technique

Fan Zhang, Jinwu Wang, Xiaoqing (Frank) Liu, Buqing Cao, Mingdong Tang

Fast Abstracts III

Chair: Sahra Sedigh

Location: 2-C

Towards Optimal Disaster Recovery in Backbone Networks

Kien Nguyen, Quang Tran Minh, Shigeki Yamada

Empirical Effectiveness Evaluation of Spectra-based Fault Localization on Automated Program Repair

Yuhua Qi, Xiaoguang Mao, Yan Lei, Ziyang Dai, Yudong Qi, Chengsong Wang

Potential Semantics in Multi-Modal Relevance Feedback Information for Image Retrieval

Jiyi Li, Qiang Ma, Yasuhito Asano, Masatoshi Yoshikawa

UML based Security Function Policy Verification Method for Requirements Specification

Atsushi Noro, Saeko Matsuura

Determining Appropriate IT Systems Design Based on System Models

Sayaka Izukura, Kazuo Yanoo, Hiroshi Sakaki, Masato Kawatsu

IEEE COMPSAC International Workshops: Friday, July 26

09:00-10:30 Workshop Sessions

SSS 2013: The 6th IEEE International Workshop on Service Science & Systems

Session 1 Chair: William Wei Song

Location: 3-IJ

Interactive Augmented Reality Game for Enhancing Library Instruction in Elementary Schools

Yi-Shiang Wang, Chih-Ming Chen, Chin-Ming Hong, Yen-Nung Tsai

A Customized Visiting Route Service under RFID Environment

Chieh-Yuan Tsai, Bo-Han Lai

Enhancing Diversity-Accuracy Technique on User-Based Top-N Recommendation Algorithms

Wichian Premchaiswadi, Pitaya Poompuang, Nipat Jongswat, Nucharee Premchaiswadi

QUORS 2013: The 7th IEEE Workshop on Quality Oriented Reuse of Software

Session 1 Chair: Hongji Yang

Location: 2-AB

Auction-Based Resources Provisioning with SLA Consideration on Cloud Systems

Chi-Chung Chang, Kuan-Chou Lai, Chao-Tung Yang

Implementation of Video and Medical Image Services in Cloud

Chao-Tung Yang, Kuan-Lung Huang, William C. Chu, Kuan-Chou Lai, Chih-Hung Chang, Chih-Wei Lu

Cloud Migration for SMEs in a Service Oriented Approach

Nicolas Nussbaumer and Xiaodong Liu

An Improvement to Data Service in Cloud Computing with Content Sensitive Transaction Analysis and Adaptation

Chih-Wei Lu, Chih-Ming Hsieh, Chih-Hung Chang and Chao-Tung Yang

CDS 2013: The 1st IEEE International Workshop on Consumer Devices and Systems

Session 1 Chair: Yoshia Saito

Location: 3-L

Invited Speech: Overlay Network Protocol and Device Metadata for Controlling and Managing Home Networks and Devices

Norihiro Ishikawa

Power Allocation Algorithms of PoE for on-Demand Power Supply

Masaya Yokohata, Tomotaka Maeda, Yasuo Okabe

ADMNET 2013: The 1st IEEE International Workshop on Architecture, Design, Deployment and Management of Networks and Applications

Session 1.1 Chair: Masato Tsuru

Location: 2-D

An ADS-B based Secure Geographical Routing Protocol for Aeronautical Ad Hoc Networks

Mohamed Slim Ben Mahmoud and Nicolas Larrieu

On the Use of Congestion Information for Rerouting in the Disaster Evacuation Guidance Using Opportunistic Communication

Akihiro Fujihara and Hiroyoshi Miwa

Consideration of Network Selection Criteria on IP Mobility Communications Quality by Real-time Status and/or Statistical Information

Yasuhiro Ohishi, Kaori Maeda, Takemi Sahara, Naoki Hayashi, Reiji Aibara

An Optimal Route Selection Mechanism for Outbound Connection on IPv6 Site Multihoming Environment

Takuya Yamaguchi, Yong Jin, Nariyoshi Yamai, Kiyohiko Okayama, Koki Okamoto, Motonori Nakamura

ADMNET 2013: The 1st IEEE International Workshop on Architecture, Design, Deployment and Management of Networks and Applications

Session 1.2 Chair: Kouji Nishimura

Location: 2-E

E-mail Priority Delivery System with Dynamic Whitelist in the Layer 3 Switch

Gada, Nariyoshi Yamai, Kiyohiko Okayama, Keita Kawano, Motonori Nakamura

Domain Registration Date Retrieval System of URLs in E-mail Messages for Improving Spam Discrimination

