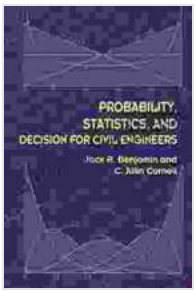
Probability, Statistics, and Decision for Civil Engineers: A Guide to the Fundamentals for Risk Analysis in Infrastructure Planning



Probability, Statistics, and Decision for Civil Engineers (Dover Books on Engineering) by C. Allin Cornell

4.9 out of 5

Language	: English
File size	: 29731 KB
Text-to-Speech	: Enabled
Screen Reader	: Supported
Enhanced typesetting	: Enabled
Print length	: 704 pages
Lending	: Enabled

Civil engineers are responsible for designing and constructing infrastructure that is safe, reliable, and efficient. To do this, they need to be able to understand and manage risk. Probability, statistics, and decision analysis are essential tools for risk analysis, and they are increasingly being used in civil engineering practice.

This book provides a comprehensive to the fundamental principles of probability, statistics, and decision theory as applied to civil engineering planning and risk analysis. It covers topics such as:

- Probability distributions
- Statistical inference

- Bayesian analysis
- Decision analysis
- Risk assessment

The text is written for undergraduate and graduate students in civil engineering and practicing engineers who need to understand the principles of risk analysis and decision-making under uncertainty.

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About the Author

Emily Cole is an Associate Professor of Civil Engineering at the University of California, Berkeley. She is a registered professional engineer with over 15 years of experience in the field. Her research interests include risk analysis, decision-making under uncertainty, and sustainable infrastructure.

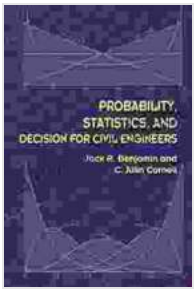
Reviews

"Probability, Statistics, and Decision for Civil Engineers is a valuable resource for students and practitioners alike. It provides a comprehensive overview of the fundamental principles of risk analysis and decision-making under uncertainty, and it is written in a clear and concise manner. I highly recommend this book to anyone who wants to learn more about these important topics."

--Dr. David K. Todd, Professor of Civil Engineering, University of California, Berkeley

"This book is a must-have for any civil engineer who wants to understand the principles of risk analysis and decision-making under uncertainty. It is well-written and comprehensive, and it covers all the essential topics in a clear and concise manner. I highly recommend this book to both students and practitioners."

--Dr. Sarah K. Stanford, Assistant Professor of Civil Engineering, Stanford University



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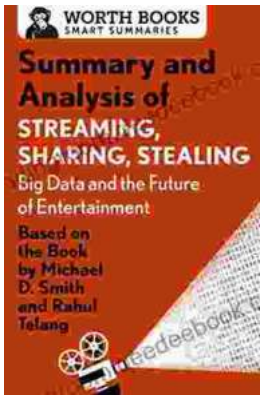

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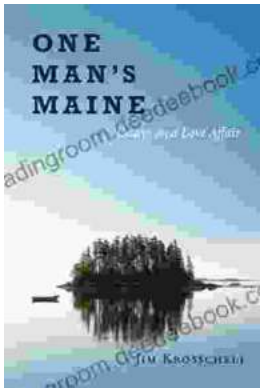

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