Statistical Analysis with Missing Data

Roderick J. A. Little, Donald B. Rubin
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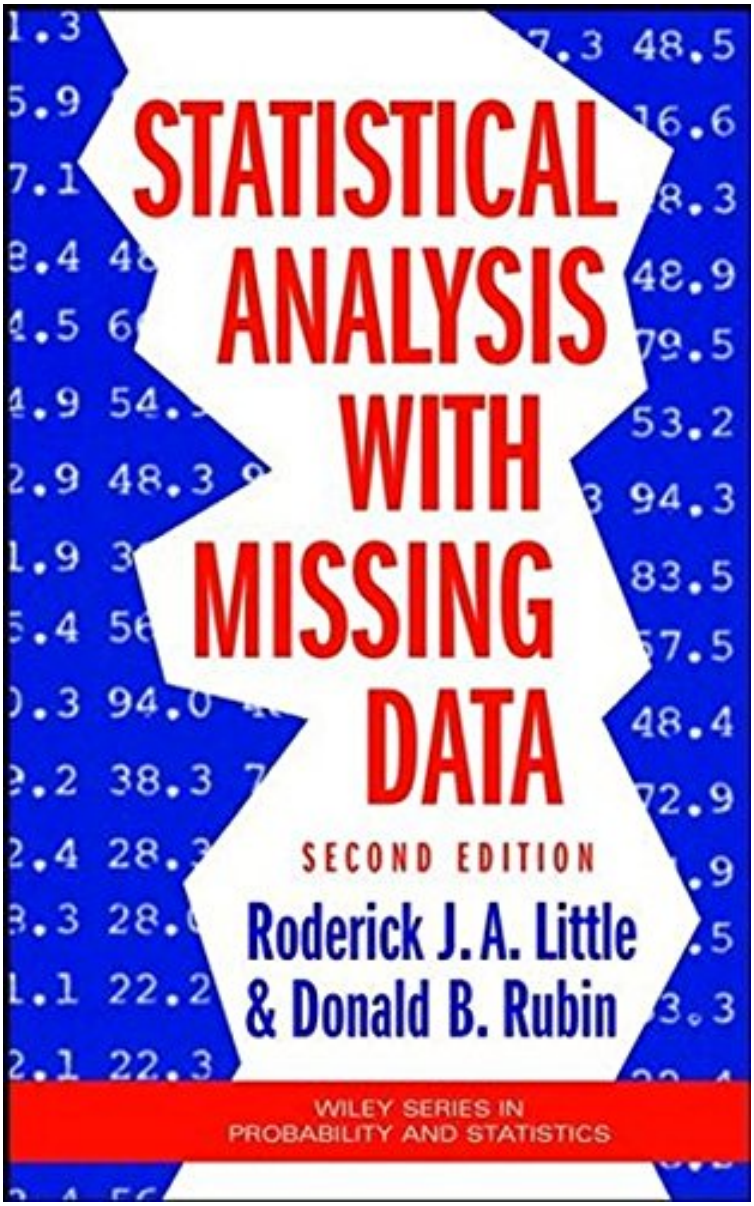

#615112 in Books Roderick J A Little 2002-09-09Original language:EnglishPDF # 1 9.45 x 1.00 x 6.30l, 1.53 #File Name: 0471183865408 pagesStatistical Analysis With Missing Data | File size: 73.Mb

Roderick J. A. Little, Donald B. Rubin : Statistical Analysis with Missing Data before purchasing it in order to gage whether or not it would be worth my time, and all praised Statistical Analysis with Missing Data:

0 of 0 people found the following review helpful. Good reference but not exhaustiveBy AshleyA good text. It was required for a graduate level course on handling missing data. The professor has also opted to use a portion of an additional textbook with some more modern techniques not addressed in this book such as pattern mixture models. But

