



WELCOME!

Message from the General Chair:

Welcome to Boston and the **42nd Annual IEEE/IFIP International Conference on Dependable Systems and Networks!** This is the third time that the New England area has had the privilege of hosting this remarkable group of researchers, teachers, students, and practitioners in the science of producing dependable and secure systems.

Al Avizienis—who we will honor during DSN 2012 as one of the winners of the Jean Claude Laprie award—was chair of the first of our predecessor conferences, FTCS, in Pasadena in 1971, at which he prophetically stated that "...it seems certain that the International Symposium on Fault-Tolerant Computing will become a periodic event."

We have a rich program, consisting of 2 plenary addresses, including one by IEEE Piore award winner Professor Fred Schnieder, 4 workshops, 3 tutorials, 51 regular papers, 37 fast abstracts, 5 student forum papers, 6 posters, and 2 Birds-of-a-Feather sessions.

I want to express my deep gratitude to all of the organizers of the conference for their invaluable and tireless help, especially DSN Steering Committee Chair Neeraj Suri and Vice-Chair Rick Schlichting, Program Committee Chairs Phil Koopman and Michel Cukier, Local Arrangements Chair Pat Kreidl, Treasurer Tom Gannon, Publicity Chair Alan Wood, Publications Chair Bojan Cukic, Chuck Weinstock, Walt Heimerdinger, Zbigniew Kalbarczyk, Abdelmajid Khelil, Avi Mendelson, Aad van Moorsel, Gilles Muller, Cristina Nita-Rotaru, Etienne Rivière, Andreas Steininger, and Ann Tai. Many others are listed on the next page.



Bob Swarz, The MITRE Corporation
June 2012

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Mike Reiter, Univ. of North Carolina
Bill Sanders, Univ. of Illinois
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Paulo Verissimo, Univ. Lisbon
Chuck Weinstock, SEI/CMU

Workshop on Open Resilient human-aware Cyber-physical Systems (WORCS)

- Mohamed Kaàniche, LAAS-CNRS, Université de Toulouse, France
- Michael Harrison, Queen Mary U. London, UK
- Hermann Kopetz, Technical U. Vienna, Austria
- Daniel Siewiorek, CMU, USA

Workshop on Fault Tolerance for HPC at eXtreme Scale (FTXS)

- Nathan DeBardleben, Los Alamos National Laboratory
- Jon Stearley, Sandia National Laboratory
- Franck Cappello, INRIA and University of Illinois at Urbana Champaign

6th Workshop on Recent Advances in Intrusion Tolerance and resilience (WRAITS)

- Ilir Gashi, CSR, City University London, UK
- O. Patrick Kreidl, University of North Florida, USA

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Paul Townend (U. Leeds, UK)
Marko Vukolic (Eurecom, France)
Youtao Zhang (U. Pittsburgh, USA)
Lidong Zhou (Microsoft Research, China)

Tutorial: Tool Supported Model-Based Safety Analysis

- Frank Ortmeier, Otto-von-Guericke University

Tutorial: From Reliable to Secure Distributed Programming

- Christian Cachin IBM Research -Zurich, Switzerland

Tutorial: Software Fault Injection for the Assessment of Critical Systems

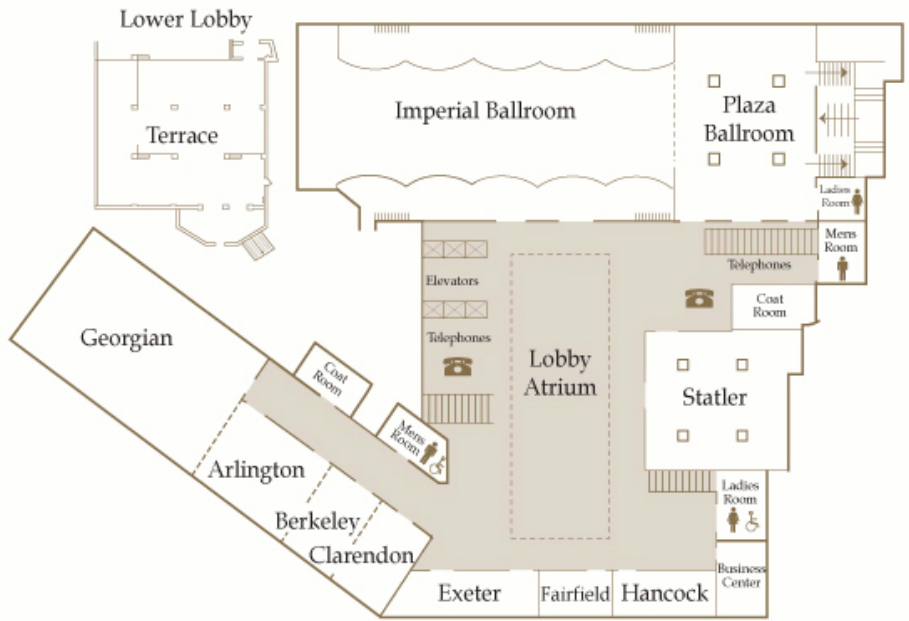
- Domenico Cotroneo and Roberto Natella, Università degli Studi di Napoli Federico II

