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Nota di contenuto	1. Mobile and Ubiquitous Systems -- Self-healing for Pervasive Computing Systems -- Self Organization and Self Maintenance of Mobile Ad Hoc Networks through Dynamic Topology Control -- Data Backup for Mobile Nodes: A Cooperative Middleware and an Experimentation Platform -- 2. Architecting Systems -- Identification of Security Requirements in Systems of Systems by Functional Security Analysis -- Implementing Reliability: The Interaction of Requirements, Tactics and Architecture Patterns -- A Framework for Flexible and Dependable Service-Oriented Embedded Systems -- Architecting

Robustness and Timeliness in a New Generation of Aerospace Systems -- 3. Fault Management -- Architecting Dependable Systems with Proactive Fault Management -- ASDF: An Automated, Online Framework for Diagnosing Performance Problems -- 4. Experience and Vision -- Is Collaborative QoS the Solution to the SOA Dependability Dilemma? -- Software Assumptions Failure Tolerance: Role, Strategies, and Visions -- Architecting Dependable Systems Using Reflective Computing: Lessons Learnt and Some Challenges -- Architecting and Validating Dependable Systems: Experiences and Visions.

Sommario/riassunto

As software systems become increasingly ubiquitous, issues of dependability become ever more crucial. Given that solutions to these issues must be considered from the very beginning of the design process, it is clear that dependability and security have to be addressed at the architectural level. This book, as well as its six predecessors, was born of an effort to bring together the research communities of software architectures, dependability, and security. This state-of-the-art survey contains expanded, peer-reviewed papers based on selected contributions from the Workshop on Architecting Dependable Systems (WADS 2009), held at the International Conference on Dependable Systems and Networks (DSN 2009), as well as a number of invited papers written by renowned experts in the area. The 13 papers are organized in topical sections on: mobile and ubiquitous systems, architecting systems, fault management, and experience and vision.