



The International Conference on Dependable Systems and Networks

PACIFICO YOKOHAMA Conference Center, Yokohama, Japan
June 28 - July 1, 2005

Sponsored by: IEEE Computer Society Technical Committee on Fault-Tolerant Computing
IFIP WG 10.4 on Dependable Computing and Fault Tolerance
IEICE Technical Group on Dependable Computing

In cooperation with : University of Tokyo, Japan, Osaka University, Japan,
University of Florence, Italy, University of Twente, Netherlands, Sun Microsystems, USA

Advance Program and Registration Form



Invitation from General Chair

On behalf of the Organizing committee, it is my pleasure to invite you to attend the 2005 International Conference on Dependable Systems and Networks (DSN-2005), the leading international conference on dependability. This year, the conference is being held in Yokohama, Japan, from June 28th to July 1st.

Dependability is a vital attribute for computing systems and communication networks that pervade every aspect of modern societies and our daily lives. As we have increasingly relied on correct and safe functioning of these systems and networks, there have been increasing concerns about malicious exploitation of imperfect systems and networks and intentional cyber-attacks as well as the traditional concerns for inadvertent faults, errors, and failures. This conference attempts to provide answers to the important question, "how can we make computer systems and networks that we increasingly rely on more dependable?"

The conference will have multiple main tracks of refereed papers for the Dependable Computing and Communications Symposium (DCCS) and the Performance and Dependability Symposium (PDS), as well as plenary sessions for Keynote and Panel. The conference will also feature three Workshops, five Tutorials, Student Forum, Industry Sessions, and Fast Abstracts with posters to emphasize late-breaking research. There will be a plenty of opportunity for informal discussions during breaks and social activities including welcome reception, excursion to Japanese garden (Sankei-En) and world-heritage "Noh" performance in Yokohama "Noh" Theater, followed by dinner cruise on Tokyo/Yokohama Bay.

I look forward to welcoming you to Yokohama, Japan this June!

Takashi Nanya
General Chair, DSN 2005

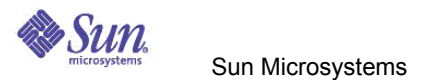
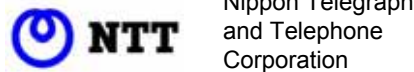
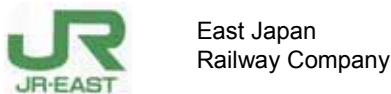
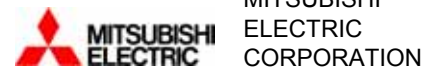
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A very special thanks to the following sponsors of DSN 2005. Without their generous support we would not be able to provide such an exciting hosting to all participants:

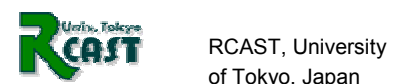
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Hot Topics in System Dependability :

George Candea (Stanford Univ.), David Oppenheimer (UCB)

Assurance of Networking Systems Dependability Service Level Agreements :

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Chair: Matti Hiltunen (AT&T Labs - Research, NJ, USA) <hiltunen@research.att.com>

Members: Antonio Casimiro Costa (University of Lisbon), David Bakken (Washington State University)

Student Forum

The Student Forum will provide an opportunity for students working in the area of dependable computing to present and discuss their research objectives, approaches and preliminary results. The Forum is centered around a conference track during which the selected "student research papers" will be presented.

Preparation and Submission:

Student research papers should be single-authored and describe preliminary results and future directions of the student's on-going research. The papers will be reviewed by a committee led by the Student Forum Chair. Accepted contributions will be published in the Supplement of the 2005 International Conference on Dependable Systems and Networks.

Papers should be no more than three pages long (IEEE double-column format), and should be submitted in camera-ready form, ready to be printed. There is no revision cycle. Contributions should be submitted through the web to <http://www.dsn.org/> as Portable Document Format (.pdf), or Post Script (.ps) files.

Acceptance and Notification:

The criteria for acceptance of Student Research Papers will be originality, relevance and interest to the community. You will be notified by April 28, 2005.

Important Notes:

The final submission deadline is April 8, 2005, but you are encouraged to send in your submission well in advance of the final deadline. Late submissions will not be accepted; no fooling. By submitting a Student Research Paper you are committing yourself to present it at the conference if it is accepted.

Questions or comments about the Student Forum should be directed to the Student Forum Chair: Philip Koopman (Carnegie Mellon Univ., USA) koopman@cmu.edu

Deadlines

Submission: **April 8, 2005**

Notification: April 28, 2005

Program Committee

Chair : Philip Koopman (Carnegie Mellon Univ., USA) <koopman@cmu.edu>

Members: Henrique Madeira (Univ. Coimbra, Portugal), Kazuhiko Iwasaki (Tokyo Metro. Univ., Japan)

Student Travel Grants

The IEEE Computer Society Technical Committee on Fault-Tolerant Computing will solicit applications for travel scholarships to partially offset the cost of students planning to attend DSN-2005 in Yokohama, Japan, June 28 - July 1, 2005. To be eligible, the applicant must be enrolled in a degree program at the time of DSN-2005. Authors of accepted papers, students submitting papers to the Student Forum, and others are all welcome to apply. Participation, such as presenting a regular paper or a paper in the Student Forum will be used as one criterion in awarding the scholarships, however. The Technical Committee anticipates awarding scholarships in the range of \$500.

To apply, submit a write-up not exceeding 500 words stating your student status and summarizing your current research related to dependable computing and describing how it is relevant to DSN-2005, what you hope to learn by attending the conference, and how you expect it to affect your future research directions. Also include your name, postal address, electronic mail address, telephone number, and fax number. Applications must be received no later than April 8, 2005 and should be submitted through the web to <http://www.dsn.org/> as Portable Document Format (.pdf), or Post Script (.ps) files. The awards will be announced by April 28, 2005. Questions about the Student Grant applications should be directed to the Student Forum Chair: Philip Koopman (Carnegie Mellon Univ., USA) koopman@cmu.edu.

Fast Abstracts

Fast Abstracts are lightly refereed short presentations of work in progress or opinion pieces that can cover any and all facets of dependable systems and networks. Because they are brief and have a later deadline, Fast Abstracts allow their authors to:

- Report on work that may or may not be complete.
- Introduce new ideas to the community.
- State positions on controversial issues.

As such, they provide an excellent opportunity to present new work and receive early feedback from the community. We particularly encourage submission from conference participants that would not otherwise present their work at the conference. Submissions should be at most two pages, formatted using standard two-column IEEE format. They are refereed primarily based on their relevance to the conference. Accepted Fast Abstracts will be published in the Supplement of the 2005 International Conference on Dependable Systems and Networks.

All participants in this track will have an opportunity to present a poster; selected participants will also present a 5 minute talk, including 1 minute for questions.

Full submission information is available from the conference website (www.dsn.org).

Deadlines

Submission: **April 8, 2005**

Notification: April 28, 2005

Program Committee

Chair: Matti Hiltunen (AT&T Labs - Research, NJ, USA) <hiltunen@research.att.com>

Members: Antonio Casimiro Costa (University of Lisbon), David Bakken (Washington State University)

Workshops

Workshop 1: Dependable Software - Tools and Methods

Dependability includes attributes such as reliability, availability, safety, and security. In order to realize dependable systems, system software must provide not only such attributes against hardware failures and intrusions, but also the software itself must have robustness. Formal methods and tools, such as UML and model checking, have been recently taken into account with a hope that they enable design-time detection of malfunctioning to reduce the cost of debugging.

This one-day workshop covers all aspects of supporting dependable software including theoretical results, case studies, language aspects, software engineering tools, and system software. Topics include but are not limited to:

- Integrated specification techniques such as UML, OWL and B
- Software Analysis
- Software Testing
- Automated theorem proving such as model checking
- Interactive theorem proving using proof assistants
- Abstraction and refinement using logical relations, abstract interpretations, simulations and lax transformations
- Tools for building dependable systems, such as real-time, WEB service, and distributed systems.

Organizers :

Chair: Takuya Katayama (Japan Advanced Institute of Science and Technology, Japan)

Co-Chairs: Yoshiki Kinoshita (National Institute of Advanced Industrial Science and Technology, Japan)

Yutaka Ishikawa (University of Tokyo, Japan)

Workshop 2 : Hot Topics in System Dependability

Authors are invited to submit position papers to the First Workshop on Hot Topics in System Dependability. The goal of this workshop is to identify cutting-edge research ideas spanning the domains of fault tolerance and reliability (e.g., as reflected at conferences such as DSN and ISSRE) and systems (e.g., as reflected at conferences such as OSDI and SOSOP). We are today at a historic confluence of interests between the two communities, with the former bringing decades of fault tolerance research into the domain of general purpose systems, and the latter taking an earnest interest in dependability. It is our hope that providing mutual sounding boards for plans for future research will benefit both communities and bring them closer together.

The workshop will focus on critical components of the infrastructures touching our everyday lives: operating systems, networking, security, wide-area and enterprise-scale distributed systems, mobile computing, compilers, and language design. We seek participation and contributions from both academic researchers and industry practitioners, to achieve a mix of long-range research vision and technology ideas anchored in immediate reality.

