

1. Record Nr.	UNINA9910453713003321
Titolo	Engineering dependable software systems // edited by Manfred Broy, Doron Peled and Georg Kalus
Pubbl/distr/stampa	Amsterdam ; ; Washington, D. C. : , : IOS Press, , [2013] ©2013
ISBN	1-61499-207-X
Descrizione fisica	1 online resource (376 p.)
Collana	NATO science for peace and security series. Sub-series D, Information and communication security ; ; volume 34
Altri autori (Persone)	BroyM. <1949-> KalusGeorg PeledDoron <1962->
Disciplina	005.1/4
Soggetti	Computer software - Verification Computer systems - Verification Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Proceedings of the NATO Advanced Study Institute on Engineering Dependable Software Systems, Marktoberdorf, Germany, 31 July - 12 August 2012"--Title page verso. "Published in cooperation with NATO Emerging Security Challenges Division."
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	ENGINEERING DEPENDABLE SOFTWARE SYSTEMS; Preface; Contents; A Logical Approach to Systems Engineering Artifacts and Traceability: From Requirements to Functional and Architectural Views; Mastering System Analysis and Design through Abstraction and Refinement; Data Abstraction in VCC; Families of software systems: a model checking approach; A Tutorial on Runtime Verification; Model Checking Meets Probability: A Gentle Introduction; Risk-driven Engineering of Requirements for Dependable Systems; Model-Based Verification, Optimization, Synthesis and Performance Evaluation of Real-Time Systems Model-Driven Engineering and Model Transformation: for Fun and Profit Symbolic Execution and Software Testing; Model Checking Basics; Subject Index; Author Index

Sommario/riassunto

Because almost all technical systems are more or less interfaced with software these days, attacks against computer systems can cause considerable economic and physical damage. For this reason, understanding the dependability of such systems, as well as the improvement of cyber security and its development process, are amongst the most challenging and crucial issues in current computer science research. This book contains the lectures from the NATO Advanced Study Institute (ASI) Summer School entitled Engineering Dependable Software Systems, held in Marktoberdorf, Germany, in July and August 20
