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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Probability, Statistics, and Reliability Concepts -- Distribution Functions and Its Applications -- Statistical Parameter Estimation -- System Reliability Modeling -- Order Statistics and Reliability Estimation -- Stochastic Processes -- Maintenance Modeling -- Software Reliability -- Statistical Machine Learning Methods and Its Applications.
Sommario/riassunto	This book presents the state-of-the-art methodology and detailed analytical models and methods used to assess the reliability of complex systems and related applications in statistical reliability engineering. It is a textbook based mainly on the author's recent research and publications as well as experience of over 30 years in this field. The book covers a wide range of methods and models in reliability, and their applications, including: statistical methods and model selection for machine learning; models for maintenance and software reliability; statistical reliability estimation of complex systems; and statistical reliability analysis of k out of n systems, standby systems and repairable systems. Offering numerous examples and solved problems within each chapter, this comprehensive text provides an introduction to reliability engineering graduate students, a reference for data scientists and reliability engineers, and a thorough guide for researchers and instructors in the field.