Masayuki Matsuoka, Nariyoshi Yamai, Kiyohiko Okayama, Keita Kawano, Motonori Nakamura, Masato Minda

Identifying User Authentication Methods on Connections for SSH Dictionary Attack Detection

Akihiro Satoh, Yutaka Nakamura, Takeshi Ikenaga

A Scalable Server Load Balancing Method Using IP Address Stealing

Kunihiko Toumura and Naokazu Nemoto

IEESD & TIP 2013: The 5th IEEE International Workshop on Industrial Experience in Embedded Systems Design and The 2nd IEEE International Workshop on Tools in Process

Session 1 Chairs: Detlef Streitferdt, Tiberiu Seceleanu

Location: 2-C

Supporting the Software Development Process using Social Media: Experiences with Student Projects

Reyes Juarez-Ramirez, Rafael Pimienta-Romo, Violeta Ocegueda-Miramontes

Gaining Industrial Confidence for the Introduction of Domain-Specific Languages

Arjan J. Mooij, Jozef Hooman, Rob Albers

Industrial Requirements on Evolution of an Embedded System Architecture

Daniel Hallmans, Thomas Nolte, Stig Larsson

HSNCE 2013: The 4th IEEE International Workshop on High-Speed Network and Computing Environment

Session 1 Chair: Kazunori Nozaki

Location: 3-K

Modelling and Scientific Computing (Invited)

Ray Walshe

Petaflow - An Example of Communication and Computational Technologies with Social Impact

A. Ancel, K. Baba, J. Cisonni, Y. Fujiso, P. Goncalves, M. Imbert, K. Koyamada, K. Nozaki, H. Ohsaki, A.-C. Orgerie, X. Pelorson, B. Raffin, N. Sakamoto, E. Sakane, S. Wada, S. Shimojo, A. Van Hirtum, P. Neyron, I. Assenmacher

Parallel Caching for Remote Visualization

Alexandre Ancel, Bruno Raffin, Ingo Assenmacher, Annemie Van Hirtum, Yo Fujiso, Kazunori Nozaki

IWFIT 2013: The 1st IEEE International Workshop on Future Internet Technologies**Session 1 Chair: Fumio Teraoka****Location: 2-F**

A Practical Study on Distributed Resolution Service for ICN

Yuncheng Zhu and Akihiro Nakao

Service-oriented Router-based CDN System - An SoR-based CDN Infrastructure Implementation on a Real Network Environment

Janaka Wijekoon, Shinichi Ishida, Erwin Harahap, and Hiroaki Nishi

Packet Classification Using Multi-Iteration RFC

Chun-Hui Tsai, Hung-Mao Chu, and Pi-Chung Wang

DRANs: Resilient Disaster Recovery Access Networks

Quang Tran Minh, Kien Nguyen, and Shigeki Yamada

10:30-11:00 Morning Break
11:00-12:30 Workshop Sessions

SSS 2013: The 6th IEEE International Workshop on Service Science & Systems**Session 2 Chair: Ji-Jiang Yang****Location: 3-IJ**

Affective Robot Enabled Capacity and Quality Improvement of Nursing Home Aged Care Services in Australia

Rajiv Khosla, Mei-Tai Chu, Khanh Nguyen

Analyzing Distribution of Implicit Semantic Information in Web Services

Xiaocao Hu, Zhiyong Feng, Shizhan Chen

An Activity Ontology for Context-Aware Health Promotion Application

Anindhita Dewabharata, Don Ming-Hui Wen, Shuo-Yan Chou

QUORS 2013: The 7th IEEE Workshop on Quality Oriented Reuse of Software**Session 2 Chair: Xiaodong Liu****Location: 2-AB**

A Software-reuse Method from Model 1 to SSH2

Xiaoyu Wang, Hongwei Ruan, Yan Wang, Hua Li, Hongji Yang

A Three-Dimensional Approach to Supporting Software Evolution

Shang Zheng and Hongji Yang

Analyzing and Predicting Software Quality Trends Using Financial Patterns

Aseel Hmood, Juergen Rilling

A Hybrid Cloud Storage Architecture for Service Operational High Availability

Yen-Hung Kuo, Yu-Lin Jeng, Juei-Nan Chen

CDS 2013: The 1st IEEE International Workshop on Consumer Devices and Systems**Session 2 Chair: Norihiro Ishikawa****Location: 3-L**

An Implementation of a Still Picture Internet Broadcasting System with Audience-oriented QoS Control for Smartphones and PCs Audience

