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Sommario/riassunto

This book is an extension of the author’s first book and serves as a guide and manual on how to specify and compute 2-, 3-, & 4-Event Bayesian Belief Networks (BBN). It walks the learner through the steps of fitting and solving fifty BBN numerically, using mathematical proof. The author wrote this book primarily for naïve learners and professionals, with a proof-based academic rigor. The author's first book on this topic, a primer introducing learners to the basic complexities and nuances associated with learning Bayes’ theory and inverse probability for the first time, was meant for non-statisticians unfamiliar with the theorem - as is this book. This new book expands upon that approach and is meant to be a prescriptive guide for building BBN and executive decision-making for students and professionals; intended so that decision-makers can invest their time and start using this inductive reasoning principle in their decision-making processes. It highlights the utility of an algorithm that served as the basis for the first book, and includes fifty 2-,3-, and 4-event BBN of numerous variants. Equips readers with a simplified reference source for all aspects of the discrete form of Bayes’ theorem and its application to BBN Provides a compact resource for the statistical tools required to build a BBN Includes an accompanying statistical analysis portal Jeff Grover, PhD, is Founder and Chief Research Scientist at Grover Group, Inc., where he specializes in Bayes’ Theorem and its application to strategic economic decision making through Bayesian belief networks (BBNs). He specializes in blending economic theory and BBN to maximize stakeholder wealth. He is a winner of the Kentucky Innovation Award (2015) for the application of his proprietary BBN big data algorithm. He has operationalized BBN in the healthcare industry, evaluating the Medicare “Hospital Compare” data; in the Department of Defense, conducting research with U.S. Army Recruiting Command to determine optimal levels of required recruiters for recruiting niche market medical professionals; and in the agriculture industry in optimal soybean selection. In the area of economics, he was recently contracted by the Department of Energy, The Alliance for Sustainable Energy, LLC Management and Operating Contractor for the National Renewable Energy Laboratory, to conduct a 3rd party evaluation of the Hydrogen Financial Analysis Scenario (H2FAST) Tool.