Risk Modeling, Assessment, and Management (Wiley Series in Systems Engineering and Management)

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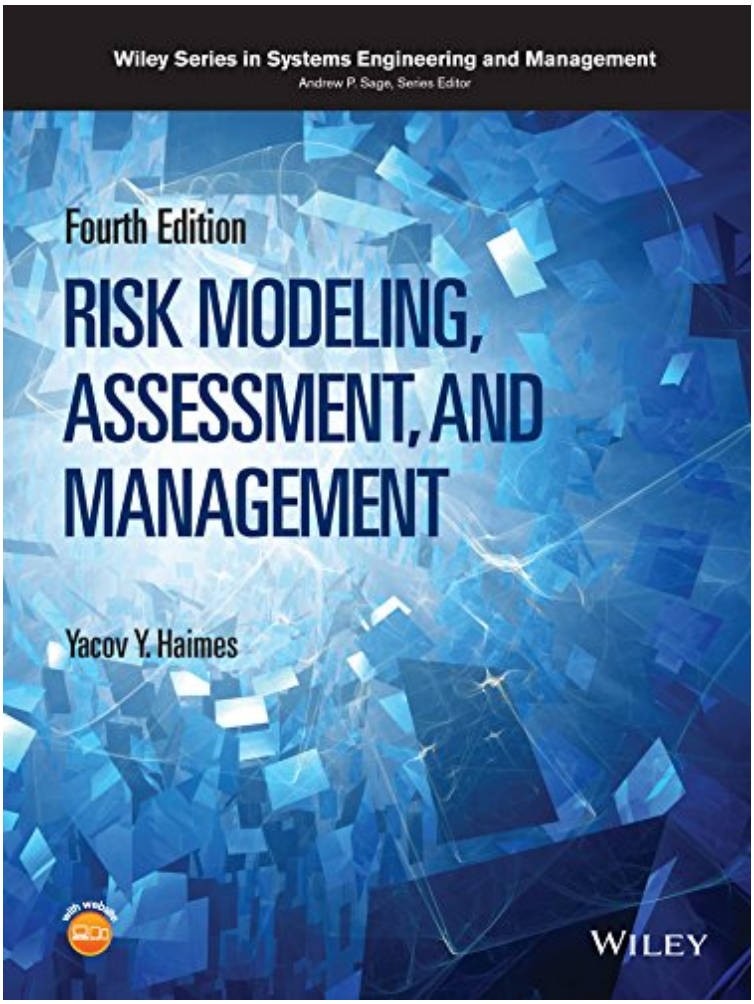

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From Wiley : Risk Modeling, Assessment, and Management (Wiley Series in Systems Engineering and Management) before purchasing it in order to gage whether or not it would be worth my time, and all praised Risk Modeling, Assessment, and Management (Wiley Series in Systems Engineering and Management):

Presents systems-based theory, methodology, and applications in risk modeling, assessment, and management This book examines risk analysis, focusing on quantifying risk and constructing probabilities for real-world decision-making, including engineering, design, technology, institutions, organizations, and policy. The author presents

fundamental concepts (hierarchical holographic modeling; state space; decision analysis; multi-objective trade-off analysis) as well as advanced material (extreme events and the partitioned multi-objective risk method; multi-objective decision trees; multi-objective risk impact analysis method; guiding principles in risk analysis); avoids higher mathematics whenever possible; and reinforces the material with examples and case studies. The book will be used in systems engineering, enterprise risk management, engineering management, industrial engineering, civil engineering, and operations research. The fourth edition of Risk Modeling, Assessment, and Management features: Expanded chapters on systems-based guiding principles for risk modeling, planning, assessment, management, and communication; modeling interdependent and interconnected complex systems of systems with phantom system models; and hierarchical holographic modeling An expanded appendix including a Bayesian analysis for the prediction of chemical carcinogenicity, and the Farmerrsquo;s Dilemma formulated and solved using a deterministic linear model Updated case studies including a new case study on sequential Pareto-optimal decisions for emergent complex systems of systems A new companion website with over 200 solved exercises that feature risk analysis theories, methodologies, and application Risk Modeling, Assessment, and Management, Fourth Edition, is written for both undergraduate and graduate students in systems engineering and systems management courses. The text also serves as a resource for academic, industry, and government professionals in the fields of homeland and cyber security, healthcare, physical infrastructure systems, engineering, business, and more.

From the Back CoverExamines the multidisciplinary applications, problems, and case histories in risk modeling, assessment, and management This book examines risk analysis, focusing on quantifying risk and constructing probability in conjunction with real-world decision-making problems, including institutional, organizational, and political considerations. The author presents basic concepts (hierarchical holographic modeling; decision analysis; multi-objective trade-off analysis) as well as advanced material (extreme events and the partitioned multi-objective risk method; multi-objective decision-tree analysis; multi-objective risk impact analysis method); avoids higher mathematics whenever possible; and reinforces the material with examples and case studies. The fourth edition of Risk Modeling, Assessment, and Management features: Expanded chapters covering systems-based guiding principles for risk modeling, planning, assessment, management, and communication; modeling complex systems of systems with phantom system models; and hierarchical holographic modeling An expanded appendix including the Bayesian analysis for the prediction of chemical carcinogenicity, and the Farmerrsquo;s Dilemma formulated and solved using a deterministic linear model Updated case studies including a new case study on sequential Pareto-optimal decisions made during emergent complex systems of systems A new companion website with over 200 solved exercises and problems that feature risk analysis theories, methodologies, and applications Risk Modeling, Assessment, and Management, Fourth Edition, is written for both undergraduate and graduate students in systems engineering and systems management courses. The text also serves as a resource for academic, industry, and government professionals in the fields of homeland and cyber security, healthcare, physical infrastructure systems, engineering, business, and more. Yacov Y. Haimes, PhD., is the Lawrence R. Quarles Professor at the School of Engineering and Applied Science, University of Virginia, Charlottesville, and is a member of the Systems and Information Engineering faculty. He is the Founding Director (1987) of the university-wide Center for Risk Management of Engineering Systems. On the faculty of Case Western Reserve University, Cleveland, for 17 years, he was the Chair of the Systems Engineering Department, and Director of the Center for Large-Scale Systems and Policy Analysis.nbsp;