PDS Program Committee

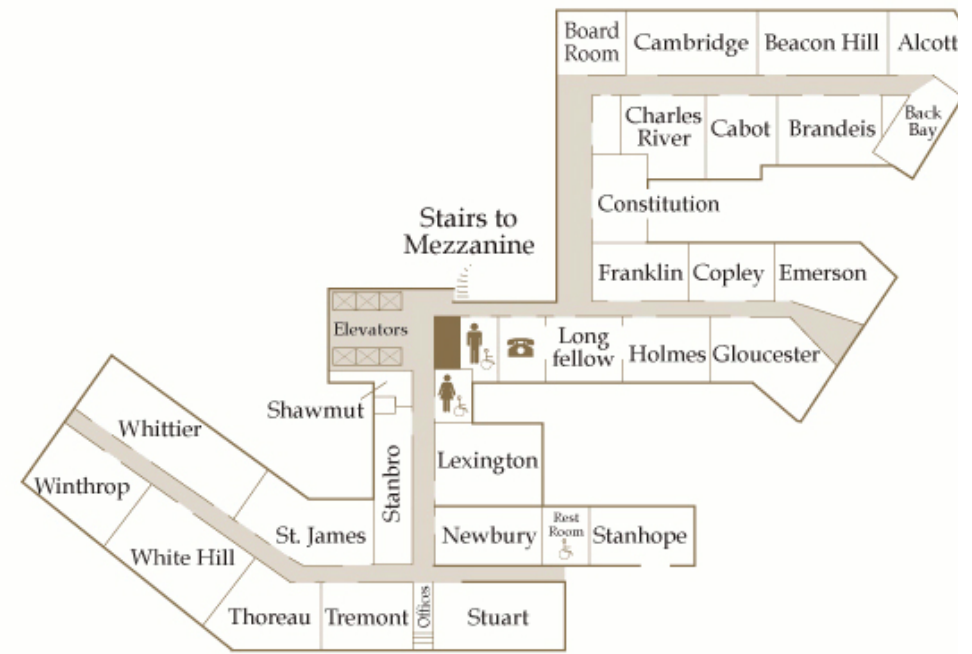
Aad Van Moorsel (Newcastle University, UK)
Amit Paradar (I.B.M. Thomas Watson Research Center, USA)
Andrea Bondavalli (University of Florence, Italy)
Ann Tai (WW Technology Group, USA)
Arun Somani (Iowa State U., USA)
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Miguel Correia (Univ. of Lisbon, Portugal)
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Susanna Donatelli (University of Torino, Italy)
Tadashi Dohi (Hiroshima University, Japan)
Tzicker Chiueh (Stony Brook University, USA)
Vana Kalogeraki (Athens University of Economics & Business, Greece)
Wenke Lee (Georgia Institute of Technology, USA)
Xinyuan Wang (George Mason University, USA)

The Second International Workshop on Dependability of Clouds, Data Centers and Virtual Machine Technology (DCDV)

