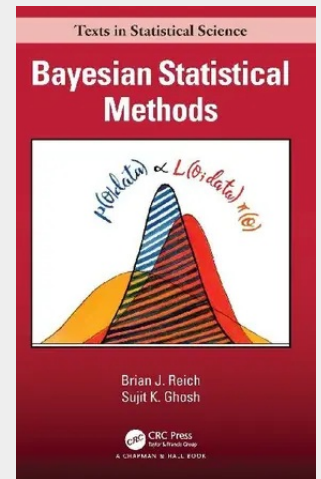


Bayesian Statistical Methods

Bayesian Statistical Methods provides data scientists with the foundational and computational tools needed to carry out a Bayesian analysis. This book focuses on Bayesian methods applied routinely in practice including multiple linear regression, mixed effects models and generalized linear models (GLM). The authors include many examples with complete R code and comparisons with analogous frequentist procedures. In addition to the basic concepts of Bayesian inferential methods, the book covers many general topics: - Advice on selecting prior distributions - Computational methods including Markov chain Monte Carlo (MCMC) - Model-comparison and goodness-of-fit measures, including sensitivity to priors - Frequentist properties of Bayesian methods Case studies covering advanced topics illustrate the flexibility of the Bayesian approach: - Semiparametric regression - Handling of missing data using predictive distributions - Priors for high-dimensional regression models - Computational techniques for large datasets - Spatial data analysis The advanced topics are presented with sufficient conceptual depth that the reader will be able to carry out such analysis and argue the relative merits of Bayesian and classical methods. A repository of R code, motivating data sets, and complete data analyses are available on the book's website. Brian J. Reich, Associate Professor of Statistics at North Carolina State University, is currently the editor-in-chief of the Journal of Agricultural, Biological, and Environmental Statistics and was awarded the LeRoy & Elva Martin Teaching Award. Sujit K. Ghosh, Professor of Statistics at North Carolina State University, has over 22 years of research and teaching experience in conducting Bayesian analyses, received the Cavell Brownie mentoring award, and served as the Deputy Director at the Statistical and Applied Mathematical Sciences Institute.

Designed to provide a good balance of theory and computational methods that will appeal to students and practitioners with minimal mathematical and statistical background and no experience in Bayesian statistics to students and practitioners looking for advanced methodologies.



125,50 €
125,50 € (zzgl. MwSt.)

Nicht mehr lieferbar

Artikelnummer: 9780815378648
Medium: Buch
ISBN: 978-0-8153-7864-8
Verlag: CRC Press
Erscheinungstermin: 16.04.2019
Sprache(n): Englisch
Auflage: 1. Auflage 2019
Serie: Chapman & Hall/CRC Texts in Statistical Science
Produktform: Gebunden
Gewicht: 602 g
Seiten: 288
Format (B x H): 161 x 240 mm