Position papers (max. 5 pages) should preferably fall into one of the following categories:

- describe a novel approach to an old problem, that promises to influence future research
- debunk an old, entrenched perspective on dependability
- articulate a brand new perspective on existing problems in dependability
- describe a new problem (and possible solution) that must be addressed by the dependable systems research community

The program committee will favor papers that are likely to generate healthy debate at the workshop. Ideas do not have to be 100% fleshed out and/or entirely backed up by quantitative measurements, but must provide credible evidence that they are feasible and must be accompanied by a compelling motivation. Possible topics include, but are not limited to:

- automated failure management, that enables systems to adapt on the fly to exceptional conditions
- techniques for better detection, diagnosis, or recovery from failures
- forensic tools for administrators and programmers to use after a failure or attack
- techniques and metrics for quantifying aspects of dependability in specific domains (e.g., measuring the security of a Web service)
- tools/concepts/techniques for optimizing tradeoffs among availability, performance, correctness, and security
- novel uses of technologies not originally intended for dependability (e.g., using virtual machines to enhance dependability)

Organizers :

Co-Chairs: George Candea (Stanford University, USA), David Oppenheimer (University of California, Berkeley, USA)

Members: Lorenzo Alvisi (University of Texas, Austin), Christian Cachin (IBM Research, Zurich), Valérie Issarny (INRIA / Institut National de Recherche en Informatique et en Automatique), Ravishankar Iyer (University of Illinois, Urbana-Champaign), Kimberly Keeton (HP Labs, Palo Alto), Angelos Keromytis (Columbia University), Keith Marzullo (University of California, San Diego), Priya Narasimhan (Carnegie Mellon University), David Patterson (University of California, Berkeley), Martin Rinard (Massachusetts Institute of Technology), Daniel Siewiorek (Carnegie Mellon University), Amin Vahdat (University of California, San Diego), Werner Vogels (Amazon.com)

Workshop 3 : Assurance of Networking Systems Dependability Service Level Agreements

Two main leading communication technologies co-exist in today's interconnected networking systems and are converging: switching and routing. These two technologies have two different and complementary levels of fault detection and recovery. Switching resiliency is focused on sensitivity to delays and connectivity whereas routing resiliency is focused on traffic losses and traffic integrity. This workshop investigates the issues and challenges of assuring that a multi-service converged

networking system meet tight reliability requirements to meet service level agreements. In particular, the workshop will be focused on discussing and investigating the following questions:

1. What are the challenging issues of reflecting and estimating the contribution of the various network and protocol levels of resiliency to the service availability and reliability?
2. How to aggregate the complexity and interactions from four levels of networking functions (Physical, link, network and transport layers) and work with a viable model that reflects the networking system behavior from the service provider and the service user standpoints?
3. How to account for the interaction between reliability and performance i.e. when modeling and estimating network reliability how to account for the failure/repair behavior and demonstrate an SLA is met under a given engineered bandwidth?

The aim of this workshop is to bring together the dependability communities researchers and practitioners from both academia and industry with the aim of cross-fertilization and creation of strong collaboration among the participants to find practical and viable solutions for these challenging questions.

The 5 best submitted papers based on their relevance to the workshop goals will be selected for presentation at the first half day of the workshop and will be published in the supplement volume of the DSN proceedings along with a summary paper of the issues and challenges discussed and elements of proposed solutions based on the hands on work of the second half day of the workshop.

Organizers :

Chair: Saida Benlarbi (Alcatel, Canada)

Co-Chairs: Kishor Trivedi (Duke University, USA), Khaled El-Emam (TrialStat, Canada)

Tutorials

All tutorials will be held on Tuesday, June 28, and each lasts three and a half hours. Morning tutorials begin at 09:00 and afternoon tutorials begin at 13:30.

Tutorial A: “Mobile Ad Hoc Networks: Protocols and Security Issues”

Presenter/author: Nitin Vaidya (University of Illinois at Urbana-Champaign, USA) <nhv@uiuc.edu>

Attendee type: This tutorial is designed to provide an overview of issues related to protocols and security in ad hoc networks.

The tutorial should benefit researchers as well as practitioners from industry and academia, who are interested in areas related to wireless ad hoc networking.

Short description: The tutorial will introduce mobile ad hoc networks and their potential applications. Then it will discuss: (i) selected medium access control protocols, routing protocols for unicasting in ad hoc networks, (ii) classification of routing protocols (reactive and proactive protocols), (iii) properties of selected protocols from each class, and (iv) performance of TCP over wireless ad hoc networks. Security topics will cover: (i) MAC layer issues – misbehavior detection and handling, encryption, and anonymous broadcast; (ii) network layer issues – misbehavior detection and handling, trust and reputation propagation, and various attacks on routing protocols; (iii) other issues – key management, attacks on sensor networks, monitoring of wireless networks, and anomaly detection.

Biographical sketch:

Nitin Vaidya received the Ph.D. from the University of Massachusetts at Amherst. He is presently an Associate Professor of Electrical and Computer Engineering at the University of Illinois at Urbana-Champaign (UIUC). He has held visiting positions at Microsoft Research, Sun Microsystems and the Indian Institute of Technology-Bombay. His current research is in the areas of wireless networking and mobile computing. His research has been funded by various agencies, including the National Science Foundation, DARPA, Motorola, Microsoft Research and Sun Microsystems. Nitin Vaidya is a recipient of a CAREER award from the National Science Foundation. Nitin has served on the committees of several conferences, including as a program co-chair for the 2003 ACM MobiCom and General Chair for 2001 ACM MobiHoc. He has served as editor for several journals, and presently serves on the IEEE Transactions on Mobile Computing editorial board, and as editor-in-chief of ACM SIGMOBILE periodical MC2R. He has been invited to serve as Editor-in-Chief of IEEE Transactions on Mobile Computing from January 2005. Vaidya is a senior member of the IEEE and a member of the ACM. For more information, please visit <http://www.crhc.uiuc.edu/~nhv/>.

Tutorial C: “Hands-On Experiences with the SAE Standard Architecture Analysis & Design Language (AADL) in High Dependability Design”

Presenters/authors:

David Gluch (Embry-Riddle Aeronautical U., USA) <gluchd@erau.edu>

Peter Feiler (SEI, CMU, USA)

Bruce Lewis (Army AMCOM SED, USA)

Attendee type: A typical attendee would have basic knowledge of real-time and dependability design issues and techniques for software intensive systems (e.g., knowledge of scheduling, communications, redundancy, partitioning, fault tolerance) and an interest in understanding the use of architecture-driven and model-based design and analysis in the development of these systems.

The OSATE toolset will be used throughout the tutorial. Participants are required to have a laptop capable of executing the OSATE software. The OSATE software should be downloaded from the AADL web site (www.aadl.info) prior to the tutorial. A very limited number of laptops will be made available to participants at the tutorial session. However, arrangements for a laptop must be made at least two weeks prior to the tutorial. For inquiries about laptop availability and for questions regarding the download, please contact the presenter (gluchd@erau.edu).

Short description: The tutorial provides hands-on experiences using the SAE Architecture Analysis & Design Language (AADL) standard in high dependability system analysis and design. Attendees will learn key elements of the AADL and apply them to representative avionics and related application examples using the Open Source AADL Tool Environment (OSATE). The AADL capabilities to specify fault handling, redundancy, fault-tolerance, and related high dependability design aspects are highlighted. The AADL is presented as part of model-based and architecture-driven development, focusing on how the AADL's precisely defined semantics can specify and facilitate the analysis of important performance-critical and dependability considerations such as timing, schedulability, fault and error handling, time and space partitioning, and safety properties. Employing pedagogical examples, the initial sections of the tutorial introduce key AADL language constructs and demonstrate the features, capacities, and use of the open source AADL OSATE toolset. Throughout the remainder of the tutorial, in addition to slide presentations, participants will use the OSATE tool to explore the specification, analysis, and prediction capabilities of the AADL within the context of examples that address meeting a system's deadline, response time, throughput, and fault tolerance requirements. The tutorial examples demonstrate how AADL-based modeling and pattern-based architectural analysis can identify shortcomings in a design and how the AADL abstractions permit separation of application domain architecture concerns from runtime architecture concerns.

Biographical sketch:

Dr. David P. Gluch is a professor in the Department of Computer and Software Engineering at Embry-Riddle Aeronautical University and a visiting scientist at the Software Engineering Institute (SEI). His research interests are technologies and practices for model-based software engineering of complex systems, with a focus on software verification. Prior to joining the faculty at Embry-Riddle, he was a senior member of the technical staff at the SEI where he participated in the development and transition of innovative software engineering practices and technologies. His industrial research and development experience has included fault-tolerant computer, fly-by-wire aircraft control, Space Shuttle software modeling, and automated process control systems. He has co-authored a book on real-time UNIX systems and authored numerous technical reports and professional articles. Dave has a Ph.D. in physics from Florida State University and is a senior member of IEEE.

Tutorial E: "Reliable Distributed Programming"

Presenters/authors:

Rachid Guerraoui (EPFL, Switzerland) <Rachid.Guerraoui@epfl.ch>

Luis Rodrigues (U. Lisboa, Portugal) <ler@di.fc.ul.pt>

Attendee type: The tutorial is directed towards fresh graduate students and engineers seeking to get an overview of the basic programming abstractions for reliable distributed systems and of how these abstractions can be applied in practice.

To experiment the concepts introduced in the tutorial, the participants registered at the workshop will be able to download a complete system, written in the Java programming language, with running examples of many of the software components addressed by the tutorial.

Short description: This tutorial aims at providing an insight on important problems in reliable distributed computing, knowledge about the main algorithmic techniques that can be used to solve these problems, and examples of how to apply these techniques when building distributed applications. The tutorial is divided in two main parts.

In the first part, the tutorial presents various programming services that support the development of reliable distributed applications and describes algorithms that implement these services. In a sense, we give the distributed application programmer a library of abstraction interface specifications, and the distributed system builder a library of algorithms that implement the specifications.

In the second part we show how these services can be applied to a concrete application area, in particular to build replicated databases. For that purpose, the tutorial will survey the most recent academic and commercial solutions for database replication and highlight some active research directions that exploit the programming abstractions introduced in the first part of the tutorial.

Attendees of the tutorial will be guided to have "hands-on" experience with a running implementation of several of the programming services covered by the tutorial.

Biographical sketch:

Rachid Guerraoui has a Master (1989) from the University of Paris 6 and a PhD (1992) from the University of Orsay, both in Computer Science. He obtained the habilitation in Computer Science from the University of Grenoble (1996). He is associate Professor in Computer Science at Ecole Polytechnique Federale de Lausanne (Swiss Federal Institute of Technology in Lausanne) where he leads the Distributed Programming Laboratory. Previously, he was with HP Labs in Palo Alto. He has been active in distributed programming and dependable systems where he published many papers. He has given tutorials on distributed programming and dependable systems in various conferences for several years now. For the 3rd consecutive year, Rachid Guerraoui has been elected best professor by students of the school of Computer and Communication Systems at EPFL, in particular for the topic of this tutorial.

