1. Record Nr. UNIORUON00078923

Autore	POOL, David
Titolo	Eritrea : towards unity in diversity / by David Pool
Pubbl/distr/stampa	London, : Minority Rights Group, c1997
ISBN	18-976937-1-0
Descrizione fisica	32 p. ; 30 cm
Disciplina	963.5
Soggetti	ERITREA - Storia
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910829294603321

Autore	Au Siu-Kui
Titolo	Engineering risk assessment and design with subset simulation / / Siu-Kui Au, Yu Wang
Pubbl/distr/stampa	Singapore : , : Wiley, , 2014 ©2014
ISBN	1-118-39807-6 1-118-39805-X 1-118-39806-8
Descrizione fisica	1 online resource (337 p.)
Classificazione	TEC009070
Disciplina	519.2
Soggetti	Risk assessment - Mathematics Engineering design - Mathematics Set theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and

index.

Nota di contenuto

Sommario/riassunto

"A unique book giving a comprehensive coverage of Subset Simulation - a robust tool for general applicationsThe book starts with the basic theory in uncertainty propagation using Monte Carlo methods and the generation of random variables and stochastic processes for some common distributions encountered in engineering applications. It then introduces a class of powerful simulation method called Markov Chain Monte Carlo method (MCMC), an important machinery behind Subset Simulation that allows one to generate samples for investigating rare scenarios in a probabilistically consistent manner. The theory of Subset Simulation is then presented, addressing related practical issues

encountered in the actual implementation. A number of variants of Subset Simulation that can lead to improved performance for specific classes of problems will also be covered. The second half the book introduces the reader to probabilistic failure analysis and reliability-based design, which are laid out in a context that can be efficiently tackled within the context of Subset Simulation or Monte Carlo simulation in general. The result is a general framework that allows the practitioner to investigate reliability sensitivity to uncertain parameters and to explore possible design scenarios systematically for selection of the final design in a convenient but computationally efficient manner via simulation.A unique feature of this book is that it is complemented with a VBA (Visual Basic for Applications) that implements Subset Simulation in the Excel spreadsheet environment. This allows the reader to experiment with the examples in the book and get hands-on experience with simulation. A chapter is devoted to the software framework that allows a practical solution by resolving the risk assessment problem into three uncoupled procedures, namely, deterministic modeling, uncertainty modeling and uncertainty propagation. Presents a powerful simulation method called Subset Simulation for efficient engineering risk assessment and reliability-based design Illustrates application examples with MS Excel spreadsheets allowing readers to gain hands-on experience with simulation techniques Covers theoretical fundamentals as well as advanced implementation issues in practical engineering problems A companion website is available to include the developments of the software ideas "--