The 12th IEEE/IPSJ International Symposium on Applications and the Internet
http://www.saintconference.org
Izmir, Turkey
16-20 July

Co-sponsors: IEEE Computer Society, the Information Processing Society of Japan
Technical sponsor: IEEE-CS IT Professional
Message from the General Chairs of SAINT 2012
On behalf of the IEEE Computer Society and Information Processing Society of Japan (IPSJ), we would like to welcome you to the 12th International Symposium on Applications and the Internet (SAINT 2012). SAINT was first held in 2001 and has been held every year in USA and Japan alternatively till 2004, and Europe from 2005. We are very pleased to hold the conference this year in Izmir, Turkey.

SAINT was designed as an international forum addressing important research challenges in both networking and applications. The important change in the symposium organization was introduced from SAINT 2008. From that year, SAINT was co-located with COMPSAC (IEEE Annual Signature Conference on Computer Software and Applications), and had joint keynotes and joint panels so that both communities can exchange their ideas and new research results. As the frontier of the Internet no longer stops at the shores of large corporations, small businesses, and online stores, it has expanded to include the presence and contributions of virtually all mankind. This year, SAINT 2012 aims to bring a focus to theme “The Inclusive Internet.”

We would like to thank Katsuyuki Yamazaki, Chair of the Standing Committee, and Sumi Helal, Chair of the Steering Committee for their contribution to the exciting technical program in SAINT 2012.

We would like to thank laurel Tweed for her tremendous efforts in organizing the conference. Thanks also to the SAINT 2012 Local Organization Committee in Izmir, Turkey for their hard work to make the conference a success. We also thank all the keynote speakers, panelists, workshop organizers and authors for their contribution to the exciting technical program in SAINT 2012.

We hope you enjoy and benefit from the entire program and workshops, as well as Izmir, Turkey.

The 2012 IEEE/IPSJ Symposium on Applications & the Internet (SAINT)
Program At-a-Glance

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<td>Joint COMPAS &amp; SAINT Planning Meeting - All Welcome -</td>
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<td>SAINT Panel (SAINT Advancing to New COMPAS)</td>
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<td>July 20 Fri</td>
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<td>The 3rd Workshop on High Speed Network and Computing Environments (HSNCE 2012)</td>
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<td>The 3rd Workshop on Enablers for Ubiquitous Computing and Smart Services (EUCASS 2012)</td>
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The 6th Workshop on Middleware Architecture in the Internet (MidArch 2012) will be held as COMPASAC Workshop.
Monday July 16
ICT Vision for Izmir Search Conference
COMPSAC/SAINT Welcome Reception
Sponsored by Izmir Municipality

Buses will depart from Swissotel at 16:00 for a short tour of the area, landing at the Izmir fair area, location for the ICT Vision for Izmir Search Conference. This conference seeks to explore ways for the city of Izmir to encourage the growth of technology-based industry and research. All COMPSAC/SAINT attendees are welcome to attend! Reception and social hour will follow. Attendees who can only attend the reception should gather in the Swissotel lobby at 19:30 for a guided walk to the reception location.

17:00-20:00: ICT Vision for Izmir Search Conference
20:00-21:30: Welcome Cocktail Reception
21:30: Walk back to Swissotel

Tuesday July 17
Conference Banquet

The COMPSAC/SAINT banquet will be an outdoor gala at the archaeological ruins of Old Smyrna called Agora.

18:30: Walking from Swissotel to Agora
20:00: Tour
20:00: Dinner
21:30: Walking back to Swissotel

Wednesday July 18
Bus Trip to Ephesus

Local organizers have arranged for a bus trip for all conference attendees to visit Ephesus. Once an ancient Greek city, today Ephesus is a major archeological site located approximately 1 hour south of Izmir. Purchase dinner following the tour at Kusadasi, a nearby town on the Aegean coast.