this is a great intro to the topic. I will say, however, some of the problems are vague and poorly explained. Computationally they are not too difficult, but trying to figure out exactly what they are asking is sometimes tough.54 of 55 people found the following review helpful. Cautious and applicableBy wiredweirdI'm working with data sets where up to 15% of measurements are unusable. If I'm going to get any results at all, I have to get them despite the lost values.This book provides a huge library of techniques for working around the holes, as well as techniques for filling them in. This is not a cut-and-paste text for programmers - it gives the basic theory and algorithms for each technique. Still, the presentation is quite readable and fairly easy to put into practice.The book's emphasis is on imputation - filling in values so that analysis can move forward. This is something to approach with real caution, though. The imputed (synthesized) values must not perturb the analysis, so the imputation must differ according to the analysis being performed. The authors present a variety of imputation techniques, as well as bootstrap, jacknife, and other techniques for measuring the quality of the results.The authors also dedicate chapters to approaches that work only with available data, and to cases where missing data can not simply be ignored.This is the most thorough and practical guide I know to handling missing data. In an ideal world, experiments would all produce usable results and surveys would all have every question answered. When you have to deal with reality, though, this is the book.0 of 0 people found the following review helpful. Must have book for missing data analysisBy W. YIPThis is a classic and should be part of your library if you are a serious statistician.

Praise for the First Edition of Statistical Analysis with Missing Data "An important contribution to the applied statistics literature.... I give the book high marks for unifying and making accessible much of the past and current work in this important area." William E. Strawderman, Rutgers University "This book...provide[s] interesting real-life examples, stimulating end-of-chapter exercises, and up-to-date references. It should be on every applied statisticians bookshelf." The Statistician "The book should be studied in the statistical methods department in every statistical agency." Journal of Official Statistics Statistical analysis of data sets with missing values is a pervasive problem for which standard methods are of limited value. The first edition of Statistical Analysis with Missing Data has been a standard reference on missing-data methods. Now, reflecting extensive developments in Bayesian methods for simulating posterior distributions, this Second Edition by two acknowledged experts on the subject offers a thoroughly up-to-date, reorganized survey of current methodology for handling missing-data problems. Blending theory and application, authors Roderick Little and Donald Rubin review historical approaches to the subject and describe rigorous yet simple methods for multivariate analysis with missing values. They then provide a coherent theory for analysis of problems based on likelihoods derived from statistical models for the data and the missing-data mechanism and apply the theory to a wide range of important missing-data problems. The new edition now enlarges its coverage to include: Expanded coverage of Bayesian methodology, both theoretical and computational, and of multiple imputation Analysis of data with missing values where inferences are based on likelihoods derived from formal statistical models for the data-generating and missing-data mechanisms Applications of the approach in a variety of contexts including regression, factor analysis, contingency table analysis, time series, and sample survey inference Extensive references, examples, and exercises Amstat News asked three review editors to rate their top five favorite books in the September 2003 issue. Statistical Analysis With Missing Data was among those chosen.

"I enjoyed reading this well written book. I recommend it highly to statisticians." (Journal of Statistical Computation Simulation, July 2004) a well written and well documented text for missing data analysis... (Statistical Methods in Medical Research, Vol.14, No.1, 2005) "An update to this authoritative book is indeed welcome." (Journal of the American Statistical Association, December 2004) this is an excellent book. It is well written and inspiring (Statistics in Medicine, 2004; 23) "...this second edition offers a thoroughly up-to-date, reorganized survey of of current methods for handling missing data problems..." (Zentralblatt Math, Vol.1011, No.11, 203) "...well written and very readable...a comprehensive, update treatment of an important topic by two of the leading researchers in the field. In summary, I highly recommend this book..." (Technometrics, Vol. 45, No. 4, November 2003)From the PublisherAcknowledged experts on the subject bring together diverse sources on methods for statistical analysis of data sets with missing values, a pervasive problem for which standard methods are of limited value. Blending theory and application, it reviews historical approaches to the subject, and rigorous yet simple methods for multivariate analysis with missing values. Goes on to provide a coherent theory for analysis of problems based on likelihoods derived from statistical models for the data and the missing data mechanism. The theory is applied to a wide range of important missing-data problems. Extensive references, examples, and exercises.From the Back CoverPraise for the First Edition of Statistical Analysis with Missing Data "An important contribution to the applied statistics literature.... I give the book high marks for unifying and making accessible much of the past and current work in this important area."William E. Strawderman, Rutgers University "This book...provide[s] interesting real-life examples, stimulating end-of-chapter exercises, and up-to-date references. It should be on every applied statisticians bookshelf."The Statistician "The book should be studied in the statistical methods department in every statistical agency."Journal of Official Statistics Statistical analysis of data sets with missing values is a pervasive problem for which standard methods are of limited value. The first edition

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