1. Record Nr. UNISA996465970303316

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| Titolo | Dependable Computing - EDCC 2005 [[electronic resource] ] : 5th European Dependable Computing Conference, Budapest, Hungary, April 20-22, 2005, Proceedings / / edited by Mario Dal Cin, Mohamed Kaâniche, András Pataricza |
| Pubbl/distr/stampa | Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2005 |
| Edizione | [1st ed. 2005.] |
| Descrizione fisica | 1 online resource (XVI, 480 p.) |
| Collana | Programming and Software Engineering ; ; 3463 |
| Disciplina | 004.2 |
| Soggetti | Software engineering<br>Special purpose computers<br>Computer system failures<br>Computer hardware<br>Software Engineering<br>Special Purpose and Application-Based Systems<br>System Performance and Evaluation<br>Computer Hardware |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Bibliographic Level Mode of Issuance: Monograph |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Keynote I -- A Process Toward Total Dependability – Airbus Fly-by-Wire Paradigm -- Session 1A: Distributed Algorithms -- Building and Using Quorums Despite any Number of Process of Crashes -- Failure Detection with Booting in Partially Synchronous Systems -- Total Order Communications: A Practical Analysis -- Gracefully Degrading Fair Exchange with Security Modules -- Session 1B: Fault Tolerant Design and Protocols -- Adding Fault-Tolerance Using Pre-synthesized Components -- Efficiency of Dynamic Arbitration in TDMA Protocols -- An Architectural Framework for Detecting Process Hangs/Crashes -- Energy Efficient Configuration for QoS in Reliable Parallel Servers -- Session 2A: Practical Experience Reports and Tools I -- Novel Generic Middleware Building Blocks for Dependable Modular Avionics Systems -- Integrating Fault Tolerance and Load Balancing in Distributed |

Systems Based on CORBA -- Performance Evaluation of Consistent Recovery Protocols Using MPICH-GF -- Session 2B: Assessment and Analysis -- An Approach to Experimentally Obtain Service Dependability Characteristics of the Jgroup/ARM System -- The Effectiveness of Choice of Programming Language as a Diversity Seeking Decision -- Formal Safety Analysis of a Radio-Based Railroad Crossing Using Deductive Cause-Consequence Analysis (DCCA) -- Panel -- Dependability Challenges and Education Perspectives -- Keynote II -- Availability in Industry and Science – A Business Perspective - -- Session 3A: Measurement -- Fast Run-Time Reconfiguration for SEU Injection -- Assembly-Level Pre-injection Analysis for Improving Fault Injection Efficiency -- A Data Mining Approach to Identify Key Factors in Dependability Experiments -- Session 3B: Practical Experience Reports and Tools II -- PathCrawler: Automatic Generation of Path Tests by Combining Static and Dynamic Analysis -- A New Methodology and Tool Set to Execute Software Test on Real-Time Safety-Critical Systems -- A Grey-Box Approach to the Functional Testing of Complex Automatic Train Protection Systems -- Session 4A: Hardware Verification -- Deterministic Test Vector Compression / Decompression Using an Embedded Processor -- Efficient Single-Pattern Fault Simulation on Structurally Synthesized BDDs -- Session 4B: Fast Abstracts I Session 5A: Dependable Networking -- Structure-Based Resilience Metrics for Service-Oriented Networks -- Efficient Protection of Many-to-One Communications -- Session 5B: Fast Abstracts II Session 6A: Practical Experience Reports and Tools III -- Impact of Faults in Combinational Logic of Commercial Microcontrollers -- Implementation of a Testing and Diagnostic Concept for an NPP Reactor Protection System -- COMPAS – Compressed Test Pattern Sequencer for Scan Based Circuits -- Session 6B: Reliability Engineering and Testing -- Fault Links: Exploring the Relationship Between Module and Fault Types -- Model-Based Identification of Fault-Prone Components -- Regression Test Selection for Testable Classes.

Sommario/riassunto

It is always a special honor to chair the European Dependable Computing C- ference (EDCC). EDCC has become one of the well-established conferences in the ?eld of dependability in the European research area. Budapest was selected as the host of this conference due to its traditions in organizing international scienti?c events and its traditional role of serving as a meeting point between East and West. EDCC-5 was the ?fth in the series of these high-quality scienti?c conf-ences. In addition to the overall signi?cance of such a pan-European event, this year’s conference was a special one due to historic reasons. The roots of EDCC date back to the moment when the Iron Curtain fell. Originally, two groups of scientists from di?erent European countries in Western and Eastern Europe – who were active in research and education related to dependability created a – joint forum in order to merge their communities as early as in 1989. This trend has continued up to today. This year’s conference was the ?rst one where the overwhelming majority of the research groups belong to the family of European nations united in the European Union. During the past 16 years we observed that the same roots in all the professional, cultural and scienti?c senses led to a seamless integration of these research communities previously separated ar- ?cially for a long time. EDCC has become one of the main European platforms to exchange new - searchideasinthe?eldofdependability.