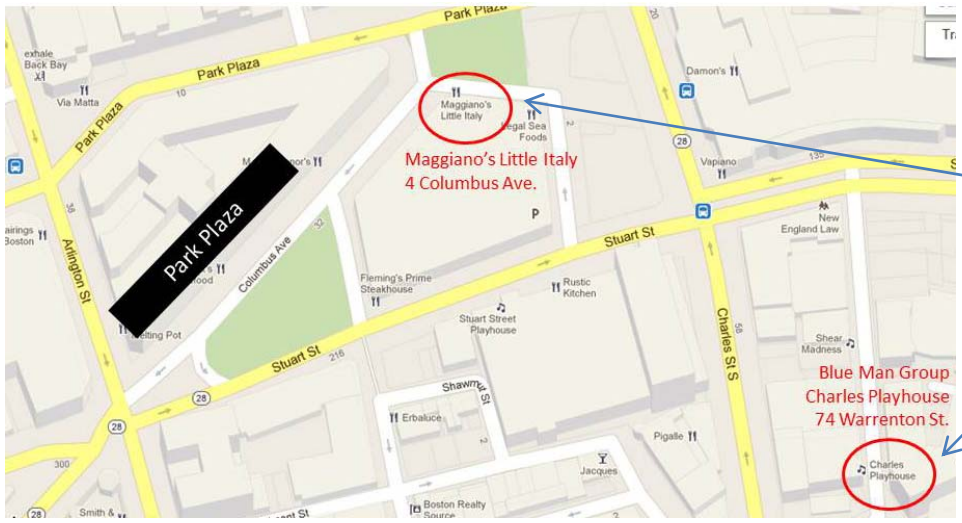
- Jogesh K. Muppala, HK Univ. of Sci. and Tech., Hong Kong
- Matti Hiltunen, AT&T Labs-Research, USA
- Robert Stroud, Adelard LLP, UK
- Roy Campbell, UIUC, USA



MEZZANINE FLOOR



4th FLOOR



Information about the Banquet and “Blue Man Group”

(see map at left)

The banquet is at *Maggiano's Little Italy*, 4 Columbus Avenue. Beverage service begins at 5:00 p.m. and dinner will be served promptly at 5:30 p.m.

After dinner, we will take the short walk to the Charles St. Playhouse at 74 Warrenton St., for a performance of “Blue Man Group.” Please arrive by 7:30. The show begins at 8:00 p.m. **Remember to bring the ticket provided in your welcome packet.**

MONDAY, JUNE 25th

8:30-12:00	<p>Workshop 1 (all day) WHITE HILL ROOM (4th FLOOR) WORCS Open, Resilient, Human-Aware Cyber-Physical Systems</p> <p>Breaks at 10:00 and 15:00 Lunch at 12:00 (Georgian Room)</p>	<p>Workshop 2 (all day) BERKELEY/CLARENDON ROOMS FTXS Fault-Tolerance for HPC at Extreme Scale</p> <p>Breaks at 10:00 and 15:00 Lunch at 12:00 (Georgian Room)</p>	<p>Workshop 3 (all day) ARLINGTON ROOM WRAITS Recent Advances on Intrusion Tolerance and Resilience</p> <p>Breaks at 10:00 and 15:00 Lunch at 12:00 (Georgian Room)</p>	<p>Workshop 4 (all day) STATLER ROOM DCDV Dependability of Clouds, Data Centers, and Virtual Machine Technology</p> <p>Breaks at 10:00 and 15:00 Lunch at 12:00 (Georgian Room)</p>	<p>Tutorial 1 CAMBRIDGE ROOM (4TH FLOOR) Tool-Supported Model-Based Safety Analysis</p> <p>Break at 10:00</p>	
13:30-17:00					<p>Tutorial 3 CAMBRIDGE ROOM (4TH FLOOR) Software Fault Injection for the Assessment of Critical Systems</p> <p>Break at 15:00</p>	<p>Tutorial 2 BEACON HILL RM (4TH FLOOR) From Reliable to Secure Distributed Programming</p> <p>Break at 15:00</p>
18:30-20:00	<p>WELCOME RECEPTION (GEORGIAN ROOM)</p>					