Yuki Nakano, Natsuki Hirota, Yoshia Saito, Yuko Murayama

Towards a Multi-Screen Application Model for the Web

Louay Bassbouss, Max Tritschler, Stephan Steglich, Kiyoshi Tanaka, Yasuhiko Miyazaki

Elevator Acceleration Sensing: Design and Estimation Recognition Algorithm Using Crowdsourcing

Tianhui Yang, Katsuhiko Kaji, Nobuo Kawaguchi

ADMNET 2013: The 1st IEEE International Workshop on Architecture, Design, Deployment and Management of Networks and Applications

Session 2.1 Chair: Hiroyoshi Miwa

Location: 2-D

Analysis of Temporal Latency Variation on Network Coordinate System for Host Selection in Large-Scale Distributed Network

Hiroshi Yamamoto and Katsuyuki Yamazaki

Parallel Evolutionary P2P Networking Technique Evaluating Network Topologies Sequentially

Kei Ohnishi and Mario Koeppen

Knaster Procedure for Proportional Fair Wireless Channel Allocation

Mario Koeppen, Kei Ohnishi and Masato Tsuru

A Distributed Protective Approach for Multiechelon Supply Systems

Xiaoyi Zhang, Zheng Zheng, Yueni Zhu, Kaiyuan Cai

ADMNET 2013: The 1st IEEE International Workshop on Architecture, Design, Deployment and Management of Networks and Applications

Session 2.2 Chair: Takashi Yamanoue

Location: 2-E

Target Application Grouping Function Considering Software Updates on Application Execution Control System

Daisuke Okamoto, Masanori Fujiwara, Keita Kawano, Nariyoshi Yamai

Effects of Moral Judgement, Emotional Control and Problem Solving on Information Ethics of Gifted Students in Computer Science

HanSung Kim, Sooleen Nam, WonGyu Lee, KiChun Nam, DaiYoung Kwon

Development and Application of the Information Ethical Sensitivity Measurement Tool for College Students in Korea

SoAh Gwak, HanSung Kim, WonGyu Lee

IEESD & TIP 2013: The 5th IEEE International Workshop on Industrial Experience in Embedded Systems Design and The 2nd IEEE International Workshop on Tools in Process

Session 2 Chairs: Detlef Steitferdt, Tiberiu Seceleanu

Location: 2-C

Partitioning Decision Process for Embedded Hardware and Software Deployment

Gaetana Sapienza, Tiberiu Seceleanu, Ivica Crnkovic

Refactoring and Automated Testing of Distributed ERP Systems

Khalid Ebanhesaten, Franz-Felix Fuessler, Detlef Streitferdt

Analyzing Distributed Java Applications by Automatic Centralization

Lei Ma, Cyrille Artho, Hiroyuki Sato

HSNCE 2013: The 4th IEEE International Workshop on High-Speed Network and Computing Environment

Session 2 Chair: Hiroyuki Ohsaki

Location: 3-K

A Scalable Approach to Avoid Incast Problem from Application Layer

Yukai Yang, Hirotake Abe, Ken-ichi Baba, Shinji Shimojo

Multi-constrained Routing Algorithm: A Networking Evaluation

Van Dan Nguyen, Thomas Begin, Isabelle Guerin Lassous

An Architectural Design of a Job Management System Leveraging Software Defined Network

Yasuhiro Watashiba, Susumu Date, Hirotake Abe, Kohei Ichikawa, Hiroaki Yamanaka, Eiji Kawai, Haruo Takemura

A Note on the Accuracy of Several Existing Approximations for M/Ph/m Queues

Thomas Begin, Alexandre Brandwajn

IWFIT 2013: The 1st IEEE International Workshop on Future Internet Technologies

Session 2 Chair: Fumio Teraoka

Location: 2-F

Flow Control for Higher Resiliency in Wide Area Distributed Cloud Computing

Hitoshi Yabusaki, Masakuni Agetsuma, Hiroshi Nakagoe, Koichi Murayama, Hiroyuki Osaki,

Masami Hiramatsu, and Takatoshi Kato
Hybrid Control Model for Flow-based Networks
Othman Othman M. M. and Koji Okamura
Toward Green Information Centric Networking (Invited Talk)
Toru Hasegawa (Osaka University)

12:30-14:00 Lunch Break
14:00-15:30 Workshop Sessions

SSS 2013: The 6th IEEE International Workshop on Service Science & Systems

Session 3 Chair: Shuo-Yan Chou

Location: 3-IJ

Forecasting Reading Anxiety to Promote Reading Performance based on Annotation Behavior

