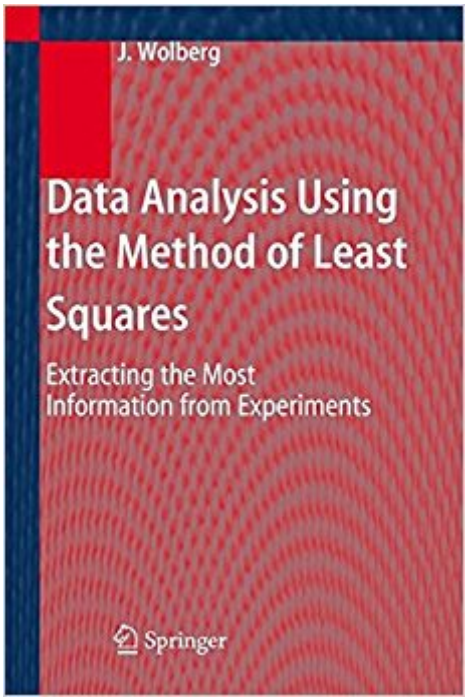
Data Analysis Using The Method Of Least Squares: Extracting The Most Information From Experiments



Synopsis

Develops the full power of the least-squares method Enables engineers and scientists to apply the method to their specific problem Deals with linear as well as with non-linear least-squares, parametric as well as non-parametric methods

Book Information

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Customer Reviews

Aus den Rezensionen: "â | Die â | Methode der kleinsten Quadrate â | ist â | eines der am hÃ¤ufigsten angewendeten statistischen Verfahren zur Aus- und Bewertung der Daten. John Wolberg â | bedauert, dass dieser Methode noch lÃ¤ngst nicht die ihr zustehende Aufmerksamkeit â | gewidmet wird â | Die publizistische LÃ cke â | mÃ¶chte der Autor mit diesem Buch schlieÃ en. â | Das Buch vermittelt das Wissen fÃ r eine hÃ¶chst effiziente Methode zur Datenanalyse. Der Autor erlÃ¤utert die Thematik in dem â | Buch abstrakt konzentriert und untermauert sie durch einfache, Ã berwiegend hypothetische Beispiele, die zum â | VerstÃ¤ndnis der Methode beitragen ..." (Dr. Norbert HÃ¶fert, in: Gefahrstoffe - Reinhaltung der Luft, 2007, Vol. 67, Issue 4, S. 136)

The preferred method of data analysis of quantitative experiments is the method of least squares. Often, however, the full power of the method is overlooked and very few books deal with this subject at the level that it deserves. The purpose of Data Analysis Using the Methods of Least SquaresÂ is to fill this gap and include the type of information required to help scientists and engineers apply the method to problems in their special fields of interest. In addition, graduate students in science and

engineering doing work of experimental nature can benefit from this book. Particularly, both linear and non-linear least squares, the use of experimental error estimates for data weighting, procedures to include prior estimates, methodology for selecting and testingÂ models, prediction analysis, and some non-parametric methods are discussed.

In my work I must review large data bases. We typically fit various models to the data. I've used the method of least squares to perform the analyses and found a reference to Wolberg's book. After reading several chapters I realized that there were several important aspect of this method that I wasn't aware of. I found the discussion of available software particularly helpful as well as the analysis of errors. Least Squares is a very powerful technique and this book provides a very complete discussion of the method.

Landmarks, Facilities, Resupply Data, and Essential Trail Information for the Entire Pacific Crest Trail, from Mexico to Canada Too Small to Ignore: Why the Least of These Matters Most Motorhome and RV Retirement Living: The Most Enjoyable and Least Expensive Way to Retire Cleveland Neighborhood Guidebook: The Least Practical, Most Literary Guide to Cleveland Analytics: Data Science, Data Analysis and Predictive Analytics for Business Statistics, Data Mining, and Machine Learning in Astronomy: A Practical Python Guide for the Analysis of Survey Data (Princeton Series in Modern Observational Astronomy)