TUESDAY, JUNE 26th

8:30-10:30	PLENARY SESSION KEYNOTE ADDRESS BY DR. JULIAN M. GOLDMAN (GEORGIAN ROOM)	
10:30-11:00	<i>Morning Break</i>	
11:00-12:30	DCCS-1 DEPENDABILITY ASSESSMENT ARLINGTON ROOM <i>Session Chair: Elmootazbellah Elnozahy</i> Instrumenting AUTOSAR for Dependability Assessment: A Guidance Framework <i>Thorsten Piper, Stefan Winter, Paul Manns, and Neeraj Suri</i> Binary Mutation Testing Through Dynamic Translation <i>Markus Becker, Christoph Kuznik, Mabel Mary Joy, Tao Xie, and Wolfgang Müller</i> DS-Bench Toolset: Tools for Dependability Benchmarking with Simulation and Assurance <i>Hajime Fujita, Yutaka Matsuno, Toshihiro Hanawa, Mitsuhsa Sato, Shinpei Kato, and Yutaka Ishikawa</i>	PDS-1 NETWORKS BERKELEY/CLARENDON ROOMS <i>Session Chair: Peter Kemper</i> Multi-Ring Paxos <i>Parisa Marandi, Marco Primi and Fernando Pedone</i> Adaptive Algorithms for Diagnosing Large-Scale Failures in Computer Networks <i>Srikar Tati, Bong Jun Ko, Guohong Cao, Ananthram Swami, and Thomas La Porta</i> Mitigating the Impact of Ambient Noise on Wireless Mesh Networks Using Adaptive Link-Quality-based Packet Replication <i>Jesús Frigal, Juan-Carlos Ruiz, David de Andrés, and Antonio Bustos</i>
12:30-14:00	<i>Luncheon (Georgian Room)</i>	
14:00-15:30	DCCS-2 STORAGE ARLINGTON ROOM <i>Session Chair: James Plank</i> Practical Scrubbing: Getting to the bad sector at the right time <i>George Amvrosiadis, Alina Oprea, and Bianca Schroeder</i> Robust Data Sharing with Key-Value Stores <i>Cristina Basescu, Christian Cachin, Ittay Eyal, Robert Haas, Alessandro Sorniotti, Marko Vukolic and Ido Zachevsky</i> A Framework for Efficient Evaluation of the Fault Tolerance of Deduplicated Storage Systems <i>Eric Davis Rozier and William Sanders</i>	PDS-2 FAULT INJECTION BERKELEY/CLARENDON ROOMS <i>Session Chair: Robin Berthier</i> Error Injection-based Study of Soft Error Propagation in AMD Bulldozer Microprocessor Module <i>Cristian Constantinescu, Mike Butler, and Chris Weller</i> Understanding Soft Error Propagations Using Efficient Vulnerability-Driven Fault Injection <i>Xin Xu and Man-Lap Li</i> Characterization of Error Resiliency of Power Grid Substation Devices <i>Kuan-Yu Tseng, Daniel Chen, Zbigniew Kalbarczyk, and Ravishankar Iyer</i>
15:30-16:00	<i>Afternoon Break</i>	

16:00-17:30	<p><u>DCCS-3 MONITORING & DIAGNOSIS</u> ARLINGTON ROOM <u>Session Chair: Paul Townend</u> Flexible and Efficient Instruction-Grained Run-Time Monitoring <i>Daniel Deng and Edward Suh</i> Automatic Fault Characterization via Abnormality-Enhanced Classification <i>Greg Bronevetsky, Ignacio Laguna, Saurabh Bagchi, and Bronis R. de Supinski</i> Draco: Statistical Diagnosis of Chronic Problems in Large Distributed Systems <i>Soila Pertet Kavulya, Kaustubh Joshi, Matti Hiltunen, Scott Daniels, Rajeev Gandhi, and Priya Narasimhan</i></p>	<p><u>PDS-3 PERFORMANCE I</u> BERKELEY/CLARENDON ROOMS <u>Session Chair: Susanna Donatelli</u> Model-driven Consolidation of Java Workloads on Multicores <i>Danilo Ansaloni, Lydia Y. Chen, Evgenia Smirni, and Walter Binder</i> Finite Horizon Analysis of Infinite CTMDPs <i>Peter Buchholz</i> Toward Comprehensive and Accurate Simulation Performance Prediction of Parallel File Systems <i>Miguel Erazo, Ting Li, Jason Liu, and Stephan Eidenbenaz</i></p>	<p><u>FAST ABSTRACTS I</u> STATLER ROOM <u>Session Chair: Timothy Tsai</u> Accuracy Improvement of Wavelet Shrinkage Estimation for Software Reliability Assessment <i>Xiao XIAO and Tadashi Dohi</i> Security in presence of aggressive VMM optimizations on Embedded Power Architecture Platforms <i>Aashish Mittal, Dushyant Bansal, Sorav Bansal, and Varun Sethi</i> Fraud Detection Approach in a Mobile Wallet System <i>Santonu Sarkar and Neminath Hubballi</i> Techniques and Issues in Agent-Based Modeling Validation <i>Laura L. Pullum and Xiaohui Cui</i> Enhancing Control-Flow Integrity of Smartphone Platform with Program Counter Encoding Compiler <i>Yongsuk Lee and Gyungho Lee</i> Adaptive Monitoring to Detect Intrusions in Critical Servers <i>Joao Antunes and Nuno Neves</i> Predicting Cloud Failures Based on Anomaly Signal Spreading <i>Felix Salfner and Peter Troger</i> CBASS: Cross-platform Binary Automated Symbolic-execution System <i>Lixin Li, Xing Li, and James E. Just</i> Low Cost Compaction Circuits for Analog-to-Digital Converters Testing <i>Vadim Geurkov and Lev Kirischian</i> Methodology for a Security Audit of ERTMS <i>Robert Stroud and Ilir Gashi</i></p>
18:00-19:30	<p><u>BIRDS OF A FEATHER I</u> ARLINGTON ROOM <u>Cloud Computing Resilience in Practice: Harder than it Looks</u> <i>Paulo Verissimo, Alysson Bessani, and Marcelo Pasin</i></p>	<p><u>BIRDS OF A FEATHER II</u> BERKELEY/CLARENDON ROOMS <u>Virtualization in Mixed-Criticality Systems</u> <i>Varun Sethi and Michael Paulitsch</i></p>	