Buses will depart from Swissotel at 16:00
17:00: Arrival at Ephesus
17:00-19:30: Tour at Ephesus and House of Virgin Mary
19:30: Board bus for Kusadasi
20:00-21:30: Time for exploring, dinner
21:30: Board bus for return trip to Swissotel, Izmir

IPSJ Journal of Information Processing
Call for papers
Special issue of Applications and the Internet in Conjunction with Main Topics of SAINT 2012

ATTENTION SAINT AUTHORS:
Journal of Information Processing (JIP) is pleased to announce the call for papers for a special issue of “Applications and the Internet in Conjunction with Main Topics of SAINT 2012.”

The IEEE/IPSJ International Symposium on Applications and the Internet (SAINT) is intended to provide a forum for researchers in the Internet and its applications to discuss the current status, technical challenges, standards, fundamental issues, future services, and applications. This symposium covers a broad range of networking and computing technologies and advanced applications and services. This year, SAINT 2012 will be held in Izmir, Turkey on July 16-20, 2012. By taking this opportunity, the Special Section on Applications and the Internet in Conjunction with Main Topics of SAINT 2012 has been planned to publish high-quality articles such as, but not limited to those based on the papers presented in the SAINT 2012 as well as past SAINT symposiums. Your contribution to this special section would be greatly appreciated.

Journal of Information Processing (JIP) is currently encouraging more submissions from outside of Japan. Any papers electronically submitted to JIP before July 31, 2013 are free of publication charge when accepted.

Submission Guidelines

(1) All papers must be submitted electronically. Please access the following URL and proceed under the submission instructions: https://www.ipsj.or.jp/prms/author_pre_submit_en.do *Note that this URL is for English papers only.

(2) All papers will be reviewed. The review process will be carried out in the same manner as regular issues. However, you have shorter time than usual (two months) for preparation of your responses to inquiries.

(3) Submission deadline is October 15, 2012.

(4) The special issue will be published on the J-Stage website in July, 2013. Preprints will be published on the IPSJ Journal in June, 2013.

(5) The Editorial Committee of This Special Issue
Editor in-Chief: Hiroyuki OHSAKI (Osaka Univ., Japan)
Editorial Board: Nariyoshi YAMAI (Okayama Univ., Japan)

Editorial Committee: Dan LIN (Missouri Univ. of Science and Technology, USA), Hen-I YANG (Iowa State Univ., USA), Susumu ISHIHARA (Shizuoka Univ., Japan), Takashi IMAIZUMI (Chiba Univ., Japan), Yasuo OKABE (Kyoto Univ., Japan), Eiji KAWAI (NICT, Japan), Atsushi TAGAMI (KDDI R&D Labs., Japan), Yuuichi TERANISHI (NICT, Japan), Motonori NAKAMURA (NII, Japan), Yutaka YAMANOUE (Kagoshima Univ., Japan)
Joint COMPSAC/SAINT Opening and Keynotes

Joint Opening Session:
Conference Welcome:
Carl Chang, Chair, COMPSAC Standing Committee; Katsuyuki Yamazaki, Chair, SAINT Standing Committee
Welcome Remarks:
Mustafa Gülen, President, Izmir Institute of Technology, Turkey
Binali Yildirim, Minister of Transport, Maritime Affairs, and Communications, Turkey
Opening Remarks:
John Walz, President, IEEE; Kazuo Furutaka, President, IPSJ
Conference Overview:
COMPSAC General Chairs; SAINT General Chairs
Program Overview:
COMPSAC Program Chairs; SAINT Program Chairs
Best Paper Awards:
COMPSAC Program Chairs; SAINT Awards Chairs

Joint Keynote #1: Dr. George O. Strawn, Director, National Coordination Office/NITRD, OSTP, USA
Trust and Confidence
As IT becomes increasingly pervasive in human affairs, it is important that IT systems be worthy of trust and confidence. The U.S. Federal government includes an interagency research collaboration program called Networking and IT Research and Development (NITRD). NITRD has a major focus on interagency coordination for research in cybersecurity. In this talk, I will first make some personal observations on cybersecurity, then describe the cybersecurity research agenda recently proposed by the NITRD agencies, and conclude by relating a controversial proposal.