Luis Rodrigues graduated (1986), has a Master (1991) and a PhD (1996) in Electrotechnic and Computers Engineering, by the Instituto Superior Tecnico da Universidade Tecnica Lisboa (IST). He obtained the "Agregacao" in Informatics (2003) by the Universidade de Lisboa. He is Associate Professor at Departamento de Informatica, Faculdade de Ciencias (Faculty of Sciences), Universidade de Lisboa. Previously he was at the Electrotechnic and Computers Engineering Department of Instituto Superior Tecnico de Lisboa (IST) (he joined IST in 1989). From 1986 to 1996 he was a member of the Distributed Systems and Industrial Automation Group at INESC. Since 1997, he is a (founding) member of the LASIGE laboratory at

University of Lisbon where he leads the Distributed Algorithms and Network Protocols group. He participated and contributes to several national and international projects. His current interests include fault-tolerant and real-time distributed systems, group membership and communication, replicated data management, publish-subscribe systems, peer-to-peer computing and mobile computing. He has more than 60 publications in these areas. He is co-author of a book on distributed computing. He is a member of the Ordem dos Engenheiros, ACM, and IEEE.

Keynote Address

Wednesday, June 29, 9:00-10:00 (Room301+302)

Title: Observation of Local and Distant Earthquakes and Tsunami Warning System

In Japan, Japan Meteorological Agency, JMA, has the official responsibility for the public for tsunami forecasts and issuance of tsunami information. For the tsunami forecast the first step is precise and prompt estimation of the location and magnitude of the earthquake because generation of tsunami is strongly controlled by the focal depth and the magnitude of the earthquake. In case that the location is at sea, focal depth is shallow and magnitude is large, we should expect the tsunami generation. For local tsunami, since JMA started its tsunami forecast in 1952, constant efforts have been made for sophistication and speedup of the forecast for over 50 years. The continuous improvements enable us to issue a forecast 3 to 4 minutes at the quickest after the occurrence of the earthquake. For distant tsunami such as ocean wide destructive one, international cooperation of information exchange is important. It is necessary to collect seismic waveform data in quasi-real-time from foreign countries for the precise forecast, and sea level data for tsunami observation. For both local and distant cases, it is important to keep the seismic observation network and analyzing system well maintained for reliable tsunami forecast.

Speaker :

Dr. Mitsuyuki HOSHIBA (Japan Meteorological Agency)

Dr. Mitsuyuki Hoshiba joined Japan Meteorological Agency, JMA, after graduation from Kyoto University, Japan, and since then he has worked as a seismologist. After spending 17 months as an observer of earthquakes and volcanoes at Fukuoka branch office of JMA, he moved to Meteorological Research Institute, MRI, where he worked for 15 years as a researcher on seismic wave propagation. He received a doctorate in geophysics in 1993 from Kyoto University with a dissertation on multiple scattered seismic waves and excitation of seismic coda. He stayed for 6 months at University of Southern California for a cooperative research in 1993, and spent a year as visiting scientist at University of Munich in 1996.

Since 2 years ago, he has worked at headquarter of JMA as a deputy director of Earthquake Prediction Information Division. In case that a large earthquake occurs anywhere in Japan, he rushes to his office and engages in issuing the information about the earthquake.

Panel

Friday, July 1, 8:30-10:30 (Room301+302)

Title: Dependability Benchmarking of Computing Systems

Panelists:

Cristian Constantinescu (Intel Corp.)
Henrique Madeira (University of Coimbra)
Brendan Murphy (Microsoft Research)
Karama Kanoun (LAAS-CNRS)
Ira Pramanick (Sun Microsystems)
Lisa Spainhower (IBM Corporation)

The importance of benchmarking is increasing as every aspect of human life is relying on the correct operation of computing systems. Although considerable efforts have been made, presently there are no widely accepted dependability benchmarks. This panel will discuss the main issues and the latest developments, as seen by industry and academia. Both hardware, software and system level dependability benchmarking will be addressed.

Conference at a Glance

Tuesday, 28 June

08:30-09:00	Tutorial Registration				
09:00-12:30	Tutorial A Mobile Ad Hoc Networks : Protocols and Security Issues				
12:30-13:30	Lunch				
13:30-17:00	Tutorial C Hands-On Experiences with the SAE Standard Architecture Analysis & Design Language (AADL) in High Dependability Design		Tutorial E Reliable Distributed Programming		
18:00-20:00	DSN Registration / Welcome Reception				

Wednesday, 29 June

08:00-08:30	DSN Registration				
08:30-10:00	Opening Remarks and Keynote Address				
10:00-10:30	Coffee Break				
10:30-12:00	Session 1A (DCCS) Fault Tolerant Architectures and Algorithms	Session 1B (DCCS) Dependability in VLSI	Session 1C (PDS) Software Reliability, Rejuvenation and Optimization	Workshop 1 Dependable Software – Tools and Methods	Industry Session [I]
12:00-13:00	Lunch				
13:00-15:00	Session 2A (DCCS) Experimental Validation	Session 2B (DCCS) System Security	Session 2C (PDS) Security Evaluation	Workshop 1 (continued)	Student Forum
15:00-15:30	Coffee Break				
15:30-17:00	Session 3A (DCCS) Multicast	Session 3B (DCCS) Wide Area Networks	Session 3C (PDS) Evaluation of QoS and Self-healing Systems	Workshop 1 (continued)	Fast Abstracts [I]

Thursday, 30 June

08:00-08:30	DSN Registration				
08:30-10:00	Session 4A (DCCS) Detection and Adaptation	Session 4B (DCCS) FT Communications	Session 4C (PDS) Experimental Evaluation of Fault-Tolerance	Workshop 2 Hot Topics in System Dependability	Fast Abstracts [II]
10:00-10:30	Coffee Break				
10:30-12:00	Session 5A (DCCS) Operating Systems and Mechanisms	Session 5B (DCCS) Networking	Session 5C (PDS) Performance Evaluation of Networks and Protocols	Workshop 2 (continued)	Fast Abstracts [III]
12:00-13:00	Lunch				
13:00-15:00	Session 6A (DCCS) Codes	Session 6B (DCCS) Critical Infrastructures Protection	Session 6C (PDS) Markovian Models for Performance and Dependability	Workshop 2 (continued)	Fast Abstracts Poster
15:10-22:00	Excursion, cultural event and dinner cruise				

Friday, 1 July

08:00-08:30	DSN Registration				
08:30-10:30	Panel : Dependability Benchmarking of Computing Systems			Workshop 3 Assurance of Networking Systems Dependability Service Level Agreements	
10:30-11:00	Coffee Break				
11:00-12:30	Session 7A (DCCS) Consensus	Session 7B (DCCS) Hardware and Codesign	Session 7C (PDS) Experimental Microprocessor Evaluation	Workshop 3 (continued)	Industry Session [II]
12:30-13:30	Lunch				
13:30-15:30	Session 8A (DCCS) Dependability Modeling and Prediction	Session 8B (DCCS) Intrusion Detection and Tolerance	Session 8C (PDS) Replication and Checkpointing Protocol Evaluation	Workshop 3 (continued)	Industry Session [III] Funding Opportunity Announcement
15:30-16:00	Coffee Break				
16:00-17:00	Business Meeting : IEEE Technical Committee on Fault-Tolerant Computing (All participants are invited.)				

Combined Program

The information contained in this Advance Program is provisional. Session order and content are subject to change, both for logistic reasons and depending on final committee decisions on conditionally-accepted papers.

Tuesday, June 28

08:30-09:00 Tutorial Registration

09:00-12:30 Tutorials

Room:311+312 - Tutorial A: *Mobile Ad Hoc Networks: Protocols and Security Issues* - Nitin Vaidya (University of Illinois at Urbana-Champaign, USA)

12:30-13:30 - Lunch

13:30-17:00 Tutorials

Room:311+312 - Tutorial C: *Hands-On Experiences with the SAE Standard Architecture Analysis & Design Language (AADL) in High Dependability Design* - David Gluch (Embry-Riddle Aeronautical U., USA), Peter Feiler (SEI, CMU, USA), Bruce Lewis (Army AMCOM SED, USA)

Room:313+314 - Tutorial E: *Reliable Distributed Programming* - Rachid Guerraoui (EPFL, Switzerland), Luis Rodrigues (U. Lisboa, Portugal)

18:00-20:00 Room:Lounge - DSN Registration and Welcome Reception

Wednesday, June 29

08:00-08:30 DSN Registration

08:30-10:00 Room:301+302 - Opening Remarks and Keynote Address

Welcome to DSN2005

Keynote Address : *Observation of Local and Distant Earthquakes and Tsunami Warning System*

Mitsuyuki Hoshihara (Japan Meteorological Agency, Japan)

10:00-10:30 Coffee Break

10:30-12:00 Room:303 - Session 1A: Fault Tolerant Architectures and Algorithms

Chair : Jean-Claude Laprie

- *Assured Reconfiguration of Fail-Stop Systems* - E. A. Strunk, J. C. Knight, and M. A. Aiello
- *NonStop® Advanced Architecture* - D. Bernick, B. Bruckert, P. Del Vigna, D. Garcia, R. Jardine, J. Klecka, and J. Smullen
- *How Fast Can Eventual Synchrony Lead to Consensus?* - P. Dutta, R. Guerraoui, and L. Lamport

10:30-12:00 Room:301+302 - Session 1B: Dependability in VLSI

Chair : Cristian Constantinescu

- *ReStore: Symptom Based Soft Error Detection in Microprocessors* - N. J. Wang and S. J. Patel
- *Combining Error Masking and Error Detection Plus Recovery to Combat Soft Errors in Static CMOS Circuits* - S. Krishnamohan and N. Mahapatra
- *On-line Detection of Control-Flow Errors in SoCs by Means of an Infrastructure IP Core* - P. Bernardi, L. M. Bolzani, M. Rebaudengo, M. Sonza Reorda, M. Violante, and F.L. Vargas

10:30-12:00 Room:304 - Session 1C: Software Reliability, Rejuvenation and Optimization

Chair : Karama Kanoun

- *Combining Response Surface Methodology with Numerical Models for Optimization of Class-Based Queueing Systems* - P. Kemper, D. Müller, and A. Thümmler
- *On a Method for Mending Time to Failure Distributions* - M. Grottke and K. S. Trivedi
- *A Performability-Oriented Software Rejuvenation Framework for Distributed Applications* - A. T. Tai, K. S. Tso, W. H. Sanders, and S. N. Chau

10:30-12:00 Room:311+312 - Workshop 1: Dependable Software - Tools and Methods

[Systems and Tools] Chair : Takuo Watanabe

- *Difference of Degradation Schemes among Operating Systems -- Experimental analysis for web application servers --* - Hideaki Hibino, Kenichi Kourai, Shigeru Chiba
- *(*)XGE-ProtoDevel: A Communication Protocol Development Tool for 10Gbps Class Network* - Shinji Sumimoto, Mitsuru Sato, Kohta Nakashima, Kouichi Kumon, Yutaka Ishikawa

- (*) *A methodology for designing fault injection experiments as an addition to communication systems conformance testing* - Ana Maria Ambrosio, Eliane Martins, Valdivino Santiago, Fatima Mattiello-Francisco, N. L. Vijaykumar, S. V. de Carvalho
 - (*) *A Consistency Checker for UML Model Diagrams* - Yasser Kotb and Takuya Katayama
- The short presentations, 20 minute talks, are marked as (*).

