Record Nr.	UNINA9910767553403321
Titolo	Dependability metrics : advanced lectures / / Irene Eusgeld, Felix C. Freiling, Ralf Reussner (eds.)
Pubbl/distr/stampa	Berlin, : Springer, 2008
ISBN	3-540-68947-8
Edizione	[1st ed. 2008.]
Descrizione fisica	1 online resource (XI, 305 p.)
Collana	Lecture notes in computer science, , 0302-9743 ; ; 4909 LNCS sublibrary. SL 2, Programming and software engineering
Altri autori (Persone)	EusgeldIrene FreilingFelix C ReussnerRalf
Disciplina	004
Soggetti	Computer systems - Reliability
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 (p. [267]-300) and indexes.
Nota di contenuto	to Dependability Metrics to Dependability Metrics I Foundations On Metrics and Measurements Validation of Predictions with Measurements Consistent Metric Usage: From Design to Deployment Basic and Dependent Metrics Goal, Question, Metric Quality of Service Modeling Language Markov Models II Reliability Metrics Hardware Reliability Software Reliability III Security Metrics to Security Metrics Cryptographic Attack Metrics Security Measurements and Metrics for Networks Industrial Approaches and Standards for Security Assessment Economic Security Metrics Human Factors IV Performance Metrics to Performance Metrics Performance-Related Metrics in the ISO 9126 Standard Analytical Performance Metrics Performance Metrics in Software Design Models Measuring Performance Metrics: Techniques and Tools Performance Metrics for Specific Domains V Overlapping Metrics to Overlapping Attributes Performability Reliability vs. Security: A Subjective Overview.
Sommario/riassunto	With the growing ubiquity of computing systems, it is essential that we can rely on the services they deliver. Justifying reliance in computer systems requires scientific techniques to derive evidence from given systems or predict such evidence. This tutorial book gives an overview

1.

of the current state of the art in measuring the different aspects of dependability of systems: reliability, security and performance. The main impulse for this dependability metrics project resulted from a research seminar, held at Schloss Dagstuhl, Germany, in October/November 2005. The 25 chapters, based on the outcome of the research seminar, are organized in five parts on foundations, reliability metrics, security metrics, performance metrics, and overlapping metrics. The final part shows that only a combined consideration of important dependability attributes will lead to the design objective: the development of systems we can really trust.