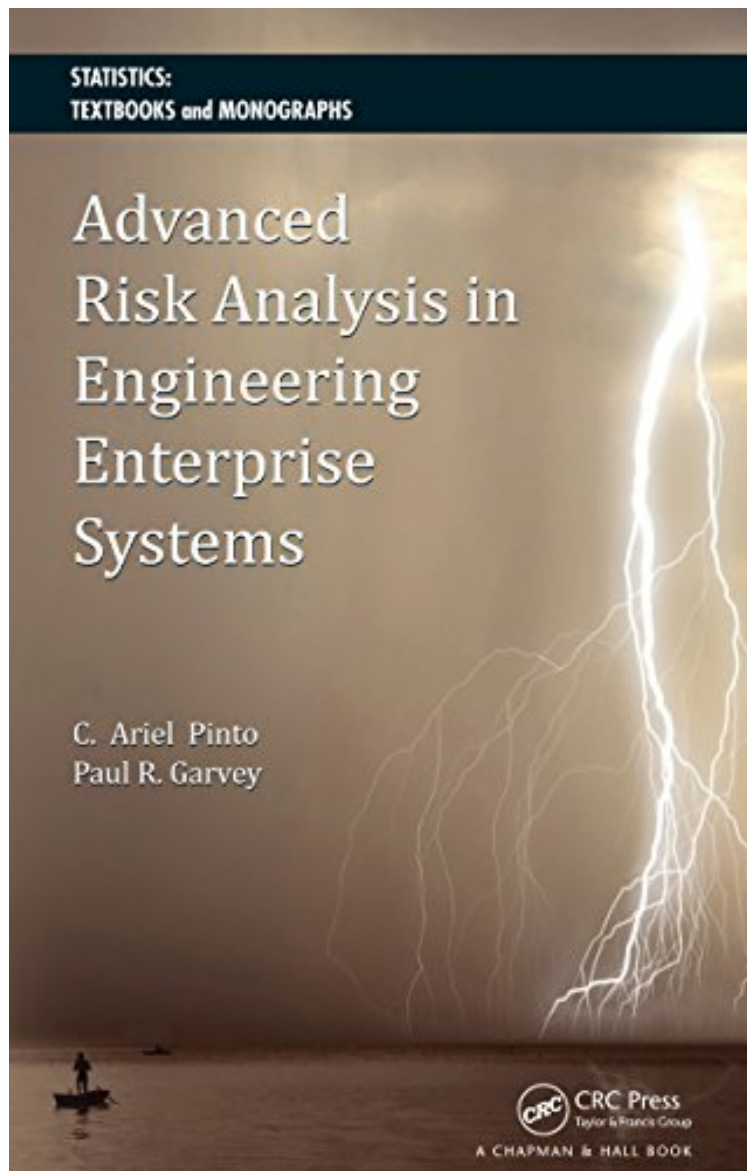


[Read ebook] Advanced Risk Analysis in Engineering Enterprise Systems (Statistics: A Series of Textbooks and Monographs)

Advanced Risk Analysis in Engineering Enterprise Systems (Statistics: A Series of Textbooks and Monographs)

Cesar Ariel Pinto, Paul R. Garvey
*ebooks | Download PDF | *ePub | DOC | audiobook*



[Download](#)

[Read Online](#)

#1447959 in eBooks 2016-04-19 2016-04-19 File Name: B00B3W5WL6 | File size: 18.Mb

Cesar Ariel Pinto, Paul R. Garvey : Advanced Risk Analysis in Engineering Enterprise Systems (Statistics: A Series of Textbooks and Monographs) before purchasing it in order to gage whether or not it would be worth my time, and all praised Advanced Risk Analysis in Engineering Enterprise Systems (Statistics: A Series of Textbooks and Monographs):