WEDNESDAY, JUNE 27th

8:30-10:00	<p><u>DCCS-4 DISTRIBUTED SYSTEMS</u> ARLINGTON ROOM <u>Session Chair:</u> John Knight</p> <p>Scalable Deferred Update Replication <i>Daniele Sciascia, Fernando Pedone and Flavio Junqueira</i></p> <p>Latent Fault Detection in Large Scale Services <i>Moshe Gabel, Assaf Schuster, Ran Gilad-Bachrach, and Nikolaj Bjorner</i></p> <p>Keep Net Working - On a Dependable and Fast Networking Stack <i>Tomas Hruby, Dirk Vogt, Herbert Bos, and Andrew S. Tanenbaum</i></p>	<p><u>PDS-4 RELIABILITY</u> BERKELEY/CLARENDON ROOMS <u>Session Chair:</u> Mohamed Kaâniche</p> <p>A Cost-based Heterogeneous Recovery Scheme for Distributed Storage Systems with RAID-6 Codes <i>Yunfeng Zhu, Patrick P. C. Lee, Liping Xiang, Yinlong Xu and Lingling Gao</i></p> <p>A new symbolic approach for network reliability analysis <i>Marco Beccuti, Andrea Bobbio, Giuliana Franceschinis, and Roberta Terruggia</i></p> <p>A Study of Soft Error Consequences in Hard Disk Drives <i>Timothy Tsai, Nawanol Theera-Ampornpunt, and Saurabh Bagchi</i></p>	<p><u>FAST ABSTRACTS II</u> STATLER ROOM <u>Session Chair:</u> Bojan Cukic</p> <p>Empirical Study of Performance of Virtualized Network IO with Hardware Assistance: Case Study specific to SR-IOV on Xen <i>Rajeshwari Ganesan, Geetika Goel, and Naveen Chandra Tewari</i></p> <p>Formal Engineering of Resilient Systems: Achievements and Challenges <i>Elena Troubitsyna and Alexander Romanovsky</i></p> <p>Injecting Machine Check Errors to Explore Dependability Issues of Multicore Systems <i>Anna Lanzaro, Antonio Pecchia, Marcello Cinque, Domenico Cotroneo, Ricardo Barbosa, and Nuno Silva</i></p> <p>A DBMS Framework for Diagnosability Analysis of Discrete Event Systems <i>Mohamed Ghazel, Florent Peres, and Atef Belhaj</i></p> <p>Power-Trace Profiler: Profiling Power Consumption in Android Applications <i>Jean McIntyre and Peter Kemper</i></p> <p>Diversity with AntiVirus Products: Additional Empirical Studies <i>Illir Gashi, Vladimir Stankovic, Michel Cukier, and Bertrand Sobesto</i></p> <p>Performance Evaluation of Cloud Computing in PaaS Environments <i>Hiroyuki Okamura, Kenichi Shigeokaz, Koichiro Yamasakiz, Tadashi Dohi and Hiroyuki Kiharaz</i></p> <p>A Hybrid Sensitivity Analysis Approach for Agent-based Disease Spread Models <i>Laura L. Pullum and Xiaohui Cui</i></p> <p>Router-Initiated Rapid and Smart Network Disaster Management Using Software-Defined Networking <i>Sejun Song, Baek-Young Choi, and Changho Choi</i></p>
10:00-10:30	<i>Morning Break</i>		

