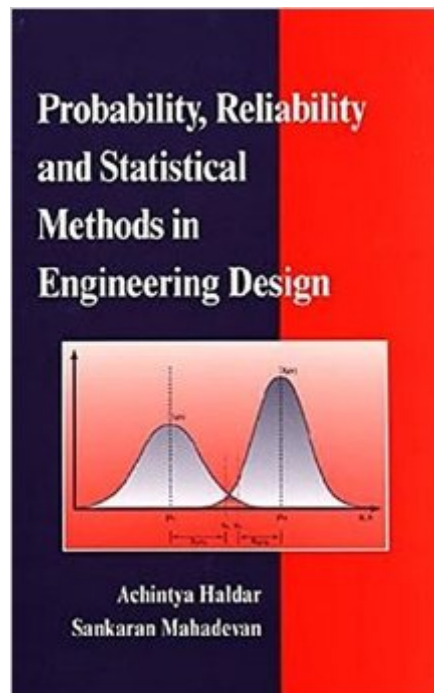


The book was found

Probability, Reliability, And Statistical Methods In Engineering Design



Synopsis

Learn the tools to assess product reliability! Haldar and Mahadevan crystallize the research and experience of the last few decades into the most up-to-date book on risk-based design concepts in engineering available. The fundamentals of reliability and statistics necessary for risk-based engineering analysis and design are clearly presented. And with the help of many practical examples integrated throughout the text, the material is made very relevant to today's practice. Key Features * Covers all the fundamental concepts and mathematical skills needed to conduct reliability assessments. * Presents the most widely-used reliability assessment methods. * Concepts that are required for the implementation of risk-based design in practical problems are developed gradually. * Both risk-based and deterministic design concepts are included to show the transition from traditional to modern design practice.

Book Information

Hardcover: 320 pages

Publisher: Wiley; 1 edition (November 1, 1999)

Language: English

ISBN-10: 0471331198

ISBN-13: 978-0471331193

Product Dimensions: 6.3 x 0.7 x 9.6 inches

Shipping Weight: 1.4 pounds (View shipping rates and policies)

Average Customer Review: 4.4 out of 5 stars [See all reviews](#) (11 customer reviews)

Best Sellers Rank: #669,850 in Books (See Top 100 in Books) #76 in [Books > Engineering & Transportation > Engineering > Design](#) #310 in [Books > Engineering & Transportation > Engineering > Civil & Environmental > Structural](#) #571 in [Books > Textbooks > Engineering > Civil Engineering](#)

Customer Reviews

As a reliability engineer, I do a lot of probabilistic risk analysis and reliability based design for large systems like gas turbines, etc. From both a theoretical and applied perspective, this is an excellent text for those getting into this subject. The book is written in a pleasing style, in which complex ideas are introduced in a manner than anyone (with no prior statistical training) can understand. It is a small book that packs a lot of information in it, and the companion volume by the same authors is another excellent text on the same topic. I particularly liked their treatment of LRFD methods and the FORM algorithms. On the negative side, I found the algorithms described in Madsen's "Methods

of structural safety" easier to implement. The authors might want to incorporate some of those methods in their next edition. They could also discuss approaches to model time-dependent reliability, apart from including empirical probability distributions in design. Overall, I have read most of the texts out there in reliability-based design and this is clearly the best. It's an expensive book, but well worth the money !

This book is among one of the best books in this subject. It captures all different aspects of probability, reliability and statistical methods in engineering design in one book with clear details and examples. The latest advancements in this area are also included in this book. I do recommend it for any engineering student taking courses in this area.

Excellent text with an abundance of practical examples which demonstrate and apply the material of the text. Very interesting and concise.

Expensive to buy. Does not contain everything, like more advanced topics of reliability design, such as Monte Carlo, Fault Tree, Structural Reliability etc etc. Has good amount of examples.

Great explanations for the theories behind reliability methods used within research for engineering design today. I have used the book almost religiously in my studies.

The book contents contain simply too much material in too short of a book. Every other explanation of formulas causes more confusion rather than simplistic explanation. It should definitely be broken down and expanded into a longer more simplistic text form.

[Download to continue reading...](#)

Probability, Reliability, and Statistical Methods in Engineering Design Elementary Stochastic Calculus With Finance in View (Advanced Series on Statistical Science & Applied Probability, Vol 6) (Advanced Series on Statistical Science and Applied Probability) Design and Analysis of Reliability Studies: The Statistical Evaluation of Measurement Errors Reliability in Engineering Design Probability on Trees and Networks (Cambridge Series in Statistical and Probabilistic Mathematics) A User's Guide to Measure Theoretic Probability (Cambridge Series in Statistical and Probabilistic Mathematics) An Introduction to Probability and Statistical Inference, Second Edition Introduction to Probability (Chapman & Hall/CRC Texts in Statistical Science) Thermodynamics With Quantum Statistical Illustrations. Monographs in Statistical Physics and Thermodynamics, Volume 2 Extended

Warranties, Maintenance Service and Lease Contracts: Modeling and Analysis for Decision-Making (Springer Series in Reliability Engineering) Engineering Methods for Robust Product Design: Using Taguchi Methods in Technology and Product Development Practical Plant Failure Analysis: A Guide to Understanding Machinery Deterioration and Improving Equipment Reliability (Mechanical Engineering) Reliability Physics and Engineering: Time-To-Failure Modeling Practical Reliability Engineering Fault-Tolerance and Reliability Techniques for High-Density Random-Access Memories (Prentice Hall Modern Semiconductor Design Series) Earthquake Engineering: Damage Assessment and Structural Design (Methods & Applications in Civil Engineering) High Throughput Screening: Methods and Protocols (Methods in Molecular Biology) (Methods in Molecular Biology, 190) G.Dieter's Li.Schmidt's Engineering 4th (Fourth) edition(Engineering Design (Engineering Series) [Hardcover])(2008) Engineering Uncertainty and Risk Analysis, Second Edition: A Balanced Approach to Probability, Statistics, Stochastic Models, and Stochastic Differential Equations Simulation, Second Edition: Programming Methods and Applications (Statistical Modeling and Decision Science)

[Dmca](#)