The International Conference on Dependable Systems and Networks (DSN 2006)

June 25-28, 2006 Sheraton Society Hill, Philadelphia, Pennsylvania, USA

Sponsored by: IEEE ifip

IEEE Computer Society Technical Committee on Fault-Tolerant Computing
IFIP WG 10.4 on Dependable Computing and Fault Tolerance

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The 2006 International Conference on Dependable Systems and Networks (DSN 2006), the leading conference on dependable computing since 1971, will be held in Philadelphia, Pennsylvania, USA, from June 25 to 28, 2006. Dependability is a vital attribute of computing and communication systems that pervade every aspect of our daily lives. As we are increasingly relying on reliable and secure functioning of these systems and networks, there have been increasing concerns about malicious exploitation of imperfect systems and networks as well as the traditional concerns for inadvertent or accidental faults, errors, and failures. The focus of this year's conference is on topics related to the question, "How can we make our computer systems and networks more dependable, reliable and trustworthy and thus **make our businesses, homeland and society more safe and secure**?"

The DSN 2006 program offers a keynote talk by a business and technology leader, research papers, industry sessions, panels, tutorials, workshops, fast abstracts, and a student forum. On behalf of the organizing committee, it is my pleasure to thank you for joining us in Philadelphia for DSN 2006.

Chandra Kintala
General Chair, DSN 2006

FINAL PROGRAM

Sessions A, B, C, and D are located in Rooms A, B, D, and E, respectively.

SUNDAY, JUNE 25

0730-0800	Tutorial Registration [Conference Lobby]			
0800-1200	Tutorial 1	Tutorial 2	Tutorial 3	
1200-1330	Lunch for Tutorial Registrants			
1330-1730			Tutorial 6	
1800-2000	Conference Registration & Welcome Reception			

MONDAY, JUNE 26

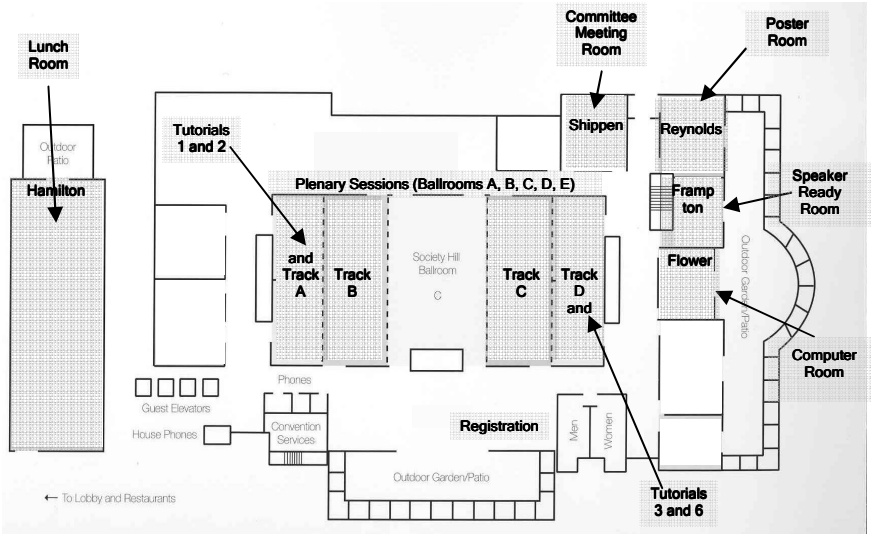
0800-0830	Conference Registration and Continental Breakfast [Lobby]			
0830-1000	Opening Remarks and Keynote Address [Ballroom]			
1000-1030	Coffee Break			
1030-1200	1A: DCCS	1B: PDS	1C:Industry	1D: WASR
1200-1330	Lunch Break [Hamilton Room]			
1330-1530	2A: DCCS	2B: PDS	2C: Industry	2D: WASR
1530-1600	Coffee Break			
1600-1730	3A: DCCS	3B: PDS	3C: Industry	3D: WASR