10:30-12:00	<p><u>DCCS-5 ERROR CODING & SAFETY</u> ARLINGTON ROOM <u>Session Chair:</u> Antonio Casimiro</p> <p>Heuristics for Optimizing Matrix-Based Erasure Codes for Fault-Tolerant Storage Systems <i>James Plank, Catherine Schuman and Devin Robison</i></p> <p>Algorithmic Approaches to Low Overhead Fault Detection for Sparse Linear Algebra <i>Joseph Sloan, Rakesh Kumar, Greg Bronevetsky and Tzanio Kolev</i></p> <p>Perspectives on Software Safety Case Development for Unmanned Aircraft <i>Ewen Denney, Ganesh Pai and Ibrahim Habli</i></p>	<p><u>PDS-5 SECURITY I</u> BERKELEY/CLARENDON ROOMS <u>Session Chair:</u> Mohammad Zulkernine</p> <p>Scalable Optimal Countermeasure Selection using Implicit Enumeration on Attack Countermeasure Trees <i>Arpan Roy, Dong-Seong Kim and Kishor Trivedi</i></p> <p>Security Metric Elicitation in Power Grid Critical Infrastructures by Observing System Administrators' Responsive Behavior <i>Saman A. Zonouz, Amir Houmansadr and Parisa Haghani</i></p> <p>A Time-Efficient Approach to Cost-Effective Network Hardening Using Attack Graphs <i>Massimiliano Albanese, Sushil Jajodia and Steven Noel</i></p>	<p><u>POSTER SESSION (EXETER FOYER)</u></p> <p>Demonstration of Intercloud Storage Toolkit <i>Christian Cachin, Alessandro Sorniotti, and Marko Vukolic</i></p> <p>Evaluation of Scalable Event Analysis Platform <i>Fyodor Yarochkin, Yennun Huang, and Sy-Yen Kuo</i></p> <p>Functional Safety Enhancement using DART Technology for Dependable VLSIs <i>Kazumi Hatayama, Yasuo Sato, Michiko Inoue, Tomokazu Yoneda, Yuta Yamato, Seiji Kajihara, Yukiya Miura, and Satoshi Ohtake</i></p> <p>A Study on the Scope of Error Propagation in Linux <i>Takeshi Yoshimura, Hiroshi Yamada, Kenji Kono</i></p> <p>Scalable Detection of Anomalous Parallel Tasks with AutomaDeD <i>Ignacio Laguna, Saurabh Bagchi, Bronis R. de Supinski, Todd Gamblin, Martin Schulz, and Dong H. Ahn</i></p> <p>Library-based Algorithmic Fault Tolerance for Scientific Applications <i>Sui Chen, Lu Peng, Greg Bronevetsky, and Marc Casas-Guix</i></p>
12:00-13:30	<i>Luncheon (Georgian Room)</i>		
13:30-15:00	<p><u>DCCS-6 SECURITY</u> ARLINGTON ROOM <u>Session Chair:</u> Doug Blough</p> <p><u>Carter Award Winner:</u> Taming Mr Hayes: Mitigating Signaling Based Attacks on Smartphones <i>Collin Mulliner, Steffen Liebergeld, Matthias Lange, and Jean-Pierre Seifert</i></p> <p>A Cross-Layer Approach for IP Network Protection <i>Qiang Zheng, Jing Zhao, and Guohong Cao</i></p> <p>Epiphany: A Location Hiding Architecture for Protecting Critical Services from DDoS Attacks <i>Vamsi Kambhampati, Christos Papadopoulos and Daniel Massey</i></p>	<p><u>PDS-6 DATA ANALYSIS</u> BERKELEY/CLARENDON ROOMS <u>Session Chair:</u> Kaustubh Joshi</p> <p>Assessing Time Coalescence Techniques for the Analysis of Supercomputer Logs <i>Catello Di Martino, Marcello Cinque and Domenico Cotroneo</i></p> <p>Optimization of Data Collection Strategies for Model-Based Evaluation and Decision-Making <i>Robert Cain and Aad van Moorsel</i></p> <p>Filtering log data: finding the needles in the haystack <i>Li Yu, Ziming Zheng, Zhiling Lan, Terry Jones, Jim Brandt, and Ann Gentile</i></p>	
15:00-15:30	<i>Afternoon Break</i>		
15:30-16:30	EMANUEL R. PIORE AWARD PRESENTATION AND LECTURE BY <u>PROFESSOR FRED B. SCHNEIDER</u> "BLUEPRINT FOR A SCIENCE OF SECURITY" (GEORGIAN ROOM)		
17:00-23:00	BANQUET AND EXCURSION TO "BLUE MAN GROUP" MAGGIANO'S LITTLE ITALY & THE CHARLES ST. PLAYHOUSE		