10:30-12:00 Room:313+314 - Industry Session [I]

Chair : Tohru Kikuno (Osaka University, Japan)

- *Fujitsu PRIMEQUEST: 32-way SMP Open Servers with Powerful Reliability Features* - Toshiyuki Shimizu, Yasuhide Shibata, Haruhiko Ueno, Takumi Takeno, Shinya Kato, Seishi Okada, Nobuo Uchida, Hiroyuki Adachi, Hideki Maeda, Takato Noda, Akira Kabemoto (Fujitsu Limited)
- *Multi-Tier Checkpointing for Peta-Scale Systems* - Alan Wood, Swami Nathan, Timothy Tsai, Chris Vick, Lawrence Votta (Sun Microsystems), Anoop Vetteth (University of Illinois)
- *Technical Perspectives of the Construction of Dependable Network as the Social Infrastructure* - Akira Arutaki, Yoshihide Kikuchi, Yoshiaki Kiriha, Atsushi Iwata, Toshiyuki Kanoh (NEC Corporation)

12:00-13:00 Room:Pacific - Lunch

13:00-15:00 Room:303 - Session 2A: Experimental Validation

Chair : Ira Pramanick

- *User Interface Dependability through Goal-Error Prevention* - R. W. Reeder and R. A. Maxion
- *Stability Monitoring and Analysis of Learning in an Adaptive System* - S. Yerramalla, M. Mladenovski, B. Cukic, and E. Fuller
- *Effective Testing and Debugging Techniques for a Group Communication System* - E. Farchi, G. Kliot, Y. Krasny, A. Krits, and R. Vitenberg
- *Error Propagation Profiling of Operating Systems* - A. Johansson and N. Suri

13:00-15:00 Room:301+302 - Session 2B: System Security

Chair : Mootaz Elnozahy

- *How Resilient are Distributed f Fault/Intrusion-Tolerant Systems?* - P. Sousa, N. F. Neves, and P. Verissimo
- *Towards a Theory of Insider Threat Assessment* - R. Chinchani, A. Iyer, H. Q. Ngo, and S. Upadhyaya
- *Constructing Multi-Layered Boundary to Defend Against Intrusive Anomalies: An Autonomic Detection Coordinator* - Z. Zhang and H. Shen
- *A Model of Stateful Firewalls and its Properties* - M. G. Gouda and A. X. Liu

13:00-15:00 Room:304 - Session 2C: Security Evaluation

Chair : Jun Xu

- *Optimizing the Pulsing Denial-of-Service Attacks* - X. Luo and R. K. C. Chang
- *Towards a Security Benchmark for Database Management Systems* - M. Vieira and H. Madeira
- *An Experimental Evaluation to Determine if Port Scans are Precursors to an Attack* - S. Panjwani, S. Tan, K. M. Jarrin, and M. Cukier
- *LITEWORP: A Lightweight Countermeasure for the Wormhole Attack in Multihop Wireless Networks* - I. Khalil, S. Bagchi, and N. Shroff

13:00-15:00 Room:311+312 - Workshop 1: Dependable Software - Tools and Methods (continued)

[Invited Talk] Chair : Takuya Katayama

- *Building Foundations for Dependable Systems* - Richard D. Schlichting (AT&T Labs-Research)

[Concurrency and Tools] Chair : Yoshiki Kinoshita

- *Typing for Reliable Distributed Systems - Recent Advances* - Pawel T. Wojciechowski
- *Congruences Properties for a Timed Extension of the pi Calculus* - Hiroaki Kuwabara, Shoji Yuen and Kiyoshi Agusa
- (*) *Model Checking of Multi-Process Applications Using SBUML and GDB* - Yoshihiko Nakagawa, Richard Potter, Mitsuharu Yamamoto, Masami Hagiya, Kazuhiko Kato

The short presentations, 20 minute talks, are marked as (*).

13:00-15:00 Room:313+314 - Student Forum

Chair : Philip Koopman

- *Dependability Analysis of the Java Virtual Machine* - Salvatore Orlando
- *Crash-Time Checkpoint and Recovery System* - Zhigang Huo
- *Towards Adaptive Process Ordering in Asymmetric Distributed Protocols* - Livia Sampaio
- *Proactive System Diagnosis Based on a Metastasis Model* - Seung Gu Kim

15:00-15:30 Coffee Break

15:30-17:00 Room:303 - Session 3A: Multicast

Chair : Ricardo Jiménez-Peris

- *GoCast: Gossip-enhanced Overlay Multicast for Fast and Dependable Group Communication* - C. Tang, R. N. Chang, and C. Ward

- *SMRP: Fast Restoration of Multicast Sessions from Persistent Failures* - J. Wu and Kang G. Shin
- *Efficient Byzantine Broadcast in Wireless Ad-Hoc Networks* - V. Drabkin, R. Friedman, and M. Segal

15:30-17:00 Room:301+302 - Session 3B: Wide Area Networks

Chair : Christof Fetzer

- *Internet Routing Anomaly Detection and Visualization* - T. Wong, V. Jacobson, and C. Alaettinoglu
- *Assessing the Performance of Erasure Codes in the Wide-Area* - R. L. Collins and J. S. Plank
- *Finding Critical Traffic Matrices* - Y. Zhang and Z. Ge

15:30-17:00 Room:304 - Session 3C: Evaluation of QoS and Self-Healing Systems

Chair : Michel Cukier

- *Experimental Evaluation of the QoS of Failure Detectors on Wide Area Network* - L. Falai and A. Bondavalli
- *Probabilistic QoS Guarantees for Supercomputing Systems* - A. J. Oliner, L. Rudolph, R. K. Sahoo, J. E. Moreira, and M. Gupta
- *Ensembles of Models for Automated Diagnosis of System Performance Problems* - S. Zhang, I. Cohen, M. Goldszmidt, J. Symons, and A. Fox

15:30-17:00 Room:311+312 - Workshop 1: Dependable Software - Tools and Methods (continued)

[Models] Chair : Shoji Yuen

- *Execution Monitoring and Information Flow Properties* - Naoyuki Nagatou and Takuo Watanabe
- *Preconditions of properties described in CTL for statements manipulating pointers* - Yoshinori Tanabe, Toshinori Takai, Toshifusa Sekizawa and Koichi Takahashi
- (*) *Analyzing Behaviors in VDM Specifications by Focusing on User-defined Types* - Kengo Miyoshi, Satoru Hirachi, Shigeru Kusakabe, and Keijiro Araki

The short presentations, 20 minute talks, are marked as (*).

15:30-17:00 Room:313+314 - Fast Abstracts

Chair : Antonio Casimiro Costa (University of Lisbon, Portugal)

- *A Novel Recurrent Neural Network Controller for Dynamic Buffer Size Tuning to Provide More Reliable End-to-End Client/Server Interaction* - Wilfred W. K. Lin, Tharam S. Dillon, Allan K. Y. Wong
- *Fault Tolerant SCADA with CORBA on LANE ATM* - David Selvakumar, Chester Rebeiro, R Pitchiah
- *Communication-Efficient Implementation of Failure Detector Class $\diamond P$* - Mikel Larrea, Alberto Lafuente
- *Replication Buffering Relay Method: Storage-based Replication over Long Distances with No-data-loss for Disaster Recovery* - M.Kan, J.Yamato, Y.Kaneko, Y.Kikuchi
- *A Failure Rate Prediction Method for the Probabilistic Safety Assessment* - Ji-Young Kim, Dong-Young Lee, Joon Lyoo
- *Run Time Encoding of Function Pointers by Dynamic Linker* - Gyungho Lee, Changwoo Pyo, Tae-Jin Kim
- *An Evaluation of Mean Delay and Jitter for 802.11e WLAN* - Norifumi Ikeda, Hiroei Imai, Masahiro Tsunoyama, Ikuo Ishii
- *A Method of Software Reliability Assessment for Xfce Open Source Project* - Yoshinobu Tamura, Shigeru Yamada, Mitsuhiro Kimura
- *Automated Discovery of Buffer Overflow Vulnerabilities in Executable Software without Source-code* - J. Durães, H. Madeira
- *Describing Inner Data Structure Management in Mobile IPv6 Using Multi-Nodes Finite State Machine* - Y. Zhang
- *Extinction Time Distribution of Internet Worms in Stochastic Kill-Signal Model* - H. Okamura, H. Kobayashi, T. Dohi
- *Efficient Embedded Firewall for Communication Appliances* - S. Garg, N. Singh
- *A Reasoning Approach to Security Analysis* - Junichi Miura, Jingde Cheng
- *Cost Efficient and Dependable: CAN in Advanced Applications* - C. Berghem, H. Sivencrona

Thursday, June 30

08:00-08:30 DSN Registration

08:30-10:00 Room:303 - Session 4A: Detection and Adaptation

Chair : Jie Xu

- *A Distributed State Monitoring Service for Adaptive Application Management* - P. Murray
- *Definition and Specification of Accrual Failure Detectors* - X. Défago, P. Urbán, N. Hayashibara, and T. Katayama
- *The Effects of Algorithmic Diversity on Anomaly Detector Performance* - K. Tan and R. A. Maxion

08:30-10:00 Room:301 - Session 4B: FT Communications

Chair : Bojan Cukic

- *On Partial Protection in Groomed Optical WDM Mesh Networks* - J. Fang, M. Sivakumar, A. K. Somani, and K. M. Sivalingam
- *Resilient Routing Layers for Recovery in Packet Networks* - A. F. Hansen, T. Čičić, S. Gjessing, A. Kvalbein, and O. Lysne
- *Perturbation-Resistant and Overlay-Independent Resource Discovery* - S. Y. Ko and I. Gupta

