Record Nr. UNINA9910483069203321 Architecting dependable systems VI / / Rogerio de Lemos, Jean-Charles **Titolo** Fabre, Cristina Gacek, Fabbio Gadducci, Maurice ter Beek (eds.) Pubbl/distr/stampa Berlin; ; Heidelberg, : Springer, c2009 **ISBN** 3-642-10248-4 Edizione [1st ed. 2009.] Descrizione fisica 1 online resource (XII, 335 p.) Collana Lecture notes in computer science; ; 5835 LemosRogerio de <1961-> Altri autori (Persone) FabreJean-Charles GacekCristina <1964-> GadducciFabbio <1966-> ter BeekMaurice Disciplina 004.22 Soggetti Computer architecture Computer systems - Reliability Fault-tolerant computing Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto 1. Dependable Service-Oriented Architectures -- A System of Architectural Patterns for Scalable, Consistent and Highly Available Multi-Tier Service-Oriented Infrastructures -- Towards Self-adaptation for Dependable Service-Oriented Systems -- Architecting Dependable Access Control Systems for Multi-domain Computing Environments --Soft Constraints for Dependable Service Oriented Architectures --Robustness Validation in Service-Oriented Architectures -- 2. Fault Tolerance and System Evaluation -- A Self-repair Architecture for Cluster Systems -- Handling Software Faults with Redundancy -- A Uniform Approach to Security and Fault-Tolerance Specification and Analysis -- A Comprehensive Exploration of Challenges in Architecture-Based Reliability Estimation -- 3. Architecting Security --Weak Behavioral Equivalences for Verifying Secure and Performance-Aware Component-Based Systems -- Architecting Security with Paradigm -- Trust-Based and Context-Aware Authentication in a Software Architecture for Context and Proximity-Aware Services --

Compositional Verification of Architectural Refactorings.

## 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 reasonable that dependability and security are addressed at the architectural level. This book has originated from an effort to bring together the research communities of software architectures, dependability and security. This state-of-the-art survey contains expanded and peer-reviewed papers based on the carefully selected contributions to two workshops: the Workshop on Architecting Dependable Systems (WADS 2008), organized at the 2008 International Conference on Dependable Systems and Networks (DSN 2008), held in Anchorage, Alaska, USA, in June 2008, and the Third International Workshop on Views On Designing Complex Architectures (VODCA 2008) held in Bertinoro, Italy, in August 2008. It also contains invited papers written by recognized experts in the area. The 13 papers are organized in topical sections on dependable service-oriented architectures, fault-tolerance and system evaluation, and architecting security.