The book was found

# Linear Models With R, Second Edition (Chapman & Hall/CRC Texts In Statistical Science)





## Synopsis

A Hands-On Way to Learning Data Analysis Part of the core of statistics, linear models are used to make predictions and explain the relationship between the response and the predictors. Understanding linear models is crucial to a broader competence in the practice of statistics. Linear Models with R, Second Edition explains how to use linear models in physical science, engineering, social science, and business applications. The book incorporates several improvements that reflect how the world of R has greatly expanded since the publication of the first edition. New to the Second Edition Reorganized material on interpreting linear models, which distinguishes the main applications of prediction and explanation and introduces elementary notions of causality Additional topics, including QR decomposition, splines, additive models, Lasso, multiple imputation, and false discovery rates Extensive use of the ggplot2 graphics package in addition to base graphics Like its widely praised, best-selling predecessor, this edition combines statistics and R to seamlessly give a coherent exposition of the practice of linear modeling. The text offers up-to-date insight on essential data analysis topics, from estimation, inference, and prediction to missing data, factorial models, and block designs. Numerous examples illustrate how to apply the different methods using R.

## **Book Information**

Series: Chapman & Hall/CRC Texts in Statistical Science Hardcover: 286 pages Publisher: Chapman and Hall/CRC; 2 edition (July 1, 2014) Language: English ISBN-10: 1439887330 ISBN-13: 978-1439887332 Product Dimensions: 1 x 6.5 x 9.5 inches Shipping Weight: 1.6 pounds (View shipping rates and policies) Average Customer Review: 4.2 out of 5 stars Â See all reviews (5 customer reviews) Best Sellers Rank: #197,222 in Books (See Top 100 in Books) #15 in Books > Science & Math > Mathematics > Applied > Linear Programming #564 in Books > Textbooks > Science & Mathematics > Mathematics > Statistics #831 in Books > Science & Math > Mathematics > Applied > Probability & Statistics

## **Customer Reviews**

This is an excellent text on linear regression techniques. Rather than teaching R step by step, Dr.

Faraway jumps right in with analysis of specific data sets, listing the R commands needed to generate the given output. An hour or so after getting the book, I downloaded R and the free package from Dr. Faraway containing all of the data sets used in the book (I followed the directions in the very short Appendix A), and I, too, was trying out the given commands on the data sets referred to in the exercises for the first chapter. Dr. Faraway is particularly good in his discussions of interpreting the output from linear regression problems. A standout chapter is the one on using regression for modelling vs. using regression for prediction. I also learned a lot from the chapter on principal components, a topic I remember covering in Grad school, but which I confess I didn't really understand at the time. Dr. Faraway's explanation of the procedure is excellent, and he uses an example in which it is possible to explain what the selected components represent in terms of the original problem, but he points out that this is not always possible; sometimes you just have to be content with accurate predictions, but no ideas as to what the principal components represent. wish I had been told this the first time I learned the procedure. If I like the book so much, why only four stars? Well, I do have a few minor guibbles. I would have liked an index of R commands, so that if you remember a command, but can't remember the correct syntax for using the command, you could find the page on which it first appeared. I would also have liked an index of data sets, so that I could quickly find every exercise set that referenced the teengamb data set, say. But these are minor complaints.

#### Download to continue reading...

Linear Models with R, Second Edition (Chapman & Hall/CRC Texts in Statistical Science) Stochastic Processes: An Introduction, Second Edition (Chapman & Hall/CRC Texts in Statistical Science) Modeling and Analysis of Stochastic Systems, Second Edition (Chapman & Hall/CRC Texts in Statistical Science) Graphics for Statistics and Data Analysis with R (Chapman & Hall/CRC Texts in Statistical Science) Introduction to Probability (Chapman & Hall/CRC Texts in Statistical Science) Binary Polynomial Transforms and Non-Linear Digital Filters (Chapman & Hall/CRC Pure and Applied Mathematics) Introduction to Modern Cryptography, Second Edition (Chapman & Hall/CRC Cryptography and Network Security Series) Machine Learning: An Algorithmic Perspective, Second Edition (Chapman & Hall/Crc Machine Learning & Pattern Recognition) Coding Theory and Cryptography: The Essentials, Second Edition (Chapman & Hall/CRC Pure and Applied Mathematics) Introduction to Partial Differential Equations with MATLAB (Chapman & Hall/CRC Applied Mathematics & Nonlinear Science) Computational Partial Differential Equations Using MATLAB (Chapman & Hall/CRC Applied Mathematics & Nonlinear Science) A Concise Introduction to Pure Mathematics, Fourth Edition (Chapman Hall/CRC Mathematics) Image Processing and Acquisition using Python (Chapman & Hall/CRC Mathematical and Computational Imaging Sciences Series) Web 2.0 and Beyond: Principles and Technologies (Chapman & Hall/CRC Textbooks in Computing) The Garbage Collection Handbook: The Art of Automatic Memory Management (Chapman & Hall/CRC Applied Algorithms and Data Structures series) Data Classification: Algorithms and Applications (Chapman & Hall/CRC Data Mining and Knowledge Discovery Series) Algorithms in Bioinformatics: A Practical Introduction (Chapman & Hall/CRC Mathematical and Computational Biology) Spatial Point Patterns: Methodology and Applications with R (Chapman & Hall/CRC Interdisciplinary Statistics) Computer Graphics Through OpenGL: From Theory to Experiments (Chapman & Hall/CRC Computer Graphics, Geometric Modeling, and Animation)

<u>Dmca</u>