Joint Keynote #2: Dr. Ross Anderson, Professor, Security Engineering, Cambridge University
Cyber Security: Threats Real and Imagined
Abstract: In the 1980s and 1990s, the Internet was a benign place, so we invented scary monsters such as the Dolev-Yao opponent or the global passive adversary and figured out how to protect systems against them. From the late 1990s we started to see real adversaries, from spammers to carders to online state actors. By 2000 systems had become so large and complex that we needed to invent security economics to reason about them. But economic models alone are not enough; we also need to know what the bad guys are doing, how much they're making, and what it costs the rest of us. Much of what's written on this is exaggerated, as vendors, policemen and intelligence agencies all have an incentive to talk up the threats. I will discuss some analysis we did for ENISA and more recently at the suggestion of the rest of us. Much of what's written on this is exaggerated, as vendors, policemen and intelligence agencies all have an incentive to talk up the threats. I will discuss some analysis we did for ENISA and more recently at the suggestion

Topics covered in the position statements and presentations:
The expert panelists will present their views and experiences covering questions including:
• How did the activists organize and publicize the unprecedented protests that gave rise to the so-called Arab Spring?
• How did they achieve such massive outreach, which moved masses to the streets?
• How did such services help protesters stay organized while events unfolded and how were reports fed back to the international media?
• How did Facebook and Twitter interoperate to ease the flow of information amongst their users in such critical time?

Discussions and Q&A:
The second part of the session will be a lively discussion with questions from the audience as well as the following questions from the panelists.
• How vulnerable social network services are to censorship?
• What measures of fault tolerance do they exhibit?
• Who should be involved in standardizing interoperability amongst social networks?
• How could they benefit from further widespread of mobile usage and ad-hoc networks to affect online and offline service provision?

Closing Remarks:
Panelists will summarize their views and visions on what has worked and what is needed to maximize outreach, required interoperability standards to support cross-social media communication, and persistence in facing service providers’ outages at critical times.

Panelists:
A strong group of panelists from industry and academia as well as actual leading users during the Egyptian Revolution are being assembled to serve on this panel.

Joint COMPSAC/SAINT Panel #2
- Challenges towards the Global Adoption of Cloud Computing -
Chair: Vladimir Getov, University of Westminster, UK
Panelists: William C. Chu, Tunghai University, Taiwan
William R. Claycomb, Carnegie Mellon University
George O. Strawn, National Coordination Office, OSTP, USA
Stephen S. Yau, Arizona State University

This panel consists of four well-known experts in the field, who will identify several major challenges for the global adoption of cloud computing and future directions for research and development in order to meet these challenges. At the beginning of the panel session, each of the panelists will present their position statement covering certain important aspects of this subject. Then, we should have time for discussions covering both the presented statements and new ideas in the subject area.

The New Cloud Computing Paradigm
Cloud computing represents a fundamental shift in the delivery of information technology services that has been changing the computing landscape. Indeed, over the past several years, cloud computing has rapidly emerged as a widely accepted computing paradigm. The research and development community has quickly reached consensus on the core concepts such as on-demand computing resources, elastic scaling, elimination of up-front capital and operational expenses, as well as the new pay-per-use business model for computing and other information technology services provided by the cloud. With the adoption of virtualization, service-oriented architectures, and utility computing, there is also consensus on the enabling technologies necessary to support this new consumption and delivery services model. Additionally, the customers’ demand to meet quality-of-service requirements and service-level agreements, including security, is well understood.

Joint COMPSAC/SAINT Panel #1
- Social Networks Empowering Citizens -
Chair:
Amr Elkadi, American University in Cairo
Salwa Abd-El-Hafiz, Cairo University
Introduction:
Facebook (launched in Feb. 2004) and Twitter (launched in July 2006) are two popular social networks reported to have more than 900 million and 140 million active users, respectively. Both services have affected the social life and activity of people in various ways, yet no one could have imagined that they would affect the future of nations!

Both Facebook and Twitter were very instrumental in the Arab Spring (especially Tunisia and Egypt revolutions). With their availability on most mobile devices (laptops, smart phones and even some regular mobile phones), these services helped actively keep political activists in touch building up their plans, outreach to the masses and feeding media reports during the revolutions, as long as there was access to the Internet.