08:30-10:00 Room:304 - Session 4C: Experimental Evaluation of Fault-Tolerance

Chair : João Gabriel Silva

- *A Framework for Node-Level Fault Tolerance in Distributed Real-time Systems* - J. Aidemark, P. Folkesson, and J. Karlsson
- *Experimental Dependability Evaluation of a Fail-Bounded Jet Engine Control System for Unmanned Aerial Vehicles* - J. Vinter, O. Hannius, T. Norlander, P. Folkesson, and J. Karlsson
- *TIBFIT: Trust Index Based Fault Tolerance for Arbitrary Data Faults in Sensor Networks* - M. Krasniewski, P. Varadharajan, B. Rabeler, S. Bagchi, and Y. C. Hu

08:30-10:00 Room:311+312 - Workshop 2: Hot Topics in System Dependability

[Distributed Systems]

- *The Virtue of Dependent Failures in Multi-Site Systems* - Flavio P. Junqueira, Keith Marzullo
- *A Root-Cause Localization Model for Large-Scale Systems* - Emre Kiciman, Lakshminarayanan Subramanian
- *The Role of Accountability in Dependable Distributed Systems* - Aydan R. Yumerefendi, Jeffrey S. Chase
- *Q&A Mini-panel* : Flavio Junqueira, Emre Kiciman, Aydan Yumerefendi

08:30-10:00 Room:313+314 - Fast Abstracts

Chair : François Taïani (Lancaster University, UK)

- *Performance and Performability Evaluations for Networked Humanoid Robot System* - T. Okuda, Y. Sago, I. Maeda, N. Ishi, T. Ideguchi, X. Tian
- *Code Comprehension and MBTI Type* - D. Greathead
- *Impact of Comprehensive Security Services on Grid Computing Performance* - S. Naqvi, M. Riguidel
- *Accessible Formal Verification for Safety-Critical Hardware Design* - J. Lach, S. Bingham, C. Elks, T. Lenhart, T. Nguyen, P. Salaun
- *Security Issues in Persistently Reactive Systems* - T. Endo, J. Miura, K. Nanashima, S. Morimoto, Y. Goto, J. Cheng
- *Detecting IIS Attacks Based on Neural-Network* - Shi-Jinn Horng, Pingzhi Fan, Yao-Ping Chou, Yen-Cheng Chang
- *A Multi-Faced Approach towards Spam-Resistible Mail* - Ming-Wei Wu, Yennun Huang, Sy-Yen Kuo
- *A Formal Method for Verifying Security Specifications Based on International Standard ISO/IEC 15408* - Shoichi Morimoto, Shinjiro Shigematsu, Jingde Cheng
- *How to Build a Dam: Fighting Application-Level DoS Attacks* - G. Badishi, A. Herzberg, I. Keidar
- *A Robust Service Discovery Approach for Hybrid Ad Hoc Networks* - Sung-Hee Lee, Young-Bae Ko
- *A Study on DATA Diversity for Safety-Related Open Network* - K.Miura, M.Sakai
- *Surviving Survivability Specifications* - L. Cloth, B.R. Haverkort
- *A Routing Protocol with Directional Antennas for Improving Robustness in Mobile Ad Hoc Networks* - Sung-Ho Kim, Young-Bae Ko

10:00-10:30 Coffee Break

10:30-12:00 Room:303 - Session 5A: Operating Systems and Mechanisms

Chair : Neeraj Suri

- *Cruz: Application-Transparent Distributed Checkpoint-Restart on Standard Operating Systems* - G. J. Janakiraman, J. R. Santos, D. Subhraveti, and Y. Turner
- *A Multi-Level Meta-Object Protocol for Fault-Tolerance in Complex Architectures* - F. Taïani, J.-C. Fabre, and M.-O. Killijian
- *Crash Data Collection: A Windows Case Study* - A. Ganapathi and D. Patterson

10:30-12:00 Room:301 - Session 5B: Networking

Chair : Elias P. Duarte, Jr.

- *Scalable and Robust WLAN Connectivity Using Access Point Array* - F. Guo and T.-c. Chiueh
- *Ring out Fault Tolerance. A New Ring Network for Superior Low-Cost Dependability* - B. Hall, K. Driscoll, M. Paulitsch, and S. Dajani-Brown
- *A System Demonstration of ST-TCP* - M. Marwah, S. Mishra, and C. Fetzer

10:30-12:00 Room:304 - Session 5C: Performance Evaluation of Networks and Protocols

Chair : Sy-Yen Kuo

- *Improving TCP Performance for Multihop Wireless Networks* - S. M. ElRakabawy, C. Lindemann, and M. Vernon
- *A Spatial Fluid-based Framework to Analyze Large-Scale Wireless Sensor Networks* - M. Gribaudo, C.-F. Chiasserini, R. Gaeta, M. Garetto, D. Manini, and M. Sereno
- *Are You Still There? -- A Lightweight Algorithm to Monitor Node Presence in Self-Configuring Networks --* - H. Bohnenkamp, J. Gorter, J. Guidi, and J.-P. Katoen

10:30-12:00 Room:311+312 - Workshop 2: Hot Topics in System Dependability (continued)

[Dependable Services]

- *Trusted Virtual Domains: Toward Secure Distributed Services* - John Linwood Griffin, Trent Jaeger, Ronald Perez, Reiner Sailer, Leendert van Doorn, Ramón Cáceres

- *Computational Risk Management for Building Highly Reliable Network Services* - Brent N. Chun, Philip Buonadonna, Chaki Ng
- *On the Challenge of Delivering High-Performance, Dependable, Model-Checked Internet Servers* - Anil Madhavapeddy, David Scott
- *Q&A Mini-panel* : Brent Chun, John Linwood Griffin, Anil Madhavapeddy

10:30-12:00 Room:313+314 - Fast Abstracts

Chair : Matti Hiltunen (AT&T Labs - Research, USA)

- *Comparing Fault Recovery Mechanisms for Superscalar Processors* - Toshinori Sato
- *Fault-Tolerant CMP Design Using a Write Cache Checker* - Elias Mizan, Marcos De Alba
- *Dependability Evaluation of Mobile Devices' System Software* - M. Zenha-Rela, M. Vieira, J. Cunha, J. Duraes
- *Performability Modeling for a Calendar Server* - Sarma Vempati, Dong Tang, Pedro Vazquez, Swami Nathan
- *Proactive Fault Manager for High Performance Computing* - Yawei Li, Zhiling Lan
- *Towards Replication of Web Services in WANs* - Jorge Salas, Francisco Perez-Sorrosal, Marta Patiño-Martínez, Ricardo Jiménez-Peris
- *Continuous Access to Remote Devices in the Presence of Device Migration* - Ryota Ozaki, Soichiro Hidaka, Kazuya Kodama, Katsumi Maruyama
- *Address Space Obfuscation to Tolerate Windows Code Injection Attacks* - Tufan Demir, Karl Levitt, Lynn Nguyen, Jeff Rowe
- *Proactive Problem Determination in Transaction-Oriented Applications* - S. Pertet, P. Narasimhan, A. Sailer, G. Kar
- *Epidemic Multicast with Optimal Node Selection in Ad-Hoc Networks* - R. Torres, V. Apte, S. Bagchi
- *Reliable Data Dissemination using Trust in Multi-hop Sensor Networks* - R. Khosla, Y. Cheng, S. Bagchi
- *Resource Fault Prediction for Fine-Grained Cycle Sharing* - X. Ren, S. Lee, S. Bagchi, R. Eigenmann
- *Overview of a New CNES Architectural EDAC Concept for High Speed Memory Protection* - M. Pignol
- *Challenges in Realizing Distributed Adaptive Dependability* - Jean-Charles Fabre, Priya Narasimhan

12:00-13:00 Room:Pacific - Lunch

13:00-15:00 Room:303 - Session 6A: Codes

Chair : David Taylor

- *A Data-Centric Approach to Checksum Reuse for Array-Intensive Applications* - G. Chen, M. Kandemir, and M. Karakoy
- *Small Parity-Check Erasure Codes - Exploration and Observations* - J. S. Plank, A. L. Buchsbaum, R. L. Collins, and M. G. Thomason
- *Using Erasure Codes Efficiently for Storage in a Distributed System* - M. K. Aguilera, R. Janakiraman, and L. Xu
- *Coverage and the Use of Cyclic Redundancy Codes in Ultra-Dependable Systems* - M. Paulitsch, J. Morris, B. Hall, K. Driscoll, E. Latronico, and P. Koopman

13:00-15:00 Room:301 - Session 6B: Critical Infrastructures Protection

Chair : Shambhu Upadhyaya

- *Authenticated System Calls* - M. Rajagopalan, M. Hiltunen, T. Jim, and R. Schlichting
- *Detecting Stealth Software with Strider GhostBuster* - Y.-M. Wang, D. Beck, B. Vo, R. Roussev, and C. Verbowski
- *Defeating Memory Corruption Attacks via Pointer Taintedness Detection* - S. Chen, J. Xu, N. Nakka, Z. Kalbarczyk, and R. K. Iyer
- *Checking Array Bound Violation Using Segmentation Hardware* - L.-c. Lam and T.-c. Chiueh

13:00-15:00 Room:304 - Session 6C: Markovian Models for Performance and Dependability

Chair : Boudewijn Haverkort

- *A Novel Approach for Fitting Probability Distributions to Real Trace Data with the EM Algorithm* - A. Thümmler, P. Buchholz, and M. Telek
- *Model Checking Markov Reward Models with Impulse Rewards* - L. Cloth, J.-P. Katoen, M. Khattri, and R. Pulungan
- *A Wavefront Parallelisation of CTMC Solution Using MTBDDs* - Y. Zhang, D. Parker, and M. Kwiatkowska
- *Lumping Matrix Diagram Representations of Markov Models* - S. Derisavi, P. Kemper, and W. H. Sanders

13:00-15:00 Room:311+312 - Workshop 2: Hot Topics in System Dependability (continued)

[Challenge Your Assumptions]

