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Collana	Programming and Software Engineering, , 2945-9168 ; ; 4680
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Soggetti	Software engineering Coding theory Information theory Computers, Special purpose Computer science Electronic data processing - Management Software Engineering Coding and Information Theory Special Purpose and Application-Based Systems Computer Science Logic and Foundations of Programming IT Operations
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Safety Cases -- Establishing Evidence for Safety Cases in Automotive Systems -- A Case Study -- Goal-Based Safety Cases for Medical Devices: Opportunities and Challenges -- Impact of Security on Safety -- Electronic Distribution of Airplane Software and the Impact of Information Security on Airplane Safety -- Future Perspectives: The Car and Its IP-Address -- A Potential Safety and Security Risk Assessment -- Modelling Interdependencies Between the Electricity and Information Infrastructures -- Poster Session 1 -- Handling Malicious Code on Control Systems -- Management of Groups and Group Keys in Multi-level Security Environments -- Application of the XTT Rule-Based Model for Formal Design and Verification of Internet Security Systems

-- RAMSS Analysis for a Co-operative Integrated Traffic Management System -- Combining Static/Dynamic Fault Trees and Event Trees Using Bayesian Networks -- Component Fault Tree Analysis Resolves Complexity: Dependability Confirmation for a Railway Brake System -- Compositional Temporal Fault Tree Analysis -- Representing Parameterised Fault Trees Using Bayesian Networks -- Human Error Analysis Based on a Semantically Defined Cognitive Pilot Model -- Safety Analysis of Safety-Critical Software for Nuclear Digital Protection System -- Specification of a Software Common Cause Analysis Method -- Combining Bayesian Belief Networks and the Goal Structuring Notation to Support Architectural Reasoning About Safety -- Application of Interactive Cause and Effect Diagrams to Safety-Related PES in Industrial Automation -- Survival by Deception -- How to Secure Bluetooth-Based Pico Networks -- Learning from Your Elders: A Shortcut to Information Security Management Success -- Intrusion Attack Tactics for the Model Checking of e-Commerce Security Guarantees -- PosterSession 2 -- Safety Process Improvement with POSE and Alloy -- Defense-in-Depth and Diverse Qualification of Safety-Critical Software -- Experimental Evaluation of the DECOS Fault-Tolerant Communication Layer -- Achieving Highly Reliable Embedded Software: An Empirical Evaluation of Different Approaches -- Modeling, Analysis and Testing of Safety Issues - An Event-Based Approach and Case Study -- A Concept for a Safe Realization of a State Machine in Embedded Automotive Applications -- Safety Demonstration and Software Development -- Improving Test Coverage for UML State Machines Using Transition Instrumentation -- Verification of Distributed Applications -- Analysis of Combinations of CRC in Industrial Communication -- A Comparison of Partitioning Operating Systems for Integrated Systems -- Software Encoded Processing: Building Dependable Systems with Commodity Hardware -- Reliability Modeling for the Advanced Electric Power Grid -- Case Study on Bayesian Reliability Estimation of Software Design of Motor Protection Relay -- A Reliability Evaluation of a Group Membership Protocol -- Poster Session 3 -- Bounds on the Reliability of Fault-Tolerant Software Built by Forcing Diversity -- A Tool for Network Reliability Analysis -- DFT and DRBD in Computing Systems Dependability Analysis -- Development of Model Based Tools to Support the Design of Railway Control Applications -- Formal Specification and Analysis of AFDX Redundancy Management Algorithms -- Modeling and Automatic Failure Analysis of Safety-Critical Systems Using Extended Safecharts -- Using Deductive Cause-Consequence Analysis (DCCA) with SCADE -- Experimental Assessment of Astrée on Safety-Critical Avionics Software -- Detection of Runtime Errors in MISRA C Programs: A Deductive Approach -- A Taxonomy for Modelling Safety Related Architectures in Compliance with Functional Safety Requirements -- Controller Architecture for Safe Cognitive Technical Systems -- Improved Availability and Reliability Using Re-configuration Algorithm for Task or Process in a Flight Critical Software.

Sommario/riassunto

Since 1979, when it was first established by the Technical Committee on Re- ability, Safety and Security of the European Workshop on Industrial Computer Systems (EWICS TC7), the SAFECOMP Conference series has regularly and continuously contributed to improving the state of the art of highly dependable computer-based systems, since then increasingly applied to safety-relevant industrial domains. In this expanding technical field SAFECOMP offers a platform for knowledge and technology transfer between academia, industry, research and licensing institutions, providing ample opportunities for exchanging insights, experiences and trends in the areas of safety,

reliability and security regarding critical computer applications. In accordance with the growing spread of critical infrastructures involving both safety and security threats, this year's SAFECOMP program included a considerable number of contributions addressing technical problems and engineering solutions across the border between safety-related and security-related concerns.

The reaction to our call for papers was particularly gratifying and impressive, including 136 full papers submitted by authors representing 29 countries from Europe, Asia, North and South America as well as Australia. The selection of 33

full papers and 16 short papers for presentation and publication was a challenging task requiring a huge amount of reviewing and organizational effort.

In view of the particularly high number of articles submitted, obvious practical constraints led – to our regret – to the rejection of a

considerable amount of high-quality work. To all authors, invited speakers, members of the International Program Committee and

external reviewers go our heartfelt thanks! The local organization of SAFECOMP 2007, hosted in Nuremberg, is also gratefully acknowledged.