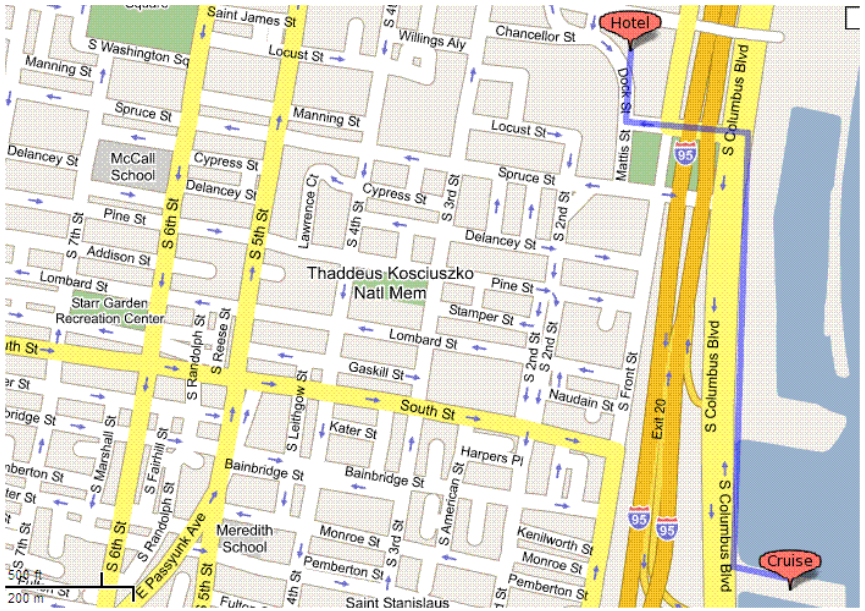
TUESDAY, JUNE 27

0800-0830	Conference Registration and Continental Breakfast [Lobby]			
0830-1000	Plenary Panel Session [Ballroom]			
1000-1030	Coffee Break			
1030-1200	4A: DCCS	4B: PDS	4C: Fast Abs	4D: WADS
1200-1330	Lunch Break [Hamilton Room]			
1330-1530	5A: DCCS	5B: DCCS	5C: Student	5D: WADS
1530-1600	Coffee Break			
1600-1730	6A: DCCS	6B: PDS	6C: Fast Abs	6D: WADS
1800-2100	Dinner Cruise			

WEDNESDAY, JUNE 28

0800-0830	Conference Registration and Continental Breakfast [Lobby]			
0830-1000	Plenary Panel Session [Ballroom]			
1000-1030	Coffee Break			
1030-1200	7A: DCCS	7B: PDS	7D: DCCS	7E: WEEDS
1200-1330	Lunch Break [Hamilton Room]			
1330-1530	8A: DCCS	8B: PDS	8D: Fast Abs	8E: WEEDS
1530-1600	Coffee Break			
1600-1730	IEEE TC Meeting [Ballroom]			





Very special thanks to the following sponsors of DSN 2006. Without their generous support we would not be able to provide such an exciting conference:

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TU Darmstadt, Germany

RCAST, University of Tokyo

SUNDAY, JUNE 25

0730-0800	Tutorial Registration [Lobby]		
0800-1200	Tutorial 1 [Room A1] **Reliability-Aware Microprocessor Architectures** *Sarita Adve and Pradip Bose, University of Illinois and IBM TJ Watson Research*	Tutorial 2 [Room A2] **Dependable Computing over Sensor Networks** *Shivkant Mishra, University of Colorado*	Tutorial 3 [Room E] **More Reliable Software Faster and Cheaper** *John Musa, Consultant*
1200-1330	Lunch for Tutorial Registrants		
1330-1730			Tutorial 6 [Room E] **Software Dependability: What You Didn't Learn in Kindergarten** *John C. Knight and Elisabeth Strunk, University of Virginia*
1800-2000	Conference Registration [Conference Lobby] & Welcome Reception [Hotel Lobby]		