- *Why Traditional Storage Systems Don't Help Us Save Stuff Forever* - Mary Baker, Kim Keeton, Sean Martin
- *What Dependability for Networks of Mobile Sensors ?* - Carole Delporte-Gallet, Hugues Fauconnier, Rachid Guerraoui
- *Application Communities: Using Monoculture for Dependability* - Michael E. Locasto, Stelios Sidiroglou, Angelos D. Keromytis
- *TACID Transactions* - Marco Vieira, António C. Costa, Henrique Madeira
- *Q&A Mini-panel*: Mary Baker, António Costa, Rachid Guerraoui, Angelos Keromytis

13:00-15:00 Room:302 - Poster

15:10-22:00 - Excursion, cultural event and dinner cruise
Sankeien Garden, Noh Play, Dinner Cruise

Friday, July 1

08:00-08:30 DSN Registration

08:30-10:30 Room:301+302 - Panel : Dependability Benchmarking of Computing Systems

Panelists:

- Cristian Constantinescu (Intel Corp.)
- Henrique Madeira (University of Coimbra)
- Brendan Murphy (Microsoft Research)
- Karama Kanoun (LAAS-CNRS)
- Ira Pramanick (Sun Microsystems)
- Lisa Spainhower (IBM Corporation)

08:30-10:30 Room:311+312 - Workshop 3: Assurance of Networking Systems Dependability Service Level Agreements

Chair : Saida Benlarbi

- *Overview of the areas and topics of the workshop* - S. Benlarbi
- *Scalable and Resilient to Denial-of-Service Attacks Overlay Networks* - D.R. Avresky and Y. Varoglu

10:30-11:00 Coffee Break

11:00-12:30 Room:303 - Session 7A: Consensus

Chair : Xavier Défago

- *Fast Byzantine Consensus* - J.-P. Martin and L. Alvisi
- *A Hybrid and Adaptive Model for Fault-Tolerant Distributed Computing* - S. Gorender, R. Macêdo, and M. Raynal
- *Adaptive Indulgent Consensus* - L. Sampaio and F. Brasileiro

11:00-12:30 Room:301+302 - Session 7B: Hardware and Codesign

Chair : Antonio Casimiro

- *Microarchitecture-Based Introspection: A Technique for Transient-Fault Tolerance in Microprocessors* - M. K. Qureshi, O. Mutlu, and Y. N. Patt
- *Reversible Fault-Tolerant Logic* - P. O. Boykin and V. P. Roychowdhury
- *Co-design Based Approach to Improve Robustness in Networked Control Systems* - S. Kowshik, G. Baliga, S. Graham, and L. Sha

11:00-12:30 Room:304 - Session 7C: Experimental Microprocessor Evaluation

Chair : Arun Somani

- *Neutron SER Characterization of Microprocessors* - C. Constantinescu
- *Microprocessor Sensitivity to Failures: Control vs Execution and Combinational vs Sequential Logic* - G. P. Saggese, A. Vetteth, Z. Kalbarczyk, and R. K. Iyer
- *Engineering Over-Clocking: Reliability-Performance Trade-Offs for High-Performance Register Files* - G. Memik, M. H. Chowdhury, A. Mallik, and Y. I. Ismail

11:00-12:30 Room:311+312 - Workshop 3: Assurance of Networking Systems Dependability Service Level Agreements (continued)

Chair : Saida Benlarbi

- *Cluster-Based Load-Balanced Fault-Tolerant Beacon Vector Routing For Wireless Sensor Networks* - L. Demoracski and D.R. Avresky
- *Dependable Communication Using Multiple Network Paths* - Y. Kodama, T. Kudoh and S. Sekiguchi

11:00-12:30 Room:313+314 - Industry Session [II]

Chair : Tohru Kikuno (Osaka University, Japan)

- *A Dependable and Cost-Effective Vehicle Control Architecture for X-By-Wire Systems Based on Autonomous Decentralized Concept* - Kentaro Yoshimura, Kohei Sakurai, Yuichiro Morita, Nobuyasu Kanekawa, Kenichi Kurosawa, Yoshiaki Takahashi, Shigetoshi Sameshima, Akitoshi Shimura (Hitachi, Ltd.)
- *R3: Rate, Robustness, and Recovery - A Framework for Benchmarking System Availability* - Ji Zhu, James Mauro, Ira Pramanick (Sun Microsystems)
- *FT-JMS: An Open-source Fault Tolerant Java Messaging Service (JMS) Platform* - Liang-Kai Chu (ICE Technology Corporation), Yennun Huang (AT&T Labs), Sy-Yen Kuo (National Taiwan University)

12:30-13:30 Room:Pacific - Lunch

13:30-15:30 Room:303 - Session 8A: Dependability Modeling and Prediction

Chair : Felicita Di Giandomenico

- *H-RAFT - Heuristic Reachability Analysis for Fault Tolerance Protocols Modelled in SDL* - S. Böhm

- *Filtering Failure Logs for a BlueGene/L Prototype* - Y. Liang, Y. Zhang, A. Sivasubramaniam, R. Sahoo, J. Moreira, and M. Gupta
- *Design Time Reliability Analysis of Distributed Fault Tolerance Algorithms* - E. Latronico and P. Koopman
- *SoftArch: an Architecture Level Tool for Modeling and Analyzing Soft Errors* - X. Li, S. Adve, P. Bose, and J. Rivers

13:30-15:30 Room:301+302 - Session 8B: Intrusion Detection and Tolerance

Chair : William H. Sanders

- *ADEPTS: Adaptive Intrusion Response Using Attack Graphs in an E-Commerce Environment* - B. Foo, Y.-S. Wu, Y.-C. Mao, S. Bagchi, and E. Spafford
- *Neutralization of Errors and Attacks in Wireless Ad Hoc Networks* - C. Basile, Z. Kalbarczyk, and R. K. Iyer
- *Modeling and Automated Containment of Worms* - S. Sellke, N. Shroff, and S. Bagchi
- *Fatih: Detecting and Isolating Malicious Routers* - A. T. Mizrak, Y.-C. Cheng, K. Marzullo, and S. Savage

13:30-15:30 Room:304 - Session 8C: Replication and Checkpointing Protocol Evaluation

Chair : Brendan Murphy

- *Analysis of Probabilistic Trapezoid Protocol for Data Replication* - T. Suzuki, M. Ohara, M. Arai, S. Fukumoto, and K. Iwasaki
- *Testing the Dependability and Performance of Group Communication Based Database Replication Protocols* - A. Sousa, J. Pereira, L. Soares, A. Correia Jr., L. Rocha, R. Oliveira, and F. Moura
- *Model-Based Failure Analysis of Journaling File Systems* - V. Prabhakaran, A. C. Arpaci-Dusseau, and R. H. Arpaci-Dusseau
- *Modeling Coordinated Checkpointing for Large-Scale Supercomputers* - L. Wang, K. Pattabiraman, Z. Kalbarczyk, R. K. Iyer, L. Votta, C. Vick, and A. Wood

13:30-15:30 Room:311+312 - Workshop 3: Assurance of Networking Systems Dependability Service Level Agreements (continued)

Chair : Saida Benlarbi

- Round-table discussion about the two main topics: Estimation issues and Modeling issues of Assuring
- Converged Networking Systems
- Discussions of covered topics in work groups
- Gathering to compare feedback and identify common understanding, issues and directions of the topic
- Summary and concluding remarks

13:30-14:30 Room:313+314 - Industry Session [III]

Chair : Tohru Kikuno (Osaka University, Japan)

- *Dependable Digital Automatic Train Control System* - Masayuki Matsumoto (East Japan Railway Company)
- *Standard and Methodologies for Validation of Complex Railway Systems* - Amendola Arturo, Esposito Rosaria, Impagliazzo Leonardo, Marmo Pietro, Poli Fabio (Ansaldo Segnalamento Ferroviario S.p.A.)

14:30-15:00 Room:313+314 - Funding Opportunity Announcement

- *Funds from the US Air Force to researchers in Asia and Australia*
William Nace (Asian Office of Aerospace Research and Development)

15:30-16:00 Coffee Break

16:00-17:00 Business Meeting : IEEE Technical Committee on Fault-Tolerant Computing (All participants are invited.)

Social Events

Welcome Reception

There will be a welcome reception from 18:00 to 20:00 on Tuesday, June 28, 2005 at the Lounge, next to the Registration desk, on the 3rd floor of the PACIFICO YOKOHAMA Conference Center, the DSN site.

Excursion, Cultural Event and Dinner Cruise

On Thursday, June 30, 2005, we will make an excursion to Sankeien Garden by buses leaving the conference site at 15:10. We then will visit a Noh Theater in Yokohama to appreciate a world-heritage "Noh" play. After this cultural event, we will go on board at Yokohama International Port Terminal to enjoy Royal Wing dinner cruise in Yokohama harbor.

Sankeien Garden

Sankeien is the former residence of Hara Sankei (his real name was Hara Tomitaro), a businessman from Yokohama who made his fortune trading silk. He dismantled buildings of historic importance from places such as Kyoto and Kamakura and reconstructed them in this garden, which was opened to the public as "Sankeien" in 1906.

In the garden, whose surface extends to 175,000m², seventeen old buildings of high historic value are skillfully arranged in harmony with the seasonal changes of the natural scenery.

The Second World War caused great damage, and in 1953 the property was transferred from the Hara family to the care of the Sankeien Hoshokai Foundation. Restoration works were carried out, and five years later, Sankeien had nearly recovered its former appearance.



The Outer Garden --- The extension is the area that was made open to the general public in 1906. The three-storied Pagoda, relocated from Kyoto's Tomoyoji Temple, has been positioned as a landmark, and the extension's main attraction is its many seasonal flowers.

The inner Garden --- A space that compares to Katsura Detached Palace. Until its opening to the public in 1958, this area was the private garden of the Hara family. While the outer garden was created for the purpose of enjoying flowers, the inner garden is an elegant composition of old architecture. In particular, the landscape that includes Rinshunkaku, a pavilion built in the middle of the 17th century (early

Edo period) and that was long related to the Kishu branch of the Tokugawa family, is often compared with the world-famous Katsura Detached Palace in Kyoto.



Noh Play

A Rare Opportunity to See an Authentic Noh Play at a Traditional Noh Theater in Yokohama !