Ting-Yun Lu, Mi Lin, Chih-Ming Chen, Jhih-Hao Wu

Definition and Detection of Control-flow Anti-Patterns in Process Models

Zhaogang Zhan, Peng Gong, Li Zhang, Jimin Ling, Wenqing Huang

A Structural Analysis of SLAs and Dependencies Using Conceptual Modelling Approach

William Wei Song, Yang Li, Aijaz Soomro, Qin Liu

QUORS 2013: The 7th IEEE Workshop on Quality Oriented Reuse of Software

Session 3 Chair: Xiaodong Liu

Location: 2-AB

Delivering Dependable Reuse Components by Expressing and Enforcing Design Decisions

Andrea Calvagna, Emiliano Tramontana

Automatically Characterizing Components with Concerns and Reducing Tangling

Emiliano Tramontana

Utilization of method Graphs to Measure Cohesion in Object Oriented Software

Atakan Aral, Tolga Ovatman

An UML Behavior Diagram based Automatic Testing Approach

Chih-Hung Chang, Chih-Wei Lu, William C. Chu, Xin-Hao Huang, Dianxiang Xu, Tse-Chuan Hsu, Yu-Bin Lai

CDS 2013: The 1st IEEE International Workshop on Consumer Devices and Systems

Session 3 Chair: Yoshia Saito

Location: 3-L

Multiagent System for Priority-Based Load Shedding in Microgrid

Takumi Kato, Hideyuki Takahashi, Kazuto Sasai, Yujin Lim, Hak-Man Kim, Gen Kitagata, Tetsuo Kinoshita

Projection-based User Interface for Smart Home Environments

Chin-Yang Lin and Yi-Bin Lin

A Home Gateway Box with Meter, Probe and L2 QoS Policy Edge

Marat Zhanikeev

ADMNET 2013: The 1st IEEE International Workshop on Architecture, Design, Deployment and Management of Networks and Applications

Session 3 Chair: Mario Koeppen

Location: 2-D

Invited Talk: Soft Computing Approaches for Context-aware Services in Digital Convergence

Sung-Bae Cho

Method for Keeping Small Distance from Users to Servers During Failures by Link Protection

Nao Maeda and Hiroyoshi Miwa

Managing Networks Independently of the Physical Topology by Service Defined Network

Yasuhiro Teramoto, Rei Atarashi, Yoshifumi Atarashi, Yasuo Okabe

IEESD & TIP 2013: The 5th IEEE International Workshop on Industrial Experience in Embedded Systems Design and The 2nd IEEE International Workshop on Tools in Process

Session 3 Chairs: Detlef Streitferdt, Tiberiu Seceleanu

Location: 2-C

Certifiable Development Process for Information Processing in the Measurement Domain on the Base of 3W-Models

Irina Gushchina, Jirka Ciemala, Wolfgang Fengler, Detlef Streitferdt

Efficient Construction of Presentation Integration for Web-Based and Desktop Development Tools

Matthias Biehl, Josune De Sosa, Martin Törngren, Oscar Diaz

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Thank you to all COMPSAC 2013 Participants.

Please join us next year in Vasteras, Sweden!

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The theme of the 38th COMPSAC conference is ***The Integration of Heterogeneous and Mobile Services in Smart Environments***. The emergence and increasing importance of digital society, cyber-physical systems, and semantic, pervasive, and mobile computing are expanding the role of software and applications in smart environments. Associated with these paradigms are instruments, sensors, and a multitude of applications that generate and require analysis of massive volumes of diverse, heterogeneous, complex, and distributed data. The potential of the emerging electric smart grid motivates developing systems designed with smart grid capabilities foremost in mind. The design of such intelligent systems is challenged by the complexity of the domains in which they are deployed. Knowledge, tools, practices, and infrastructures related to software and data have begun to evolve to cover this expanding sphere, while addressing grand challenges brought about by the complexities and uncertainties of the physical world and the heterogeneity of interconnected services and devices. Beyond the core emphasis areas of the conference, COMPSAC 2014 will provide additional tracks, special sessions, panels, and keynotes to facilitate discourse on and deepen the understanding of these challenges by furthering the fundamental contributions needed for advances in software and breakthroughs in big data analytics.

Authors are invited to submit original, unpublished research work, as well as industrial practice reports. Simultaneous submission to other publication venues is not permitted. Detailed instructions for electronic paper submission, panel and workshop proposals, fast abstracts, industry papers, poster papers, doctoral symposium, and the review process are available at www.compsac.org.

November 15, 2013: Workshop and Tutorial Proposals due
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