MONDAY, JUNE 26

0800-0830	Conference Registration and Continental Breakfast [Lobby]			
0830-1000	Opening Remarks [Ballroom] Keynote Address, **"Delivering Dependability: A Moving Target",** *Dr. Ambuj Goyal, General Manger, Information Management Division, IBM*			
1000-1030	Coffee Break			
1030-1200	**DCCS** **Session 1A: Real-Time and Embedded Systems** Chair: Johan Karlsson Efficient High Hamming Distance CRCs for Embedded Networks, *Justin Ray and Philip Koopman* Memory-Conscious Reliable Execution on Embedded Chip Multiprocessors, *G. Chen, M. Kandemir and I. Kolcu* Static Analysis to Enforce Safe Value Flow in Embedded Control Systems, *Sumant Kowshik, Grigore Rosu and Lui Sha*	**PDS** **Session 1B: Dependable Storage** Chair: Zbigniew Kalbarczyk Dependability Analysis of Virtual Memory Systems, *Lakshmi N. Bairavasundaram, Andrea C. Arpaci-Dusseau and Remzi H. Arpaci-Dusseau* Assessment of the Effect of Memory Page Retirement on System RAS Against Hardware Faults, *Dong Tang, Peter Carruthers, Zuheir Totari and Michael Shapiro* Designing Dependable Storage Solutions for Shared Application Environments, *Shravan Gaonkar, Kimberly Keeton, Arif Merchant and William H. Sanders*	**Industry Session** **Session 1C** Moderator: Brendan Murphy The Other Side of Failure!, *Jim Johnson, Standish Group* Dependable Computing: A System Perspective, *Wendy Bartlett, Hewlett Packard*	**Workshop 1 on Applied Software Reliability (WASR)** **Session 1D:** Chair: Sachin Garg Reliable Multicast for Time-Critical Systems, *M. Balakrishnan and K. Birman* Reliability Requirements of Wireless Sensor Networks for Dynamic Structural Monitoring, *M. Cinque, D. Cotroneo, G. De Caro and M. Pelella* Reliability Requirements for Infrastructure System Sensor Networks, *M. Bigrigg* Panel: "Reliability Requirements for Emerging Applications"
1200-1330	Lunch Break [Hamilton Room]			

