



The book was found

Using R For Numerical Analysis In Science And Engineering (Chapman & Hall/CRC The R Series)



Synopsis

Instead of presenting the standard theoretical treatments that underlie the various numerical methods used by scientists and engineers, *Using R for Numerical Analysis in Science and Engineering* shows how to use R and its add-on packages to obtain numerical solutions to the complex mathematical problems commonly faced by scientists and engineers. This practical guide to the capabilities of R demonstrates Monte Carlo, stochastic, deterministic, and other numerical methods through an abundance of worked examples and code, covering the solution of systems of linear algebraic equations and nonlinear equations as well as ordinary differential equations and partial differential equations. It not only shows how to use R's powerful graphic tools to construct the types of plots most useful in scientific and engineering work, but also:

- Explains how to statistically analyze and fit data to linear and nonlinear models
- Explores numerical differentiation, integration, and optimization
- Describes how to find eigenvalues and eigenfunctions
- Discusses interpolation and curve fitting
- Considers the analysis of time series

Using R for Numerical Analysis in Science and Engineering provides a solid introduction to the most useful numerical methods for scientific and engineering data analysis using R.

Book Information

File Size: 12503 KB

Print Length: 359 pages

Publisher: Chapman and Hall/CRC; 1 edition (April 24, 2014)

Publication Date: April 24, 2014

Sold by: Amazon Digital Services LLC

Language: English

ASIN: B00L2EAV3O

Text-to-Speech: Not enabled

X-Ray: Not Enabled

Word Wise: Not Enabled

Lending: Not Enabled

Enhanced Typesetting: Not Enabled

Best Sellers Rank: #262,218 Paid in Kindle Store (See Top 100 Paid in Kindle Store) #10

in Kindle Store > Kindle eBooks > Nonfiction > Science > Mathematics > Number Systems #53

in Books > Science & Math > Mathematics > Number Systems #251 in Kindle Store >

Kindle eBooks > Nonfiction > Science > Mathematics > Applied > Probability & Statistics

Customer Reviews

Great!

R is a vast project, and sometimes it can be overwhelming; particularly if you are dealing with certain CRAN Task-Views, such as Numerical Mathematics. Nonetheless, this book is a life saver. It introduces reader in to R's Numerical-Analysis capabilities, from the very basic concepts to highly developed topics. The book is based on examples developed by the author himself and examples coming from specific Vignettes. Chapters 5, 7 and 11 are particularly good for those interested in Optimization, Inverse Modelling, and Systems of Non-linear Equations. 100% recommended. Congratulations to the author.

[Download to continue reading...](#)

Using R for Numerical Analysis in Science and Engineering (Chapman & Hall/CRC The R Series)
Software Engineering: The Current Practice (Chapman & Hall/CRC Innovations in Software Engineering and Software Development Series)
Statistics and Data Analysis for Microarrays Using R and Bioconductor, Second Edition (Chapman & Hall/CRC Mathematical and Computational Biology)
Modeling and Analysis of Stochastic Systems, Second Edition (Chapman & Hall/CRC Texts in Statistical Science)
Modeling and Analysis of Stochastic Systems, Third Edition (Chapman & Hall/CRC Texts in Statistical Science)
Computational Statistics Handbook with MATLAB, Third Edition (Chapman & Hall/CRC Computer Science & Data Analysis)
Introduction to Scientific Programming and Simulation Using R (Chapman & Hall/CRC The R Series)
Introduction to Scientific Programming and Simulation Using R, Second Edition (Chapman & Hall/CRC The R Series)
Modern Data Science with R (Chapman & Hall/CRC Texts in Statistical Science)
Flexible, Reliable Software: Using Patterns and Agile Development (Chapman & Hall/CRC Textbooks in Computing)
Measure and Integral: An Introduction to Real Analysis, Second Edition (Chapman & Hall/CRC Pure and Applied Mathematics)
RNA-seq Data Analysis: A Practical Approach (Chapman & Hall/CRC Mathematical and Computational Biology)
Dynamic Prediction in Clinical Survival Analysis (Chapman & Hall/CRC Monographs on Statistics & Applied Probability)
Introduction to High Performance Computing for Scientists and Engineers (Chapman & Hall/CRC Computational Science)
Design of Experiments: An Introduction Based on Linear Models (Chapman & Hall/CRC Texts in Statistical Science)
Linear Models with R, Second Edition (Chapman & Hall/CRC Texts in Statistical Science)
Practical Statistics for Medical Research (Chapman & Hall/CRC Texts in Statistical Science)
A Course in Large Sample Theory (Chapman & Hall/CRC Texts in Statistical

Science) Modelling Survival Data in Medical Research, Third Edition (Chapman & Hall/CRC Texts in Statistical Science) Access Control, Security, and Trust: A Logical Approach (Chapman & Hall/CRC Cryptography and Network Security Series)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)