Statistics for Bioengineering Sciences: With MATLAB and WinBUGS Support (Springer Texts in Statistics)

Brani Vidakovic
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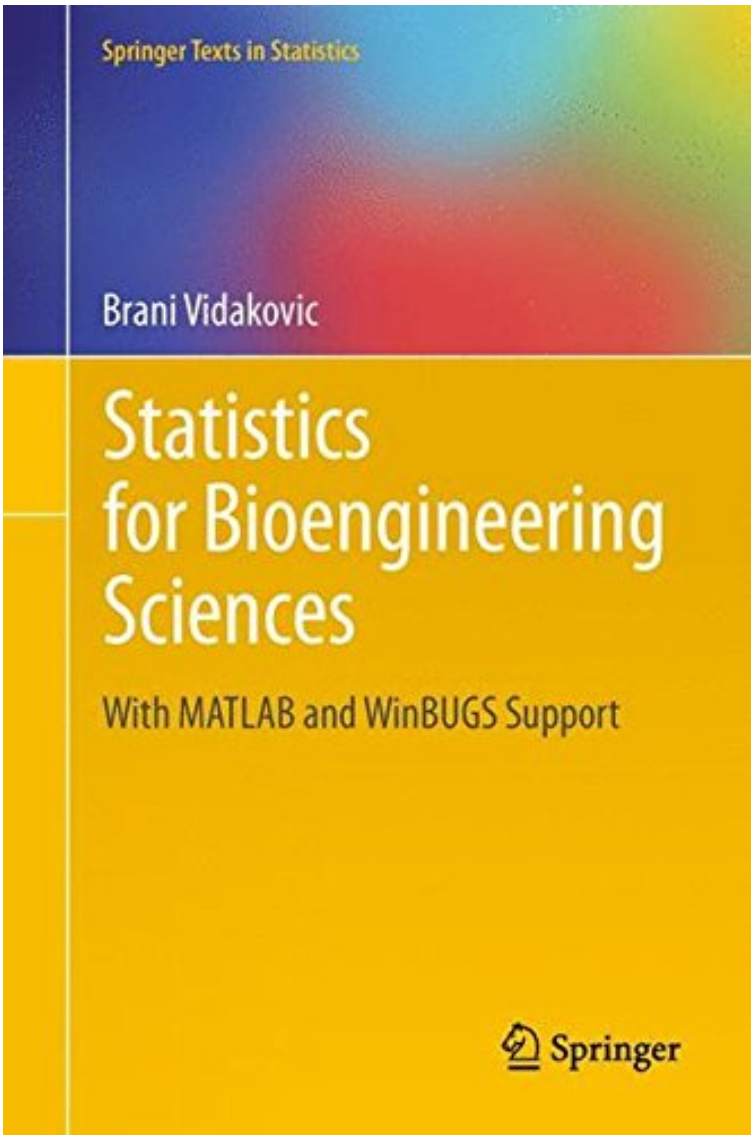

#488840 in Books Vidakovic Brani 2011-08-04Ingredients: Example IngredientsOriginal language:EnglishPDF # 1 9.30 x 1.60 x 6.40l, 3.15 #File Name: 1461403936753 pagesStatistics for Bioengineering Sciences | File size: 74.Mb

Brani Vidakovic : Statistics for Bioengineering Sciences: With MATLAB and WinBUGS Support (Springer Texts in Statistics) before purchasing it in order to gage whether or not it would be worth my time, and all praised Statistics for Bioengineering Sciences: With MATLAB and WinBUGS Support (Springer Texts in Statistics):

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Through its scope and depth of coverage, this book addresses the needs of the vibrant and rapidly growing engineering fields, bioengineering and biomedical engineering, while implementing software that engineers are familiar with.The author integrates introductory statistics for engineers and introductory biostatistics as a single textbook heavily oriented to computation and hands on approaches. For example, topics ranging from the aspects of disease and device testing, Sensitivity, Specificity and ROC curves, Epidemiological Risk Theory, Survival Analysis, or Logistic and Poisson Regressions are covered.In addition to the synergy of engineering and biostatistical approaches, the novelty of this book is in the substantial coverage of Bayesian approaches to statistical inference. Many examples in this text are solved using both the traditional and Bayesian methods, and the results are compared and commented.

From the book reviews:This text has resulted from the authors teaching of introductory statistics to engineering students in the USA. Dealing both with the theoretical aspects of statistical methods and the need to implement software that engineers are familiar with, the book is a delight to read. I recommend the book to any one intending to use either MATLAB or/and WinBUGS for statistical modelling and analysis. (Carl M. OBrien, International Statistical , Vol. 81 (3), 2014)Although there are many engineering statistics books, this is the first one I have seen devoted to bioengineering. It is a very comprehensive book with many good features. I would say that Statistics for Bioengineering Sciences would make a wonderful text for a first course in statistics for biomedical engineering students and is a great reference for engineers and statisticians. (Michael R. Chernick, Technometrics, Vol. 55 (1), February, 2013)From the Back CoverThrough its scope and depth of coverage, this book addresses the needs of the vibrant and rapidly growing engineering fields, bioengineering and biomedical engineering, while implementing software that engineers are familiar with.The author integrates introductory statistics for engineers and introductory biostatistics as a single textbook heavily oriented to computation and hands on approaches. For example, topics ranging from the aspects of disease and device testing, Sensitivity, Specificity and ROC curves, Epidemiological Risk Theory, Survival Analysis, or Logistic and Poisson Regressions are covered.In addition to the synergy of engineering and biostatistical approaches, the novelty of this book is in the substantial coverage of Bayesian approaches to statistical inference. Many examples in this text are solved using both the traditional and Bayesian methods, and the results are compared and commented.About the AuthorBrani Vidakovic is Fellow of American Statistical Association, Elected Member of International Statistical Institute, an Editor-in-Chief of Encyclopedia of Statistical Sciences, Second Edition, an Associate Editor of: Journal of American Statistical Association, Communications in Statistics, Annals of Institute of Statistical Mathematics, and Bayesian Statistics. He is Jointly Appointed Professor in School of Industrial and Systems Engineering - ISyE and Department of Biostatistics at Emory University and Adjunct Professor in Jiann-Ping Hsu College of Public Health, Georgia Southern University. Member of Integrative BioSystems Institute (IBSI), at Georgia Institute of Technology. Center for Bioinformatics and Computational Biology, at Biology Department, Georgia Institute of Technology.