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Soggetti	Software engineering Operating systems (Computers) Special purpose computers Computer system failures Software Engineering/Programming and Operating Systems Software Engineering Operating Systems Special Purpose and Application-Based Systems System Performance and Evaluation
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Formato	Materiale a stampa
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Note generali	Contributions to a research program on Dependable Information and Communications Systems (DICS) sponsored by the Hasler Foundation.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Surveys -- Dependable Software -- Dependable Systems -- Survey on Dependable IP over Fiber Networks -- Dependable Software -- SCOOP -- Concurrency Made Easy -- Scalable Programming Abstractions for XML Services -- Definition and Correct Refinement of Operation Specifications -- Formal Test Generation from UML Models -- Dependable Computing -- Advances in the Design and Implementation of Group Communication Middleware -- Fault-Tolerant Parallel Applications with Dynamic Parallel Schedules: A Programmer's Perspective -- Autonomic Computing for Virtual Laboratories -- Dependable Networks -- Algorithms for Failure Protection in Large IP-over-fiber and Wireless Ad Hoc Networks -- Robustness of the Internet at the Topology and Routing Level -- Dependable Peer-to-Peer

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## Systems Withstanding Dynamic Adversarial Churn.

### Sommario/riassunto

Modern civilization relies on a functioning information infrastructure. As a result, dependability has become a central issue in all disciplines of systems engineering and software architecture. Theories, methods and tools that help to master the problems encountered in the design process and the management of operations are therefore of utmost importance for the future of information and communication technology. The present volume documents the results of a research program on Dependable Information and Communication Systems (DICS). The members of the project met in two workshops organized by the Hasler Foundation. This state-of-the-art survey contains 3 overview articles identifying major issues of dependability and presenting the latest solutions, as well as 10 carefully selected and revised papers depicting the research results originating from those workshops. The first workshop took place in Münchenwiler, Switzerland, in March 2004, and the second workshop, which marked the conclusion of the projects, in Löwenberg, Switzerland, in October 2005. The papers are organized in topical sections on surveys, dependable software, dependable computing, and dependable networks.

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