MONDAY, JUNE 26

1330-1530	**DCCS** **Session 2A: Safety-Critical Systems** Chair: Neeraj Suri The Startup Problem in Fault-Tolerant Time-Triggered Communication, *Wilfried Steiner and Hermann Kopetz* A Reconfigurable Generic Dual-Core Architecture, *Thomas Kottke and Andreas Steininger* A Dependable System Architecture for Safety-Critical Respiratory-Gated Radiation Therapy, *Gregory Sharp and Nagarajan Kandasamy* User Interface Defect Detection by Hesitation Analysis, *Robert W. Reeder and Roy A. Maxion*	**PDS** **Session 2B: Attack Prevention and Mitigation** Chair: Paulo Verissimo A Statistical Analysis of Attack Data to Separate Attacks, *Michel Cukier, Robin Berthier, Susmit Panjwani and Stephanie Tan* VoIP Intrusion Detection Through Protocol State Machines, *Hemant Sengar, Duminda Wijesekera, Haining Wang and Sushil Jajodia* Mitigating Active Attacks Towards Client Networks Using the Bitmap Filter, *Chun-Ying Huang, Kuan-Ta Chen and Chin-Laung Lei* Accurate and Automated System Call Policy-Based Intrusion Prevention, *Lap Chung Lam, Wei Li and Tzi-cker Chiueh*	**Industry Session** **Session 2C** Moderator: Ram Chillarege Panel: "Minimizing the Effects of Murphy's Law", *Siddhartha Alladi, Alladi Computing; Jeremy Winter, MSN; Fabrizio Petrini, Pacific National Lab; Robert Cline, Sun Gard; Ron Lesan, AOL; Wesley Story, Sprint*	**Workshop 1 on Applied Software Reliability (WASR)** **Session 2D** Chair: Yennun Huang Predicting Field Defects Based on Software Test Results, *V.B. Mendiratta and J.M. Souza* Providing Automated Detection of Problems in Virtualized Servers using Monitor framework, *G. Khanna, S. Bagchi, K. Beaty, A. Kochut and G. Ken* How the Hidden Hand Shapes the Market for Software Reliability, *K. Birman, C. Chandersekaran, D. Dolev and R. van Renesse* Model-Centric Development of Highly Available Software Systems, *R.W. Buskens and O.J. Gonzalez* Panel: "The Quest for Reliable Software: Paradigms and Factors Driving Industry"
1530-1600	Coffee Break			
1600-1730	**DCCS** **Session 3A: Architecture and Operating Systems** Chair: A. J. Kleinosowski Dynamic Verification of Memory Consistency in Cache-Coherent Multithreaded Computer Architectures, *Albert Meixner and Daniel J. Sorin* Automatic Instruction-Level Software-Only Recovery Methods, *Jonathan Chang, George A. Reis and David I. August* Exploring Fault-Tolerant Network-on-Chip Architectures, *Dongkook Park, Chrysostomos Nicopoulos, Jongman Kim, N. Vijaykrishnan and Chita R. Das*	**PDS** **Session 3B: Dependability Models** Chair: Boudewijn Haverkort BlueGene/L Failure Analysis and Prediction Models, *Yinglung Liang, Yanyong Zhang, Morris Jette, Anand Sivasubramaniam and Ramendra Sahoo* Performance Assurance via Software Rejuvenation: Monitoring, Statistics and Algorithms, *Alberto Avritzer, Andre Bondi, Michael Grottke, Kishor Trivedi and Elaine J. Weyuker* Automatic Recovery Using Bounded Partially Observable Markov Decision Processes, *Kaustubh R. Joshi, Matti A. Hiltunen, William H. Sanders and Richard D. Schlichting*	**Industry Session** **Session 3C** Moderator: Lisa Spainhower Panel: "Tomorrow's Technology: Friend or Foe?", *Brendan Murphy, Microsoft; Greg Astfalk, Hewlett Packard; Brent Miller, IBM; Erik Grimmelmann, SWN Communications*	**Workshop 1 on Applied Software Reliability (WASR)** **Session 3D** Chair: Ken Birman Big Gap from Academic Response to Industry's Demand for Optimized Engineering Efficacy, *C. H. Pham, F. Lin, N. Gupta and K. Ma* Be Good (Reliable) or Be Careful (Fault Tolerant), *H. Hecht* Integrating Software Reliability and Software Engineering in Education (or Software Reliability Begins in the Classroom), *L. Bernstein and C. Kintala* Closing the Gap in Failure Analysis, *B. Murphy, M. Garzia and N. Suri* Panel: "Closing the Gap between Academic Research and Industry Needs"
1730-1830	**Large Scale Experiments in Dependability: Defining a Research Agenda** Includes discussion of GENI (All participants are invited.)			

TUESDAY, JUNE 27

0800-0830	Conference Registration and Continental Breakfast [Lobby]
0830-1000	Plenary Panel Session [Ballroom] **"Coordinated, Malicious Cyber and Physical Attacks on National Infrastructures",** *Moderator: Dr. Jeffrey Voas, SAIC Corporation*
1000-1030	Coffee Break