The goal of this panel is to provide more insight into the role that social media played in the Arab Spring by actual users/activists, their shortcomings in facing Internet service outages and interoperability capabilities.

• How did Facebook and Twitter interoperate to ease the flow of information amongst their users in such critical time?
The Global Adoption Challenges

However, widespread adoption of cloud technologies is still hindered by several major research challenges that the professional community needs to address. These include trust and security, risk management, legal issues, interoperability, autonomy and standards for cloud computing which have been selected as sub-topics for the plenary panel. One possible way to address the research challenges above is to investigate which application domains require solutions and to apply application-specific methodologies. In this case success could be achieved by targeting large scale application scenarios – including interactive and dynamic ones – which are becoming more and more important with their complex but specific requirements. Another possible approach for tackling these issues is by investigating high level formalisms with which the user can specify non-functional requirements of cloud applications, followed by designing autonomic tools to deal efficiently with trust and security, interoperability, and risk management. Thus, the future developments could rely upon two basic pillars:

1) an innovative co-design approach for autonomic computing techniques and tools which will support the user in the development of specific large/extreme scale applications on the cloud;
2) the design of novel software engineering techniques to support the correct, smart and elastic management of nonfunctional properties in challenging cloud applications.

Further research work could also focus on the integration with and the development of emerging cloud interoperability standards. This involves the adoption of meta-data-based decision-taking support via high flexibility and dynamic properties integrated within the future hybrid clouds.

SAINT Panel
- SAINT Advancing to New COMPSAC -

Panel Chair:
Katsuyuki Yamazaki, SAINT Standing Committee Chair

Panelists and Brief Talks:

**How COMPSAC Program is Organized**
Atila Elci, COMPSAC2012 Program Chair

**Anticipated SAINT-related Topics to New COMPSAC Tracks**
Hiroaki Ohnaki, SAINT2011 Program Chair

**How COMPSAC Workshop is Organized**
Mohammad Zulkernine, COMPSAC2011 Workshop Chair

**Anticipated SAINT Workshops to New COMPSAC Workshops**
Hiroki Takakura, SAINT2012 Workshop Chair

**Welcome to New Version of COMPSAC2013, Kyoto**
Sumi Helal and Yuji Oie, COMPSAC2013 General Co-Chairs

Special Guest Commentators
Kazuo Furukawa, President, IPSJ
Katsuo Ikeda, SAINT2001 (first SAINT) Program Chair

Background
SAINT, started in 2001, is sponsored by IEEE Computer Society and the Information Processing Society of Japan (IPSJ) to provide a forum for researchers and practitioners from the academic, industrial, public, and government sectors to share their latest innovations on Internet technologies and applications. SAINT has been held in conjunction with IEEE COMPSAC (the IEEE Signature Conference on Computer Software and Applications) since 2008. By virtue of co-location with COMPSAC, SAINT became also a signature conference of IPSJ on Internet and Applications since 2008.

SAINT and COMPSAC are complement to each other. SAINT features Internet technologies and related applications. COMPSAC features software-oriented, diverse-range of technologies. The co-location of COMPSAC and SAINT since 2008 has provided a good opportunity for attendees of the two conferences to share their ideas and latest innovations. Two conferences have adopted the same fee structure, and registrants, paying only one fee, are allowed to attend any sessions of either conference.

Considering these situations, it has been decided to terminate SAINT and to start the new version of COMPSAC from 2013 in Kyoto. The following is a provisional plan for the new version of COMPSAC incorporating topics and activities of SAINT: 1) Creating 5-6 tracks whose topics will focus on Internet and its applications, 2) Continuing the SAINT workshops under the auspices of COMPSAC, i.e., COMPSAC will see new workshops added in several areas of Internet and applications, 3) Expanding the Doctoral Symposium program (that was started in 2011) in size and scope.

It has also been approved by both IEEE CS and IPSJ that the new COMPSAC will be technically sponsored by IPSJ (the first technical sponsor to COMPSAC), where IPSJ members can participate in COMPSAC with member rates.