0 of 1 people found the following review helpful. ParBy EricRequired textbook for course. About par as far as textbooks go. If you're not taking the course, you can do better for your money. Definitely not the worst textbook out there by any means.1 of 1 people found the following review helpful. Two StarsBy GoodReviewClass required that I purchased book since the instructor is who wrote it

Since the emerging discipline of engineering enterprise systems extends traditional systems engineering to develop webs of systems and systems-of-systems, the engineering management and management science communities need new approaches for analyzing and managing risk in engineering enterprise systems. *Advanced Risk Analysis in Engineering Enterprise Systems* presents innovative methods to address these needs. With a focus on engineering management, the book explains how to represent, model, and measure risk in large-scale, complex systems that are engineered to function in enterprise-wide environments. Along with an analytical framework and computational model, the authors introduce new protocols: the risk co-relationship (RCR) index and the functional dependency network analysis (FDNA) approach. These protocols capture dependency risks and risk co-relationships that may exist in an enterprise. Moving on to extreme and rare event risks, the text discusses how uncertainties in system behavior are intensified in highly networked, globally connected environments. It also describes how the risk of extreme latencies in delivering time-critical data, applications, or services can have catastrophic consequences and explains how to avoid these events. With more and more communication, transportation, and financial systems connected across domains and interfaced with an infinite number of users, information repositories, applications, and services, there has never been a greater need for analyzing risk in engineering enterprise systems. This book gives you advanced methods for tackling risk problems at the enterprise level.

"The book develops several topics in risk analysis, including models and measurement of engineering risks, capability portfolio risk analysis and management, functional dependency network analysis, and extreme-event theory. Several chapters present some tools from applied probability and statistics hellip; A reader with main interest in statistics may find in these chapters several ideas about the use of specific statistical tools in applied engineering. Questions and exercises are provided in each chapter to help the reader understand the main topics."Fabrizio Durante, *International Statistical*, 2014 "hellip;excellent references hellip; appropriate for risk engineers or quality professionals wishing to gain a comprehensive understanding of the engineering or mathematics behind advanced risk analysis. hellip; I would certainly recommend this book to anyone working in high-risk, complex environments, such as nuclear, aerospace or explosives."Paul Naysmith, *Quality World* "The book is a decidedly unique and rigorous treatment of selected topics in engineering systems risk analysis and management. The narrative is notably modern and clear. The mathematical formalism is comprehensive and advanced while remaining accessible for those involved in engineering complex systems. This is foremost a book of exciting and innovative ideas for the field, exceeding what might easily have been a rote assembly of worn methods or re-introduction of the works of others. It will be of long-standing appeal to practitioners engaged in the analysis of risk in engineering enterprise systems. The book will also appeal to scholars and researchers who will benefit from the advanced and fresh thinking it offers readers. The book will improve the systems engineering community's ability to address enterprise design risk assessment and management across a system's lifecycle."Professor James Lambert, Associate Director, Center for Risk Management of Engineering Systems, University of VirginiaAbout the AuthorC. Ariel Pinto is an Associate Professor in the Department of Engineering Management and Systems Engineering at Old Dominion University, where he co-founded the Emergent Risk Initiative. He earned a Ph.D. in systems engineering from the University of Virginia. Dr. Pinto's research interests encompass the areas of risk management in engineered systems, including project risk management, risk valuation, risk communication, analysis of extreme-and-rare events, and decision making under uncertainty. Paul R. Garvey is Chief Scientist and a Director for the Center for Acquisition and Systems Analysis, a division of The MITRE Corporation. He earned an A.B. and M.Sc. in pure and applied mathematics from Boston College and Northeastern University, respectively, and a Ph.D. in engineering management from Old Dominion University, where he was awarded the doctoral dissertation medal from the faculty of the College of Engineering. He is the author of the CRC Press books *Analytical Methods for Risk Management* and *Probability Methods for Cost Uncertainty Analysis*. Dr. Garvey's research interests include the theory and application of risk-decision analytic methods to operations research problems in the system sciences domains.