TUESDAY, JUNE 27

<table>
<tr><td>1030-1200</td><td>DCCS
Session 4A: Byzantine Faults
Chair: Marcos K. Aguilera
Scaling Byzantine Fault-Tolerant Replication to Wide Area Networks, Yair Amir, Claudiu Danilov, Danny Dolev, Jonathan Kirsch, John Lane, Cristina Nita-Rotaru, Josh Olsen and David Zage
Optimal Resilience for Erasure-Coded Byzantine Distributed Storage, Christian Cachin and Stefano Tessaro
Lucky Read/Write Access to Robust Atomic Storage, Rachid Guerraoui, Ron R. Levy and Marko Vukolic</td><td>PDS
Session 4B: Attack Analysis
Chair: Bill Sanders
Using Attack Injection to Discover New Vulnerabilities, Nuno Neves, João Antunes, Miguel Correia, Paulo Veríssimo and Rui Neves
Assessing the Attack Threat due to IRC Channels, Robert Meyer and Michel Cukier
An Approach for Detecting and Distinguishing Errors versus Attacks in Sensor Networks, Claudio Basile, Meeta Gupta, Zbigniew Kalbarczyk and Ravi K. Iyer</td><td>Fast Abstracts
Session 4C
Chair: Bojan Cukic
OCD-FI: On-Chip Debug and Fault Injection, André Fidalgo, Gustavo Alves and José Ferreira
Defining Steady-State Service Level Agreeability using Semi-Markov Process, Ranjith Vasireddy and Kishor S Trivedi
Architectural Reconfiguration of Software Systems using Atomic Actions, Rogerio de Lemos
Optimistic Open Groups for Fault-Tolerant Replication, Wenbo Zhu and Murray Woodside</td><td>Workshop 2 on Architecting Dependable Systems (WADS)
Session 4D: Software Architectures and Dependability
Chair: Cristina Gacek
Keynote Talk, Professor Mary Shaw (Carnegie Mellon University)
Discussion</td></tr>
<tr><td></td><td colspan="4">Automatic Generation Techniques of Soft-Error-Detecting Logic Circuits with Low Delay and Area Overheads, Teruaki Sakata, Teppei Hirotsu, Hiromichi Yamada and Takeshi Kataoka
Verification of a Distributed Consensus Algorithm against Safety Properties with Model Checking, Takafumi Matsuo, Tatsuhiro Tsuchiya and Tohru Kikuno
BUFI: Fault Injector for Communication Buses, David de Andrés, Sara Blanc, Pedro Gil, Astrit Ademaj and Klaus Steinhammer
Safety and Reliability of Railway Signaling System Based on IP Network, Keiichi Ito, Takashi Kunifuji, Dai Watanabe and Tomonori Ushiyama
Failure-Aware Resource Selection for Grid Computing, Zhiling Lan and Yawei Li
Tunneling a Local Interconnect Network through a FlexRay Network, Kristian Ambrosch and Wilfried Kubinger</td></tr>
<tr><td>1200-1330</td><td colspan="4">Lunch Break [Hamilton Room]</td></tr>
<tr><td>1330-1530</td><td>DCCS
Session 5A: Consensus and Leader Election
Chair: Tohru Kikuno
One-Step Consensus with Zero-Degradation, Dan Dobre and Neeraj Suri
Consensus with Byzantine Failures and Little System Synchrony, Marcos K. Aguilera, Carole Delporte-Gallet, Hugues Fauconnier and Sam Toueg
Solving Atomic Broadcast with Indirect Consensus, Richard Ekwall and AndréSchiper
Eventual Leader Election with Weak Assumptions on Initial Knowledge, Communication Reliability, and Synchrony, Antonio Fernández, Ernesto Jiménez and Michel Raynal</td><td>DCCS
Session 5B: Intrusion Detection and Tolerance
Chair: Mohamed Kaaniche
Hotspots: The Root Causes of Non-Uniformity in Self-Propagating Malware, Evan Cooke, Z. Morley Mao and Farnam Jahanian
A Multi-Resolution Approach for Worm Detection and Containment, Vyas Sekar, Yinglian Xie, Michael K. Reiter and Hui Zhang
Honeypot-Aware Advanced Botnet Construction and Maintenance, Cliff C. Zou and Ryan Cunningham
Barbarians in the Gate: An Experimental Validation of NIC-Based Distributed Firewall Performance and Flood Tolerance, Michael Ihde and William H. Sanders</td><td>Student Forum
Session 5C
Chair: Christof Fetzer
Power-aware Fault Tolerance Compilation: Using Less Branches to Reduce Power Dissipation and Improve Performance, Gao Long
Increasing Data Resilience of Mobile Devices with a Collaborative Backup Service, Damien Martin-Guillerez
Behavior-Driven Testing of Windows Device Drivers, Constantin Sarbu
Revisiting Fletcher and Adler Checksums, Theresa Maxino
Intrusion Detection in Databases, José Fonseca
Towards Dynamically Reconfigurable Hard-Real-Time Communication for Embedded Mechatronic Systems, André Luiz de F. Francisco</td><td>Workshop 2 on Architecting Dependable Systems (WADS)
Session 5D: Fault Tolerance
Chair: Alexander Romanovsky
Invited Talk: The SAE Architecture Analysis and Description Language (AADL) Standard: A Basis for Architecture-Driven Embedded Systems Engineering, Joyce L Tokar (Pyrrhus Software)
An Evaluation of Fault Tolerant TCP-Splice Based Web Server Architectures, Manish Marwah, Jacob Delgado, Shivakant Mishra and Christof Fetzer
Idealised Fault Tolerant Architectural Element, Rogerio de Lemos
Fault-tolerant Smart Sensor Architecture for Integrated Modular Avionics, Stefan Schneele, Klaus Echtle, Josef Schalk</td></tr>
<tr><td></td><td colspan="4">Multidisciplinary Reliability Modeling for Sensor Network Requirements, Michael W. Bigrigg
A New Approach for Fault Tolerant and Secure Distributed Storage, Arun Subbiah
Dependable and Schedulable Online-Testing Framework for Real-Time Embedded Applications in CLI, Okehee Goh
Application-Transparent Distributed Checkpoint-Recovery for OpenSSI, Kernel-Level Single-System-Image Linux Clustering Platform, Aleksander Korzynski
Automatic Generation of Robustness and Security Properties from Program Source Code, Mithun Acharya</td></tr>
</table>