**SYMPOSIUM – Papers**

**Papers #1: Authentication & Privacy**
Chair: Kenichiro Yoshida

*Location l-Diversity Against Multifarious Inference Attacks*
Shinya Miyawaka, Nobuyuki Saji, and Takuya Mori

*Proposal of Movie CAPTCHA Method Using Amodal Completion*
Takuma Mori, Ruya Uda, and Masayuki Kikuchi

*Design and Implementation of a Secure Public Wireless Internet Service Model Using Host Identity Protocol*
Akihiro Takahashi, Tomotaka Maeda, and Yasuo Okabe

**Papers #2: Security**
Chair: Kouji Nishimura

*Detecting Malicious Websites by Learning IP Address Features*
Daiki Chiba, Kazuhiro Tobe, Tatsuya Mori, and Shigeki Goto

*Scalable and Performance Efficient Client Honeypot on High Interaction System*
Mitsuki Akciyama, Yuhei Kawakoya, and Takeo Harui

*SSH Dictionary Attack Detection based on Flow Analysis*
Akihiro Satoh, Yutaka Nakamura, and Takeshi Ikenaga

**Papers #3: Networking**
Chair: Hiroshi Yamamoto

*A Design and Implementation of OpenFlow Controller Handling IP multicast with Fast Tree Switching*
Daisuke Kotani, Kazuya Suzuki, and Hideyuki Shimomish

*Inter-AS Locator Allocation of Hierarchical Automatic Number Allocation in a 10,000-AS Network*
Kenji Fujikawa, Hajime Tazaki, and Hiroaki Harai

*Simulator-Assisted Joint Service-Level-Agreement and Vertical-Handover Adaptation for Profit Maximization*
Ismael Al Ridhawi, Nancy Samaan, and Ahmed Karmouch

**Papers #4: Application**
Chair: Susumu Takeuchi

*Proposal of Web Framework for Ubiquitous Sensor Network and its Trial Application using NO2 Sensor Mounted on Bicycle*
Takayuki Nakamura, Yuki Kikuya, Yutaka Arakawa, Motonori Nakamura, Yuka Higashijima, Yasuko Maruo, and Masayuki Nakamura

*Emotion Communication Model based on Life-Log Comparison - Mutual Understanding through Comparable Experiences*
Rika Mochizuki, Tomoki Watanabe, and Toru Kobayashi

*A Sensor Data Collection Method Based on a Constraint of Collected Number and Granularity of Characteristics on an Overlay Network*
Jun Shinomiya, Yuichi Teranishi, Kaname Harumoto, and Shojiro Nishio
Papers #5: Architecture
Chair: Michiharu Takemoto
An Academic Community Cloud Architecture for Science Applications
Shigetoshi Yokoyama and Nobukazu Yoshioka
Yoshinich Tanizawa, Takeshi Ishihara, Yuichiro Oyama, Takaomi Murakami, Tsuyoshi Kagawa, Eiji Kagamata, and Kutaroe Is
Jobcast - Parallel and Distributed Processing Framework
Ikko Nakawaga and Ken Nagami

Papers #6: Management & Analysis
Chair: Shigeohiro Ano
DNS traffic analysis -- Issues of IPv6 and CDN
Kazunori Fujiwara, Akira Sato, and Kenichi Yoshida
A GMPLS-based Power Resource Reservation System toward Energy-on-Demand Home Networking
Takuya Miyamoto, Youichi Koyama, Kazumi Sakai, and Yasuo Okabe
Accelerating Flow-Level Network Simulation with Low-Pass Filtering of Fluid Models
Yusuke Sakamoto, Hiroyuki Ohnishi, and Makoto Imase

SYMPOSIUM – Short Papers

Short Papers #1
Chair: Masato Tsuru
i-Path: Visualizing Internal Network Information for the Future Internet
Dai Mochingaga, Katsushi Kobayashi, Ryo Yamada, Shigeki Goto, Akihiro Shimoda, and Ichiro Murase
Markov Chain Based Routing Algorithm in Delay-Tolerant Networks
Chenji Pan, Jiaping Gui, Jiayu Yan, and Yue Wu
Piper: A Framework for Exploring the Privacy Implications of Pervasive Computing Applications in their Physical Environments
Ryan Babbitt, Hen-I Yang, and Johnny Wong
Extraction and Annotation of Personal Cliques from Social Networks
Maike Erdmann, Tomoya Takeyoshi, Gen Hattori, and Chihiro Ono

