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| Descrizione fisica      | 1 online resource (XVIII, 426 p.)   |
| Collana                 | Lecture Notes in Computer Science, , 0302-9743 ; ; 2788   |
| Disciplina              | 005.1   |
| Soggetti                | Software engineering<br>Special purpose computers<br>Coding theory<br>Information theory<br>Computer logic<br>Management information systems<br>Computer science<br>Software Engineering/Programming and Operating Systems<br>Special Purpose and Application-Based Systems<br>Coding and Information Theory<br>Logics and Meanings of Programs<br>Management of Computing and Information Systems  |
| 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 Talk -- Issues in Safety Assurance -- Formal Methods -- Elicitation and Validation of Graphical Dependability Models -- Visual Modeling and Verification of Distributed Reactive Systems -- Automatic Timeliness Verification of a Public Mobile Network -- Improving System Reliability via Model Checking: The FSAP/NuSMV-SA Safety Analysis Platform -- Design for Dependability -- Integrity Static Analysis of COTS/SOUP -- Safety Lifecycle for Developing Safety Critical Artificial Neural Networks -- Quantitative Reliability Estimation of a Computer- |

Based Motor Protection Relay Using Bayesian Networks -- A Dependability Model for Domestic Systems -- Security and Formal Methods -- Modelling and Verification of Layered Security Protocols: A Bank Application -- A Constraint Framework for the Qualitative Analysis of Dependability Goals: Integrity -- Software Tamper Resistance Using Program Certificates -- Keynote Talk -- Developing High Assurance Systems: On the Role of Software Tools -- Dependability and Performance Analysis -- Web Service Availability -- Impact of Error Recovery -- A Unified Tool for Performance Modelling and Prediction -- Dependability of Medical Systems -- An Approach to Trust Case Development -- Reliable Data Replication in a Wireless Medical Emergency Network -- Critical Feature Analysis of a Radiotherapy Machine -- Fault Tolerance -- Byzantine Fault Tolerance, from Theory to Reality -- Redundancy Management for Drive-by-Wire Computer Systems -- Fault-Tolerant Communication System to Improve Safety in Railway Environments -- Dependable Communication Synthesis for Distributed Embedded Systems -- Tools for Dependable Design -- Enhancing Software Safety by Fault Trees: Experiences from an Application to Flight Critical SW -- On the Role of Traceability for Standards Compliance: Tracking Requirements to Code -- Tools Supporting the Communication of Critical Domain Knowledge in High-Consequence Systems Development -- Dependability of Critical Infrastructures -- Security Policy Configuration Issues in Grid Computing Environments -- Dependability and Survivability of Large Complex Critical Infrastructures -- Hazard and Safety Analysis -- Safety Assessment of Experimental Air Traffic Management Procedures -- The Application of Causal Analysis Techniques for Computer-Related Mishaps -- Reuse in Hazard Analysis: Identification and Support -- Design for Dependability -- The Characteristics of Data in Data-Intensive Safety-Related Systems -- Using IEC 61508 to Guide the Investigation of Computer-Related Incidents and Accidents.

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## Sommario/riassunto

Edinburgh, the Scottish capital, hosted SAFECOMP 2003. Since its establishment, SAFECOMP, the series of conferences on Computer Safety, Reliability and Security, has contributed to the progress of the state of the art in dependable applications of computer systems. SAFECOMP provides ample opportunity to exchange insights and experiences in emerging methods across the borders of different disciplines. SAFECOMP year after year registers new multidisciplinary trends on dependability of computer-based systems. The cross-fertilization between different scientific communities and industry supports the achievement of long-term results contributing to the integration of multidisciplinary experiences in order to improve the design and deployment of dependable computer-based systems. Over the years the participation of industry in SAFECOMP has grown steadily. This emphasizes the importance of technology transfer between academia and industry. SAFECOMP 2003 further sustains the healthy interchange of research results and practical experiences. The SAFECOMP 2003 program consisted of 30 papers selected from 96 submissions from all over the world. SAFECOMP 2003 acknowledges the invited keynote talks enhancing the technical and scientific merit of the conference.

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