TUESDAY, JUNE 27

<table>
<tr><td>1530-1600</td><td colspan="4">Coffee Break</td></tr>
<tr><td>1600-1730</td><td>DCCS
Session 6A: Storage Systems
Chair: James Plank
HoVer Erasure Codes for Disk Arrays, James Lee Hafner
Storage Allocation in Unreliable Peer-to-Peer Systems, John A. Chandy
Reliability for Networked Storage Nodes, KK Rao, James Lee Hafner and Richard A. Golding</td><td>PDS
Session 6B: Measuring and Modeling
Chair: Michel Cukier
A Component-Level Path Composition Approach for Efficient Transient Analysis of Large CTMCs, Vinh V. Lam, Peter Buchholz and William H. Sanders
Evaluating the Performability of Systems with Background Jobs, Qi Zhang, Alma Riska, Erik Riedel, Ningfang Mi and Evgenia Smirni
A Contribution Towards Solving the Web Workload Puzzle, Katerina Goseva-Popstojanova, Fengbin Li, Xuan Wang and Amit Sangle</td><td>Fast Abstracts
Session 6C
Chair: Cristina Nita-Rotaru
Fault-Tolerant Algorithms on SoCs - A Case Study, Andreas Steininger, Matthias Függer, Ulrich Schmid and Gottfried Fuchs
When is the Right Time to Inject an Error?, Andréas Johansson, Constantin Sârbu and Neeraj Suri
Address Space Layout Permutation, Chongkyung Kil, Jinsuk Jun, Christopher Bookholt and Jun Xu
A Byzantine Resilient Distributed Position Service, Cristina Nita-Rotaru, Josh Olsen and David Zage</td><td>Workshop 2 on Architecting Dependable Systems (WADS)
Session 6D: Infrastructure for Dynamic Change
Chair: Rogerio de Lemos
Invited Talk: Dependability Services in the EASIS Software Platform, Martin Hiller (Volvo Technology Corporation)
Impact-Sensitive Framework for Dynamic Change-Management, Tudor Dumitras, Daniela Rosu, Asit Dan and Priya Narasimhan
Discussion
Wrap-up / Future Directions</td></tr>
<tr><td></td><td colspan="4">Reliability Analysis of Digital Control Equipment for Nuclear Power Plant, Ji-Young Kim, Dong-Young Lee and Joon Lyou
Simplified Automated Fault Injection (SAFI) - A Solution to Facilitate Unit Testing in Large Scaled Test Environment, Nilay Gupta and Christopher Hoang Pham
Error Detection in Service-Oriented Distributed Systems, Andrei Korostelev, Johan Lukkien and Jan Nesvadba
Challenges Related to the Development and Approval of Essential Systems Onboard Ships and Offshore Vessels, Torbjorn Skramstad and Lars Bratthall
On Exploiting Symmetry To Verify Distributed Protocols, Marco Serafini, Neeraj Suri and Péter Bokor
Locating File Processing Vulnerabilities, Nuno Ferreira Neves</td></tr>
<tr><td>1800-2100</td><td colspan="4">Dinner Cruise</td></tr>
</table>