THURSDAY, JUNE 28th

8:30-10:00	<p><u>DCCS-7 HARDWARE</u> ARLINGTON ROOM <i>Session Chair: Cristian Constantinescu</i></p> <p>RDIS: A Recursively Defined Invertible Set Scheme to Tolerate Multiple Stuck-At Faults in Resistive Memory. <i>Rami Melhem, Rakan Maddah, and Sangyeun Cho</i></p> <p>RePRAM: Re-cycling PRAM Faulty Blocks for Extended Lifetime <i>Jie Chen, Guru Venkataramani, and H. Howie Huang</i></p> <p>VARIUS-NTV: A Microarchitectural Model to Capture the Increased Sensitivity of Manycores to Process Variations at Near-Threshold Voltages <i>Ulya R. Karpuzcu, Krishna Kolluru, Nam Sung Kim, and Josep Torrellas</i></p>	<p><u>STUDENT FORUM</u> BERKELEY/CLARENDON ROOMS <i>Session Chair: David Taylor</i></p> <p>The Hierarchical Microkernel: A Flexible and Robust OS Architecture <i>Stefan Winter, Martin Tsarev, Dennis Feldmann, and Robert Reinecke</i></p> <p>Application of Model Revision in Dependable Protocols <i>Reza Hajisheykhi</i></p> <p>Single Chip Diversity TMR for Increased Reliability in Automotive Applications <i>Omar Hiari</i></p> <p>Tolerating Intermittent Hardware Faults <i>Layali Rashid</i></p> <p>Autonomic Approach to Fault and Performance Management in Map-Reduce Clusters <i>Selvi Kadirvel</i></p>	
10:00-10:30	<i>Morning Break</i>		