Short Papers #2
Chair: Ken-ichi Baba
Access Control Architecture Separating Privilege by a Thread on a Web Server
Ryosuke Matsumoto and Yasuo Okabe
Performance Analysis of Fountain-based Protocol in CSMA/CA Wireless Networks
Zan Kai Chong, Hiyoriyuki Ohnishi, Bok Min Goh, Hong Tat Ewe, and Cheng Kuan Bryan Ng
Elekspot: A Platform for Urban Place Recognition via Crowdsourcing
Minkyu Lee, Suk Hoon Jung, and Dongsoo Han
A Mobile Platform for Managing Mobile MapReduce Participatory Sensing Data
Vana Kalogeraki and Theofilos Kakonotouis

Joint COMPSAC/SAINT Doctoral Symposium – SAINT topics papers

A Study on Transport Framework for Transaction Communication with Network Aggressive Supporting
Takuya Omizo
Modeling I/O Interference in Data Intensive Map-Reduce Applications
Sven Groot

WORKSHOP #1 – HSNCE
The 3rd Workshop on High Speed Network and Computing Environments (HSNCE 2012)

Welcome note by Workshop Organizers: Shinji Shimojo & Bruno Ruffin

Session 1: Network Aware High Performance Computing
Chair: Ken-ichi Baba
Workshop Keynote: Can SDN help HPC?
Eiji Kawai
Strategic Optimization of Computation Nodes Allocation in a Coupled Simulation
Kazunori Nozaki, Hiroyuki Ohnishi, Masao Tanaka, Ammeci Van Hirtum, Eisaku Sakane

Session 2: Widely Distributed Applications and Large Scale Data Management
Chair: Hiroyuki Ohnishi
Multilevel Modeling of Physiological Systems and Simulation Platform: PhysioDesigner, Flint and Flint K3 Service
Yoshiyuki Asai, Takeshi Abe, Masao Okita, Tomohiro Okuyama, Nobukazu Yoshioka, Shigetoshi Yokoyama, Masaru Nagaku, Ken-ichi Hagihihara, Hiroaki Kitano
Survey of Network Metrology Platforms
Anne-Cécile Orgere, Paulo Goncalves, Matthieu Imbert, Julien Ridoux, Darryl Veitch
Dynamic Communication Protocol for Quick Response in Interactive Communication
Naoki Ozucli, Shunji Abe

Closing Remarks: Shinji Shimejo & Bruno Ruffin

WORKSHOP #2 – ITeS
The 5th Workshop on IT-enabled Services (ITeS 2012)

Welcome note by Workshop Organizers: Hitoshi Okada

Session 1: Keynote & Real-time Application of ITeS
Chair: Hirotsugu Kinoshita
Workshop Keynote: New Horizon of IT-enabled Services
Shiro Uesugi
Evaluation Study of Usability Factors on Mobile Payment Application on Two Different Service Providers in Thailand
Nagul Cooharojananone, Pongjit Kongnim, Aratchaporn Mongkolnut and Hitoshi Okada
A Resilient Survivors Identification Service for Large-Scale Disasters
Shigeichiro Yamasaki

Session 2: Community Application of ITeS
Chair: Hitoshi Okada
The Study on the Effect of Facebook’s Social Network Features Towards Intention to Buy on F-commerce in Thailand
Wannapon Suraworachet, Sarawadee Premviri and Nagul Cooharojananone
A Local Currency System Reflecting Variety of Values with a Swarm Intelligence
Hirotsugu Kinoshita, Yoshiaki Tajima, Tetsuya Morizumi, Masato Noto and Hideyuki Kannabe

Closing Remarks:
Panel Discussion: New Horizon of ITeS
Panelists: Shiro Uesugi and Hirotsugu Kinoshita

Closing Remarks: Shiro Uesugi

WORKSHOP #3 – NETSAP
The 3rd Workshop on Network Technologies for Security, Administration and Protection (NETSAP 2012)