WEDNESDAY, JUNE 28

0800-0830	Conference Registration and Continental Breakfast [Lobby]
0830-1000	Plenary Panel Session [Ballroom] **"Global Dependability Collaborations - Challenges and Successes",** *Moderator: Jaynarayan Lala, Raytheon*
1000-1030	Coffee Break

WEDNESDAY, JUNE 28

1030-1200	**DCCS** **Session 7A: Complex and Large Scale Systems** Chair: Elmootazbellah Elnozahy A Large-Scale Study of Failures in High-Performance-Computing Systems, *Bianca Schroeder and Garth A. Gibson* Tracking Probabilistic Correlation of Monitoring Data for Fault Detection and Isolation in Complex Systems, *Zhen Guo, Guofei Jiang, Haifeng Chen and Kenji Yoshihira* Efficiently Detecting All Dangling Pointer Uses in Production Servers, *Dinakar Dhurjati and Vikram Adve*	**PDS** **Session 7B: Multiple-Server Systems** Chair: Paul Ezhilchelvan Empirical and Analytical Evaluation of Systems with Multiple Unreliable Servers, *J. Palmer and I. Mitrani* R-Opus: A Composite Framework for Application Performability and QoS in Shared Resource Pools, *Ludmila Cherkasova and Jerry Rolia* Cost-Effective Configuration of Content Resiliency Services Under Correlated Failures, *Jinliang Fan, Dimitrios Pendarakis, Zhen Liu and Tianying Chang*	**DCCS** **Session 7D: VLSI** Chair: Cristian Constantinescu In-Register Duplication: Exploiting Narrow-Width Value for Improving Register File Reliability, *Jie Hu, Shuai Wang and Sotirios Ziavras* Run-Time Reconfiguration for Emulating Transient Faults in VLSI Systems, *David de Andrés, Juan Carlos Ruiz, Daniel Gil and Pedro Gil* CADRE: Cycle-Accurate Deterministic Replay for Processor Debugging, *Smruti Sarangi, Brian Greskamp and Josep Torrellas*	**Workshop 3 on Empirical Evaluation of Dependability and Security (WEEDS)** **Session 7D: Empirical Evaluation of DEPENDABILITY** Chair: Ioana Rus **Safety** Experience and Lessons Learned With Quantitative Safety and Dependability Assessment of Industrial Safety Critical Systems, *Carl R. Elks and Barry W. Johnson* **Fault Injection** A Field Data Study on the Use of Software Metrics to Define Representative Fault Distribution, *Regina Moraes, João Durães, Eliane Martins and Henrique Madeira* **Reliability** Empirical Testing of the Handling of a Reliability-Aware Storage Device, *Michael W. Bigrigg* Discussion
1200-1330	Lunch Break [Hamilton Room]			
1330-1530	**DCCS** **Session 8A: Networking** Chair: Farnam Jahanian Collecting and Analyzing Failure Data of Bluetooth Personal Area Networks, *Marcello Cinque, Domenico Cotroneo and Stefano Russo* Improving BGP Convergence Delay for Large-Scale Failures, *Amit Sahoo, Krishna Kant and Prasant Mohapatra* Secure Split Assignment Trajectory Sampling: A Malicious Router Detection System, *Sihyung Lee, Tina Wong and Hyong S. Kim* A General Framework for Scalability and Performance Analysis of DHT Routing Systems, *Joseph S. Kong, Jesse S. A. Bridgewater and Vwani P. Roychowdhury*	**PDS** **Session 8B: Distributed Algorithms** Chair: Michael Reiter High Throughput Uniform Total Order Broadcast for Cluster Environments, *Rachid Guerraoui, Ron R. Levy, Bastian Pochon and Vivien