10:30-12:00	<p>DCCS-8 MONITORING & REDUNDANCY ARLINGTON ROOM Session Chair: Nobuyasu Kanekawa Mitigating Random Variation with Spare RIBs: Redundant Intermediate Bitslices <i>David J. Palfaman, Nam Sung Kim and Mikko H. Lipasti</i></p> <p>Lightweight Cooperative Logging for Fault Replication in Concurrent Programs <i>Nuno Machado, Paolo Romano, and Luís Rodrigues</i></p> <p>Confidentiality of Event Data in Policy-based Monitoring <i>Mirko Montanari and Roy Campbell</i></p>	<p>PDS-7 PERFORMANCE II BERKELEY/CLARENDON ROOMS Session Chair: Ann Tai Continuous Authentication for Mouse Dynamics: A Pattern-Growth Approach <i>Chao Shen, Zhongmin Cai, and Xiaohong Guan</i></p> <p>NINEPIN: Non-Invasive and Energy Efficient Performance Isolation in Virtualized Servers <i>Palden Lama and Xiaobo Zhou</i></p> <p>ExtraTime: Modeling and Analysis of Wearout due to Transistor Aging at Microarchitecture-Level <i>Fabian Oboril and Mehdi Tahoori</i></p>	<p>FAST ABSTRACTS III STATLER ROOM Session Chair: Catello Di Martino Reliability-Aware Logic Synthesis of Integrated Circuits (ICs): Layout Effects for Multiple Transients <i>William H. Robinson, Bradley T. Kiddie, Daniel B. Limbrick, Trey Reece, Xiaowen Wang, and Qian Ding</i></p> <p>Deploy to the Crowd; Debug in the Cloud <i>Adam J. Oliner and Ion Stoica</i></p> <p>A Secure Architecture for a Recursive Virtualization Environment <i>Amir Soltani Nezhad, Antonio Casimiro, and Paulo Verissimo</i></p> <p>Note on Dependable Processor for Periodical Transient Faults under High Electromagnetic Environment <i>Aromhack Saysanasongkam, Masahiko Negishi, Masayuki Arai, and Satoshi Fukumoto</i></p> <p>Using a Proof Assistant to Construct Assurance Cases Correctness by Construction <i>Makoto Takeyama, Hiroyuki Kido, and Yoshiki Kinoshita</i></p> <p>Software-based Infield Wearout Monitoring for Synchronous Digital Chips <i>Bardia Zandian and Murali Annavaram</i></p> <p>Requirement Monitoring with Foreign Function Calls <i>Shinpei Nakata, Midori Sugaya, Shuichiro Yamamoto, and Kimio Kuramitsu</i></p> <p>Analysis of Biological Sequencing Errors using Fault Injection <i>So Youn Lee, Zbigniew Kalbarczyk, and Ravishankar K. Iyer</i></p> <p>A Study on the Scope of Error Propagation in Linux <i>Takeshi Yoshimura, Hiroshi Yamada, and Kenji Kono</i></p>
12:00-13:30	<i>Luncheon (Georgian Room)</i>		
13:30-15:00	<p>DCCS-9 ERROR DETECTION ARLINGTON ROOM Session Chair: Michael Paulitsch CFIMon: Detecting Violation of Control Flow Integrity using Performance Counters <i>Yubin Xia, Yutao Liu, Haibo Chen and Binyu Zang</i></p> <p>BLOCKWATCH: Leveraging Similarity in Parallel Programs for Error Detection <i>Jiesheng Wei and Karthik Pattabiraman</i></p> <p>Low-cost Program-level Detectors for Reducing Silent Data Corruptions <i>Siva Kumar Sastry Hari, Sarita V. Adve and Helia Naeimi</i></p>	<p>PDS-8 SECURITY II BERKELEY/CLARENDON ROOMS Session Chair: Ilir Gashi Safeguarding Academic Accounts and Resources with the University Credential Abuse Auditing System <i>Jing Zhang, Robin Berthier, William Rhee, Michael Bailey, Partha Pal, William Sanders and Farnam Jahanian</i></p> <p>A Dependability Analysis of Hardware-Assisted Polling Integrity Checking Systems <i>Jiang Wang, Kun Sun and Angelos Stavrou</i></p> <p>An Empirical Study of the Robustness of Inter-component Communication in Android <i>Amiya K. Maji, Fahad A. Arshad, Saurabh Bagchi and Jan S. Rellermeyer</i></p>	<p>FAST ABSTRACTS IV STATLER ROOM Session Chair: Bob Yeh FuzzTrees - Configurable Fuzzy Fault Trees <i>Peter Troger and Felix Salfner</i></p> <p>On Hardware Authentication for Biometric Iris Sensors <i>Nathan D. Kalka, Bojan Cukic</i></p> <p>False Alarm Minimization in IDS: Open Issues <i>Neminath Hubballi</i></p> <p>Signature-based Online Periodic Fault Tolerance for Embedded Processors <i>Waleed Dweik and Murali Annavaram</i></p> <p>Adapting PCM as main memory in GPU Architecture <i>Shuchang Shan, Yu Hu, and Xiaowei Li</i></p> <p>A Resilience Infrastructure for Embedded Computer Systems <i>Algirdas Avizienis</i></p> <p>An Experience of Implementing Dynamic Control Flow Monitor <i>Jong-min Lee and Gyung-ho Lee</i></p> <p>d* framework: Inter-Dependency Model for Dependability <i>Shuichiro Yamamoto and Yutaka Matsuno</i></p> <p>Comparison of the Architecturally Correct Execution Analysis and the Statistical Fault Injection Technique <i>Jongwhoa Na and Dongwoo Lee</i></p>
15:30-17:00	TECHNICAL COMMITTEE MEETING (OPEN TO ALL) -- ARLINGTON/BERKELEY/CLARENDON ROOMS		