Welcome Note by Workshop Organizers: Koji Nakano
Session 1: Workshop Keynote
Chair: Hiroki Takamura
Countermeasures against Emerging and Evolving Cyber-attacks - Recent and Upcoming Research Activities in NICT
Masashi Tito

Session 2: Malware Analysis
Chair: Yongjin Kwon
A Malware Classification Method based on Similarity of Function Structure
Yang Zhong, Hirofumi Yamaki and Hiroki Takakura
Malware Detection Method by Catching Their Random Behavior in Multiple Executions
Takahiro Kasama, Katsunari Yoshioka, Daisuke Inoue and Tsutomu Matsumoto

Session 3: Traffic Analysis
Chair: Koji Nakao
A Behavior-based Detection Method for Outbreaks of Low-rate Attacks
Yaokai Feng, Yoshiaki Hori, Kouichi Sakurai and Jun‘ichi Takeuch
Unknown Attacks Detection Using Feature Extraction from Anomaly-based IDS Alerts
Masaki Sato, Hirofumi Yamaki and Hiroki Takakura
A Proposal for Anomaly Traffic Detection in the IP Multimedia Subsystem using Tanimoto Distance and a Modified Moving Average
Noppawat Chaisamran, Takeshi Okuda and Suguru Yamaguchi
An Efficient Dynamic Detection Method for Various x86 Shellcodes
Takayoshi Fujii, Katsunari Yoshioka, Junji Shikata and Tsutomu Matsumoto

Closing Remarks: Yongjin Kwon

WORKSHOP #4 – HEUNET
The 3rd Workshop on Heuristic Methods for the Design, Deployment, and Reliability of Networks and Network Applications (HEUNET 2012)
Welcome note by Workshop Organizers: Masato Tsuru

Session 1: Network Deployment and Reliability
Chair: Hiroyoshi Miwa
A DHT-based HTTP Access Control System with Access Ticket Issuing Mechanism
Satoshi Uemura, Shigehiro Ano
Evaluating the Performance of Locator/ID Separation based on LISP Map Cache Emulation
Masafumi Watarai, Atsushi Tagami, Shigehiro Ano
Comparative Study on Meta-Heuristics for Achieving Parabolic Fairness in Wireless Channel Allocation
Mario Koeppen, Kaori Yoshida, Rodrigo Verschae, Masato Tsuru, Yuji Oie

Session 2: Network Design and Control
Chair: Masato Tsuru
Two-level Heuristic Algorithm for Utility-based Data Placement and Rate Allocation in Content Aware Networks
Maciej Drwal, Dariusz Gasiór
Distributing Link Stress for Internet TV Systems
Seung Chul Han
Detecting Critical Links for Keeping Shortest Distance from Clients to Servers during Failures
Naohisa Bando, Hirofumi Yamaki
Real-time Disaster Evacuation Guidance Using Opportunistic Communications
Akihiro Fujihara, Hiroki Takamura

Session 3: Workshop Keynote
Chair: Mario Koeppen
The Cloudy Sky of Programmable Infrastructures
Prof. Dana Petcu (Institute e-Austria Timisoara and West University of Timisoara, Romania)
Towards the level of Sky computing (Clouds of Clouds), the design decisions in building an open-source and deployable PaaS will be exposed to serve as a case study to assess what Cloud can do for infrastructure programmability.

Heuristics and Metaheuristics for Practical Optimisation in Wireless Networks
Prof. Stuart Allen (Cardiff University, UK)
Heuristics and meta-heuristics oriented algorithms for a range of practical optimization problems will be discussed for wireless network design and management involving the complex and competing technical and economic objectives.