Quema* Improving Fault Resilience of Overlay Multicast for Media Streaming, *Guang Tan, Stephen A. Jarvis and Daniel P. Spooner* Randomized Intrusion-Tolerant Asynchronous Services, *Henrique Moniz, Nuno Ferreira Neves, Miguel Correia and Paulo Veríssimo* A Performance Study on the Signal-on-Fail Approach to Imposing a Total Order in the Streets of Byzantium, *Qurat-ul-Ain Inayat and Paul Devadoss Ezhilchelvan*	**Fast Abstracts** **Session 8C:** Chair: Saurabh Bagchi An Evolutionary Operational Profiles Approach for Integration Tests, *Maria de Fátima Mattiello-Francisco* Comparing Process and Thread Redundancy in CMP on Energy and Reliability, *Dakai Zhu and Hakan Aydin* Aspects Made Explicit for Safe Transactional Semantics, *Kevin Hoffman and Patrick Eugster* Automated Derivation of Application Aware Error Detectors using Static Analysis, *Karthik Pattabiraman, Zbigniew Kalbarczyk and Ravi K. Iyer* The Parsimonious Approach to Constructing Fault-Tolerant Protocols, *HariGovind V. Ramasamy, Christian Cachin, Adnan Agbaria and William H. Sanders* FPGA Implementation of the Illinois Reliability and Security Engine, *Peter F. Klemperer, Reza Farivar, Giacinto Paolo Saggese, Nithin Nakka, Zbigniew Kalbarczyk and Ravishankar K. Iyer* \ SPACEDIVE: A Distributed Intrusion Detection System for Voice-over-IP Environments, *Vinita Apte, Yu-Sung Wu, Saurabh Bagchi, Sachin Garg and Navjot Singh* Modeling Probabilistic Diagnosis Parameters, *Gunjan Khanna, Yu Cheng and Saurabh Bagchi* Modeling Cascading and Escalating Outages in Interdependent Critical Infrastructures, *Jean-Claude Laprie, Karama Kanoun and Mohamed Kaaniche* A Self-checking and Reconfigurable Framework for Application Reliability Exploiting Execution Characteristics, *Long Wang, Zbigniew Kalbarczyk and Ravi. Iyer* A Discussion of Performance Optimizations for Compiler-Based Buffer Overflow Instrumentation, *Timothy Tsai* A Mediator System for Improving Dependability of Web Services, *Yuhui Chen and Alexander Romanovsky*	**Workshop 3 on Empirical Evaluation of Dependability and Security (WEEDS)** **Session 8D: Empirical Evaluation of SECURITY** Chair: Michel Cukier Towards Security Evaluation based on Evidence Information Collection and Impact Analysis, *Reijo Savola and Juha Röning* Empirical Analysis and Statistical Modeling of Attack Processes based on Honeypots, *Mohamed Kaâniche, Eric Alata, Vincent Nicomette, Yves Deswarte and Marc Dacier* Can We Quantitatively Assess Security?, *Boudewijn R. Haverkort* Compromise Modes and Effects Analysis, *Bradley J. Wood, Rico R. Valdez and Justin, M. Parsley*

WEDNESDAY, JUNE 28

1530-1600	Coffee Break
1600-1730	**IEEE TC-FTC Business Meeting** [Ballroom] (All participants are invited.)

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Lisa Spainhower (IBM, USA)
Neeraj Suri (TU Darmstadt, Germany)
Robert Swarz (Mitre Corporation, USA)
Kishor Trivedi (Duke U., USA)
Paulo E. Veríssimo (U. of Lisbon, Portugal)

Dependable Computing and Communication Symposium (DCCS)

Program Chair: Lorenzo Alvisi (U. of Texas, USA)
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