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Titolo	Principles of Performance and Reliability Modeling and Evaluation : Essays in Honor of Kishor Trivedi on his 70th Birthday // edited by Lance Fiondella, Antonio Puliafito
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ISBN	3-319-30599-9
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (659 p.)
Collana	Springer Series in Reliability Engineering, , 1614-7839
Disciplina	620
Soggetti	Electronic circuits Economic policy Quality control Reliability Industrial safety Circuits and Systems R & D/Technology Policy Quality Control, Reliability, Safety and Risk
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Phase Type and Matrix Exponential Distributions in Stochastic Modelling -- Constant-Stress Accelerated Life-Test Models and Data Analysis for One-Shot Devices -- From Performability to Uncertainty -- Managed dependability in interacting systems -- Modeling Availability Impact in Cloud Computing -- Reliability Analysis of a Cloud Computing System with Replication -- Combined Simulation and Testing Based on Standard UML Models -- Reproducibility of Software Bugs -- Measuring the Resiliency of Extreme-Scale Computing Environments.
Sommario/riassunto	This book presents the latest key research into the performance and reliability aspects of dependable fault-tolerant systems and features commentary on the fields studied by Prof. Kishor S. Trivedi during his distinguished career. Analyzing system evaluation as a fundamental tenet in the design of modern systems, this book uses performance

and dependability as common measures and covers novel ideas, methods, algorithms, techniques, and tools for the in-depth study of the performance and reliability aspects of dependable fault-tolerant systems. It identifies the current challenges that designers and practitioners must face in order to ensure the reliability, availability, and performance of systems, with special focus on their dynamic behaviors and dependencies, and provides system researchers, performance analysts, and practitioners with the tools to address these challenges in their work. With contributions from Prof. Trivedi's former PhD students and collaborators, many of whom are internationally recognized experts, to honor him on the occasion of his 70th birthday, this book serves as a valuable resource for all engineering disciplines, including electrical, computer, civil, mechanical, and industrial engineering as well as production and manufacturing.