Closing Remarks: Mario Koeppen

WORKSHOP #5 – C3NET
The 3rd Workshop on Company, Campus and Community Networking - Technology, Management and Ethics - (C3NET 2012)
Welcome Note by Workshop Organizer: Nariyoshi Yamai

Session 1: Mobility and Traffic Engineering
Chair: Ikuo Nakagawa
Vertical Handover Control Considering End-to-End Communication Quality in IP Mobility
Takuya Hourai, Kaori Maeda, Hayato Morihito, Yasuhiro Ohishi and Tomoki Harase
Design and Evaluation of Global Live Migration with Mobility Support for IP Multicast
Keisuke Kamada, Tohru Kondo, Kouji Nishimura and Reiji Aibara
An Adaptive Approach for Network Traffic Load Balancing by Using One-Way Delay
Hiroki Kashiwazaki, Satoshi Kobayashi, Shugo Kawai, Norikatu Ohishi and Yoshiaki Takai
Multihoming Method Using Routing Header in IPv6 Environment
Takuya Yamaguchi, Yong Jin, Ryoichi Tokumoto, Nariyoshi Yamai, Kiyohiko Okayama and Motonori Nakamura

Session 2: Network and Distributed System Management
Chair: Kaori Maeda
A Location Free Network System Applicable to Geographical Terms of the Electronic Journal Site License
Yoshihiro Ohsumi, Kiyohiko Okayama, Nariyoshi Yamai, Takaoki Fujihara and Takaoki Hieda
Koshien Cloud: Operations of Distributed Cloud as a Large Scale Web Contents Distribution Platform
Yoshihiro Okamoto, Satoru Noguchi, Satoshi Matsuura, Atsuo Inomata and Kazutoshi Fujikawa
An Account Provision and Management Architecture for Messaging Services in Emergency
Kazuyuki Tasaka, Yasutaka Nishimura and Kiyohito Yoshihara
An Execution Control System for Application Software Reducing Administrative Burden of Educational PCs
Masanori Fujihara, Keita Kawano and Nariyoshi Yamai

Session 3: Network Security
Chair: Hiroki Kashiwazaki
Spam Mail Discrimination System Based on Behavior of DNS Servers Associated with URLs
Shuji Suwa, Nariyoshi Yamai, Kiyohiko Okayama, Motonori Nakamura, Gada and Keita Kawano
A Casual Network Security Monitoring System using a Portable Sensor Device and Wiki Software
Takashi Yamanoue, Kentaro Oda and Koichi Shimozono

Session 4: Workshop Keynote
Chair: Motonori Nakamura
Trustworthiness in Next Generation Networks
Serap ŞAHİN

Closing Remarks by Workshop Organizer: Nariyoshi Yamai
WORKSHOP #6 – EUCASS

The 3rd International Workshop on Enablers for Ubiquitous Computing and Smart Services (EUCASS 2012)

Welcome note by Workshop Organizers: Hideya Ochiai

Session 1: Platform and Deployment
Chair: Susumu Takeuchi
Workshop Keynote: Ubiquitous Service Platform and Field Trial in CUBIQ Project
Makoto Suzuki
A Proposal of the System for Automatic Sharing Information of Movements in Growing Vegetables
Hayato Shibahara, Masato Yamanoouchi and Hideki Sunahara
Development of Arkas Sensor Platform and Application for Heavy Snowfall Observation
Hiroshi Yamamoto, Shohei Minomi, Katsuchi Nakamura and Katsuyuki Yamazaki

Session 2: Design and Applications
Chair: Hideya Ochiai
On Socio-technical Enablers for Ubiquitous Computing Applications
Kurt Geihs, Jan Marco Leimeister, Alexander Rossnagel and Ludger Schmidt
Distortions in QoE Measurements of Ubiquitous Mobile Video Services Caused by the Preconceptions of Test Subjects
Péter András Kara, László Bokor and Sándor Imre
Personalized Clothing-Recommendation System based on a Modified Bayesian Network
Lin Yu-Chu, Kawakita Yuusuke, Suzuki Etsuko and Ichikawa Haruchika

Session 3: Overlay Network Technologies
Chair: Michiharu Takekoto
An Adaptive Vertical Handover of Service Specific Overlay Networks
Yousif Al Ridhawi, Ismaeel Al Ridhawi, Nancy Samaan and Ahmed Karmouch
A Divide and Merge Method for Sensor Data Processing on Large-scale Publish/Subscribe Systems
Ryota Miyagi, Matsuura Satoshi, Satoru Noguchi, Atsuo Iomata and Kazutoshi Fujikawa

Closing Remarks: Hideya Ochiai

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