What is a Noh Play? --- It is a 600-year-old opera form of theater, which had been patronized by the warrior class in Japan. It has dancing, singing, chorus and music played by three different types of drums and a flute. Unlike western operas, all the musicians and chorus members appear on the stage with the Noh players. The background scenery of the Noh is always the same; the magnificent green pine tree. On the square Noh stage, which allows audience to watch not only from the front but also from the side, heroes and heroines of Noh plays travel hundreds of miles, and often times from the past, or from the world after to present, to tell their stories.

A huge amount of concentration on the players' part is obvious to see on the stage. The audience, however, also enjoy watching or feeling that concentration and when every player's role, including the chorus and musicians' all get integrated harmoniously with no delay, it is one of the splendid dynamics of quiet Noh play. Noh plays are beautiful to say the least. Beautiful silk kimonos with gorgeous embroideries and exotic masks, but most of all the dancer's posture is perfect all the time and at any angle so that you can take a picture of him any time from any angle.

HAGOROMO is the Noh Play you are going to see in Yokohama. It is a story about a goddess who left her special lobe on a pine tree on the beach. A young fisherman finds it and tries to leave with it. She begs him to return the lobe and she says she can't go back to the heaven without the lobe's magic power to fly. He says if it's such a nice lobe he wants to keep it as a treasure. The goddess cries quietly and looks up to the heaven sadly. Then the fisherman gives in and returns the lobe. The goddess dances beautifully expressing her joy and gratitude and flies away. Now don't miss the chance to see this beautiful Noh Play.



Local Information

Venue

The DSN Conference will be held at PACIFICO YOKOHAMA Conference Center

Duty Free Import

Personal effects and professional equipment can be brought into Japan duty free as long as their contents and quantities are deemed reasonable by the customs officer. You can also bring in 400 cigarettes, 500 grams of tobacco or 100 cigars; 3 bottles of alcoholic beverages; 2 ounces of perfume; and gifts and souvenirs whose total market price is less than 200,000 yen or its equivalent. There is no allowance for tobacco or alcoholic beverages for persons aged 19 years or younger. Strictly prohibited are firearms and other types of weapons, and narcotics.

Insurance

The organizer cannot accept responsibility for accidents that might occur. Delegates are encouraged to purchase travel insurance before leaving your home country. Insurance plans typically cover accidental loss of belongings, medical costs in case of injury or illness, and other possible risks of international travel.

Climate

The average temperature in Yokohama during the period of the congress ranges between 19-25 degrees Celsius.

Currency Exchange

Only Japanese yen (¥) is acceptable at regular stores and restaurants. Certain foreign currencies may be accepted at a limited number of hotels, restaurants and souvenir shops. You can buy yen at foreign exchange banks and other authorized money exchangers on presentation of your passport.

Traveler's Checks and Credit Cards

Traveler's checks are accepted only by leading banks and major hotels in principal cities, and the use of traveler's checks in Japan is not as popular as in some other countries. VISA, MasterCard, Diners Club, and American Express are widely accepted at hotels, department stores, shops, restaurants and nightclubs.

Tipping

In Japan, tips are not necessary anywhere, even at hotels and restaurants.

Electricity

Electric current is uniformly 100 volts, AC, throughout Japan, but with two different cycles: 50 in eastern Japan including Yokohama and Tokyo, and 60 in western Japan including Nagoya, Kyoto and Osaka. Leading hotels in major cities have two outlets of 100 and 220 volts but their sockets usually accept a two-leg plug only.

Shopping

Shops and other sales outlets in Japan are generally open on Saturdays, Sundays and national holidays as well as weekdays from 10:00 to 20:00. Department stores, however, are closed during one weekday, differing by store, and certain specialty shops may not open on Sundays and national holidays.

Registration Information

You can register securely online, via fax, or mail. Preferred registration is through the web. To register online, after you have read the below please visit On-line Registration Web Site (<http://www.dsn.org/>). You will be taken to a secure server when it is time to enter your personal and payment information.

The online registration will be closed at 24:00 JST of June 13. If the online registration is closed, please register on-site.

Registration of Authors

For each accepted paper, at least one author should register no later than the Camera-ready deadline (April 1). Otherwise, the paper will not be included in the Proceedings.

DSN Conference Registration Fees

Member:	66000 Yen
Non-Member:	84000 Yen
Emeritus:	36000 Yen
Student:	36000 Yen

DSN Conference Registration (Members, Non-Members, Emeritus) includes attendance to all DCCS and PDS sessions and Workshops (Wednesday - Friday), Tuesday Welcome Reception, Breaks, Luncheons, Conference Excursion, Proceedings, CD and the Supplemental Volume. Student Registration includes attendance to all DCCS and PDS sessions and Workshops (Wednesday - Friday), Tuesday Welcome Reception, Breaks, Luncheons, Proceedings, CD and the Supplemental Volume. Students may attend the Conference Excursion by buying tickets at 10000 Yen.

Additional Tickets for the Conference Excursion are available at 10000 Yen each (children under 12 are free) (it will not be possible to buy on-site additional tickets).

Tutorial Registration Fees

Advance (on or before **12pm JST Jun 13**)

Member 1 tutorial:	16000 Yen
2 tutorials:	29000 Yen
Non-Member 1 tutorial:	20000 Yen
2 tutorials:	36000 Yen

On-site

Member 1 tutorial:	20000 Yen
2 tutorials:	36000 Yen
Non-Member 1 tutorial:	25000 Yen
2 tutorials:	45000 Yen

Tutorial Registration includes the chosen tutorial(s), Tuesday Welcome Reception, Tuesday Breaks and Luncheon, and handouts.

Payment

All payments must be in Japanese Yen. Major currency cross rates can be checked at <http://finance.yahoo.com/currency?u> .

Credit cards are the preferred form of payment. No checks are accepted.

Bank transfers are an acceptable form of payment but are subject to an additional bank fee, and are not considered paid until received by our bank. These payments must be received by May 16 for advance registration, and by June 13 for late registration. If you are not sure your payment arrives by June 13, please register on-site.

Registration Confirmation

Written confirmation of registration will be sent via e-mail or fax from DSN2005 Registration Secretariat within one day of receiving your registration and payment. If you do not receive confirmation, please contact to DSN2005 Registration Secretariat DSN2005@pac.ne.jp.

Member, Emeritus and Student Discounts

To qualify for the discounted Member rates, you must be a member of the IEICE, IPSJ, IEEE or the IEEE Computer Society and include your membership number. Retired scientists are eligible for Emeritus discount rate. To qualify for the Student discount rate you must be a full time student and you must show your student ID at registration.

Registration via fax or mail

To register via fax or mail you can print out the Registration Form, add your payment information and send it to:

Proactive Inc.
DSN2005 Registration Secretariat
Tel: +81-78-366-5050
Fax: +81-78-366-5051
E-mail: DSN2005@pac.ne.jp
Address: Promena Kobe 16F, 1-8-1, Higashikawasaki-cho, Chuo-ku, Kobe 650-0044, Japan
Office hours: 9:00-17:00 (weekday only)

The deadline of registration is June 13, 2005. Registration form or payment received after this deadline may not be acknowledged or accepted, and may require processing and payment on-site. If you are not sure registration arrives in time, please register on-site.

To qualify for the advance registration discount, form and payment must be received by May 16. Registrations received after May 16 will be charged at the late/on-site rate.

On-site Registration

On-site registrants will pay the late registration fees. Credit cards are the preferred form of payment. No checks are accepted.

Cancellations and Substitutions

Cancellations and substitutions are allowed. However, full registration fees will be charged unless cancellation notice is sent and received before the deadline of June 13. A 5000 Yen handling fee will be applied to all cancellations. Fees will not be refunded after the cancellation deadline.

If you have registered online, you can also cancel the registration online. Otherwise, a letter from the (original) registrant on company letterhead clearly stating the registration information to be canceled or the conditions of the substitutions and the name of the replacement should be sent via fax or mail to DSN2005 Registration Secretariat (Fax number and address are shown above).

Visa requirement

Every foreign visitor entering Japan must have a valid passport. Visitors from countries whose citizens must have visas should apply to the Japanese consular office of diplomatic mission in their respective countries. Especially, if you are such a presenting author, please start the process to request a visa immediately. For further details, please contact your travel agent or the local consular office.

Note that letters of invitation to support visa application can only be sent to presenting authors who have paid their registration fees for DSN2005. Please send the request to DSN2005 Registration Secretariat via Fax or e-mail (Fax number and e-mail address are shown above) with a copy of your registration confirmation.

Questions

Please direct all registration related questions to DSN2005 Registration Secretariat or Tomohiro Yoneda, Registration Chair DSN 2005 .

Hotel Reservation

Please plan your trip as soon as possible and make early hotels reservations if you want to be sure to have what you asked for. Reservations should be made through On-line Hotel Reservation page (<http://www.dsn.org/>). You will be taken to a secure server when it is time to enter your personal and payment information.

Please be sure to make your reservations before 24:00 of Jun 13, 2005 JST (the earlier the better!).

Rooms at the following hotels have been reserved at the conference rates for DSN 2005. The rates are applied only to the bookings to the official travel agent and not applied to the direct request to the hotels.

1. InterContinental The Grand Yokohama

- Adjacent to the site
- 2 min. walk from Minatomirai Station

2. The Pan Pacific Hotel Yokohama

- 2 min. walk to the site
- 1 min. walk from Minatomirai Station

3. Yokohama Royal Park Hotel

- 5 min. walk to the site
- 3 min. walk from Minatomirai Station

4. Navios Yokohama

- 7 min. walk to the site
- 7 min. walk from Minatomirai Station

5. Yokohama Sakuragicho Washington Hotel

- 11 min. walk to the site
- In front of JR Sakuragicho Station

6. Breezbay Hotel

- 13 min. walk to the site
- 2 min. walk from JR Sakuragicho Station

More information can be seen in On-line Hotel Reservation page (<http://www.dsn.org/>).

Access from Narita Airport

1. InterContinental The Grand Yokohama
2. The Pan Pacific Hotel Yokohama
3. Yokohama Royal Park Hotel

There are airport bus services bound for these three hotels 6 times a day (departing from Narita Airport at 7:20/14:40/15:40/17:00/18:00/20:00 as of March 2005).

Travel time is about 120 minutes and the fare is JPY 3500 one way. If the departure times do not meet your flight schedule, you can take one of the other ways as below.

