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-- 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 -- Poster Session 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 ?rst 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 depe- able computer-based systems, since then increasingly applied to safety-relevant industrial domains. Inthisexpandingtechnical?eldSAFECOMPo?ersaplatformforknowledge andtechnologytransferbetweenacademia, industry, researchandlicensingins- tutions, 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 safetyrelated and securi- related concerns.

Thereactiontoourcallforpaperswasparticularlygratifyingandimpressive, including 136 full papers submitted by authors representing 29 countries from Europe, Asia, North and South America aswell

asAustralia. The selection of 33 fullpapersand16shortpapersforpresentationandpublicationwasachalleng ing task requiring a huge amount of reviewing and organizational e?ort. 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.