- 4. Navios Yokohama
 - 5. Yokohama Sakuragichio Washington Hotel
 - 6. Breezbay Hotel
- Other Hotels

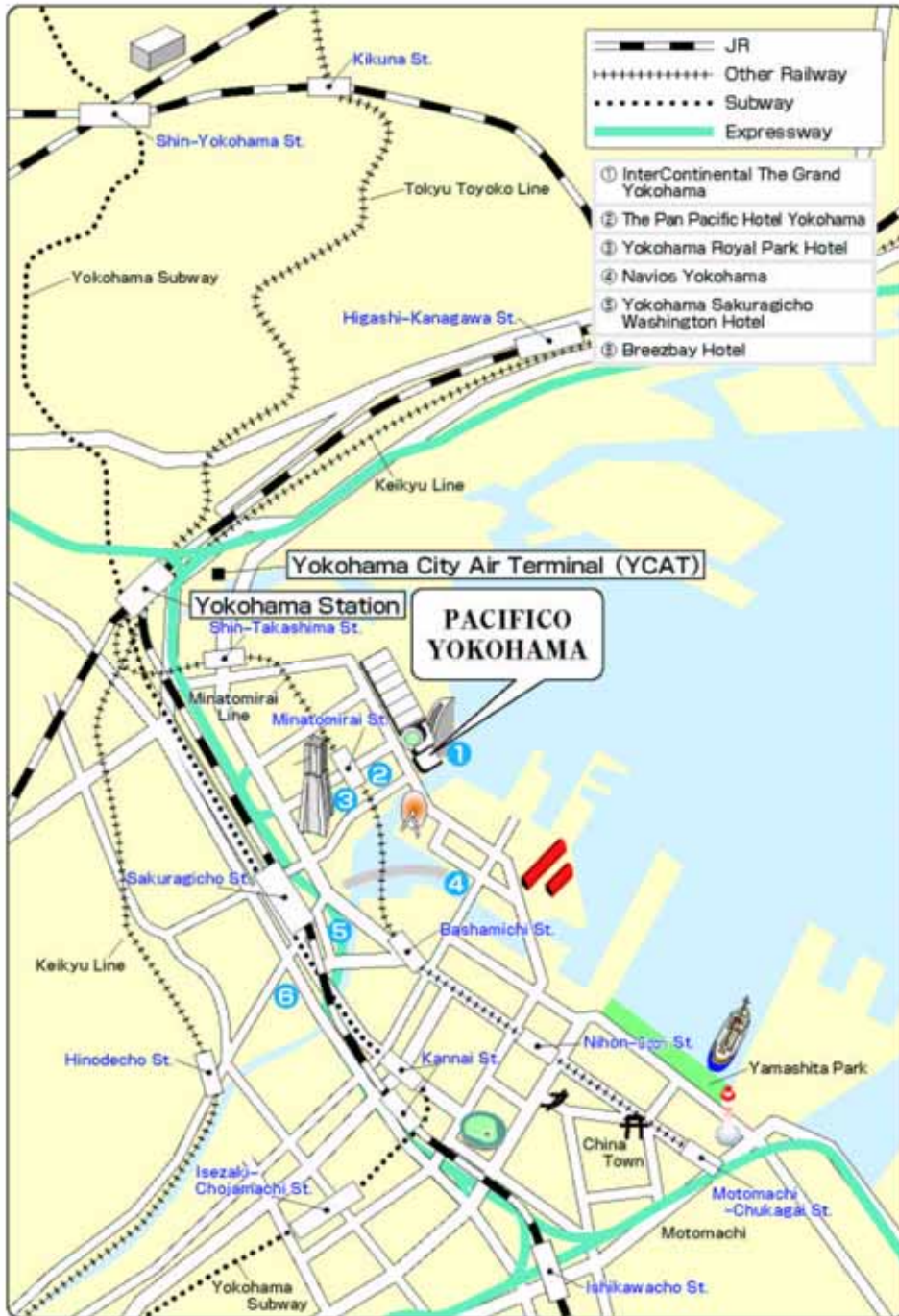
(1) Airport Bus

Take an airport bus bound for Yokohama City Air Terminal (YCAT), departing every 20-30 minutes. Travel time is about 90 minutes and the fare is JPY 3500 one way. Then, take a taxi to your hotel. It will take about 10-15 minutes at JPY 1500-2000 depending on the location of your hotel.

(2) Narita Express Train

Take a "Narita Express" limited-express train bound for Yokohama Station, departing every 60 minutes. Travel time is about 90 minutes and the fare is JPY 4180 one way. Then, take a taxi to your hotel. It will take about 10-15 minutes at JPY 1500-2000 depending on the location of your hotel.

Area Map



Official Travel Agent

JTB Corp. (JTB) has been appointed as the official travel agent for the conference and will handle hotel accommodations.

DSN-2005**Registration Form****Deadline: 13 Jun, 2005**

Yokohama, Japan, June 28 - July 1, 2005

Fax: +81-78-366-5051 e-mail: DSN2005@pac.ne.jp

Proactive Inc.

DSN 2005 Registration Secretariat

On-line registration is also possible via web site:
<http://www.dsn.org/index.html>
 *Do not register via web site after sending this form.

Please complete this form by checking the boxes where appropriate,
 and return it to the Registration Secretariat via e-mail or fax no later than the deadline.

1. NAME:
 Prof. Dr. Mr. Ms. First name _____ Family name _____
2. ORGANIZATION: _____**3. SHORT AFFILIATION for the badge (less than about 10 letters)** _____
4. ADDRESS: Organization Home _____
 _____ Postal code _____ Country _____

Phone: _____ Fax: _____ e-mail: _____

5. Do you want to be included in the ATTENDANCE LIST: Yes No**6. Do you want in the MAILING LIST:** Yes No**7. SPECIAL NEEDS FOR DIETARY:** None Vegetarian Others _____**8. AUTHOR:** No Yes **Paper Title:** _____**9. SPEAKER:** Yes No**10. REGISTRATION FEES:**

	Advance (on or before 5pm JST May 16)	Late/On-site (after 5pm JST May 16)	Amount
Member	<input type="checkbox"/> JPY 55000	<input type="checkbox"/> JPY 66000	JPY
Non-Member	<input type="checkbox"/> JPY 70000	<input type="checkbox"/> JPY 84000	JPY
Emeritus	<input type="checkbox"/> JPY 30000	<input type="checkbox"/> JPY 36000	JPY
Student	<input type="checkbox"/> JPY 30000	<input type="checkbox"/> JPY 36000	JPY
Additional Tickets for the Conference Excursion	<input type="checkbox"/> JPY 10000 (Children under 12 are free.) X ____ Ticket(s)		JPY
Total			JPY (a)

DSN Conference Registration (Members, Non-Members, Emeritus) includes attendance to all DCCS and PDS sessions and Workshops (Wednesday - Friday), Tuesday Welcome Reception, Breaks, Luncheons, Conference Excursion, Proceedings, CD and the Supplemental Volume.

Student Registration includes attendance to all DCCS and PDS sessions and Workshops (Wednesday - Friday), Tuesday Welcome Reception, Breaks, Luncheons, Proceedings, CD and the Supplemental Volume, but not Conference Excursion.

Please show your Student's ID card at Registration Desk.

11. For Members only
MEMBERSHIP number of IEICE, IPSJ, IEEE or the IEEE Computer Society: _____
12. For students only
Name of University: _____

Student ID number: _____

13. TUTORIAL REGISTRATION FEES:

		Advance (on or before 5pm JST Jun 13)	On-site	Amount (b)
Member	1 tutorial	<input type="checkbox"/> JPY 16000	<input type="checkbox"/> JPY 20000	JPY
	2 tutorials	<input type="checkbox"/> JPY 29000	<input type="checkbox"/> JPY 36000	JPY
Non-Member	1 tutorial	<input type="checkbox"/> JPY 20000	<input type="checkbox"/> JPY 25000	JPY
	2 tutorials	<input type="checkbox"/> JPY 36000	<input type="checkbox"/> JPY 45000	JPY

Tutorial Registration includes the chosen tutorial(s), Tuesday Welcome Reception, Tuesday Breaks and Luncheon, and handouts.

Tutorial June 28 A.M. (9:00-12:30)	Tutorial June 28 P.M. (13:30-17:00)
<input type="checkbox"/> A. Prof. Nitin Vaidya , Univ. of Illinois at Urbana-Champaign <i>"Mobile Ad Hoc Networks: Protocols and Security Issues"</i> , Room311	<input type="checkbox"/> C. Prof. David Gluch , Embry-Riddle Aeronautical Univ., Prof. Peter Feiler , CMU & Dr. Bruce Lewis , Army AMCOM SED <i>"Hands-On Experiences with the SAE Standard Architecture Analysis & Design Language (AADL) in High Dependability Design"</i> , Room311
	<input type="checkbox"/> E. Prof. Rachid Guerraoui , EPFL & Prof. Luis Rodrigues , Univ. Lisboa <i>"Reliable Distributed Programming"</i> , Room313

14. HOTEL ACCOMMODATIONS IN YOKOHAMA:

Hotel name	Room type	Period of stay	Amount of deposit
1st choice	<input type="checkbox"/> Single <input type="checkbox"/> Twin	Check-in _____	JPY15,000× ____ room(s) =JPY_____(c)
2nd choice		Check-out _____ (_____) nights	

15. GRAND TOTAL: (a) + (b) + (c) + JPY525 (handling charge)× ____ room(s) = JPY _____

16. PAYMENT:

Credit card: VISA MasterCard JCB Diners Club AMEX

Card number:

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Name of card holder: _____ Expiration date: _____ (month) / _____ (year)

Authorized signature: _____

Bank transfer:

Payment must be received by May 16 for the advance registration or by June 13 otherwise.

I(We) have remitted the above sum of total on _____ (date) by the name of _____ (name of remitter) through _____ (name of bank) to:

Overseas: Bank of Tokyo-Mitsubishi (SWIFT Code: BOTKJPJT) / Jinbocho Branch / Ordinary deposit

Account number: 2303890 / Account Name: DSN2005 Registration Chair Tomohiro Yoneda

Domestic: 東京三菱銀行 神保町支店 普通2303890 デイエスエヌ ニセンゴ ヨネダ トモヒロ (DSN2005 米田友洋)

17. DATE: _____ **SIGNATURE:** _____

(Application will become valid upon receipt of confirmation from Registration Secretariat (and JTB).)



Advance program rev.1.81

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