Data Analysis

Applied Longitudinal Data Analysis for EpidemiologyGrade Models and Methods for Data AnalysisExcel Data AnalysisStatistical Data AnalysisBivariate Data AnalysisSAS for Data AnalysisIntelligent Data AnalysisData Analysis with Excel®Bayesian Methods for Data Analysis, Third EditionStatistical Sciences and Data AnalysisLongitudinal Data AnalysisMaking Sense of Multivariate Data AnalysisCategorical Data AnalysisPharmacokinetic and Pharmacodynamic Data Analysis: Concepts and Applications, Third EditionNonparametric Functional Data AnalysisData AnalysisQuantitative Data Analysis with SPSS 12 and 13Exploratory Data AnalysisFunctional Data AnalysisData Analysis Using StataFatigue Crack Growth Measurement and Data AnalysisAtmospheric Data AnalysisData Analysis Methods in Physical OceanographyAdvances in Data AnalysisData Analysis, Classification and the Forward SearchData Analysis for the Behavioral Sciences Using SPSSMultivariate Data AnalysisLongitudinal Data AnalysisStatistics and Data Analysis for Financial EngineeringNonparametric Regression Methods for Longitudinal Data AnalysisHandbook of Data AnalysisLongitudinal Data AnalysisMass Spectrometry Data Analysis in ProteomicsRobustness in Data AnalysisAn Introduction to Survey Research, Polling, and Data AnalysisQualitative Data Analysis with NVivoFire Data Analysis HandbookFunctional Data Analysis with R and MATLABMethods for Statistical Data Analysis of Multivariate ObservationsStatistical

Data Analysis

Applied Longitudinal Data Analysis for Epidemiology

This book is a guide to the practical application of statistics in data analysis as typically encountered in the physical sciences. It is primarily addressed at students and professionals who need to draw quantitative conclusions from experimental data. Although most of the examples are taken from particle physics, the material is presented in a sufficiently general way as to be useful to people from most branches of the physical sciences. The first part of the book describes the basic tools of data analysis: concepts of probability and random variables, Monte Carlo techniques, statistical tests, and methods of parameter estimation. The last three chapters are somewhat more specialized than those preceding, covering interval estimation, characteristic functions, and the problem of correcting distributions for the effects of measurement errors (unfolding).

Grade Models and Methods for Data Analysis

An introduction to the underlying principles, central concepts, and basic techniques for conducting and understanding exploratory data analysis - with numerous social science examples.

Excel Data Analysis

This book presents new developments in data analysis, classification and multivariate statistics, and in their algorithmic implementation. The volume offers contributions to the theory of clustering and discrimination, multidimensional data analysis, data mining, and robust statistics with a special emphasis on the novel Forward Search approach. Many papers provide significant insight in a wide range of fields of application. Customer satisfaction and service evaluation are two examples of such emerging fields.

Statistical Data Analysis

A practical guide to longitudinal data analysis in medical research and epidemiology.

Bivariate Data Analysis

This book provides a new grade methodology for intelligent data analysis. It introduces a specific infrastructure of concepts needed to describe data analysis models and methods. This monograph is the only book presently available covering both the theory and application of grade data analysis and therefore aiming both at researchers, students, as well as applied practitioners. The text is richly illustrated through examples and case studies and includes a short introduction to software implementing grade methods, which can be downloaded from the editors.

SAS for Data Analysis

The field of mathematical statistics called robustness statistics deals with the stability of statistical inference under variations of accepted distribution models. Although robust statistics involves mathematically highly defined tools, robust methods exhibit a satisfactory behaviour in small samples, thus being guite useful in applications. This volume in the book series Modern Probability and Statistics addresses various topics in the field of robust statistics and data analysis, such as: a probability-free approach in data analysis; minimax variance estimators of location, scale, regression, autoregression and correlation; "L1-norm methods; adaptive, data reduction, bivariate boxplot, and multivariate outlier detection algorithms; applications in reliability, detection of signals, and analysis of the sudden cardiac death risk factors. The book contains new results related to robustness and data analysis technologies, including both theoretical aspects and practical needs of data processing, which have been relatively inaccessible as they were originally only published in Russian. This book will be of value and interest to researchers in mathematical statistics as well as to those using statistical methods.

Intelligent Data Analysis

Broadening its scope to nonstatisticians, Bayesian Methods for Data Analysis, Third Edition provides an accessible introduction to the foundations and applications of Bayesian analysis. Along with a complete reorganization of the material, this edition concentrates more on hierarchical Bayesian modeling as implemented via Markov chain Monte Carlo (MCMC) methods and related data analytic techniques. New to the Third Edition New data examples, corresponding R and WinBUGS code, and homework problems Explicit descriptions and illustrations of hierarchical modeling-now commonplace in Bayesian data analysis A new chapter on Bayesian design that emphasizes Bayesian clinical trials A completely revised and expanded section on ranking and histogram estimation A new case study on infectious disease modeling and the 1918 flu epidemic A solutions manual for gualifying instructors that contains solutions, computer code, and associated output for every homework problem—available both electronically and in print Ideal for Anyone Performing Statistical Analyses Focusing on applications from biostatistics, epidemiology, and medicine, this text builds on the popularity of its predecessors by making it suitable for even more practitioners and students.

Data Analysis with Excel®

This accessible introduction to data analysis focuses on the interpretation of statistical results, in particular those which come from nonexperimental social research. It will provide social science researchers with the tools necessary to select and evaluate statistical tests appropriate for their research question. Using a consistent data-set throughout the book to illustrate the various analytic techniques, Michael Lewis-Beck covers topics such as univariate statistical significance of the relationship between two variables, simple regression in which the dependent variable is influenced by a single independent variable, and multiple regression.

Bayesian Methods for Data Analysis, Third Edition

"Multivariate Data Analysis - in practice adopts a practical, non-mathematical approach to multivariate data analysis. The book's principal objective is to provide a conceptual framework for multivariate data analysis techniques, enabling the reader to apply these in his or her own field. Features: Focuses on the practical application of multivariate techniques such as PCA, PCR and PLS and experimental design. Nonmathematical approach - ideal for analysts with little or no background in statistics. Step by step introduction of new concepts and techniques promotes ease of learning. Theory supported by hands-on exercises based on real-world data. A full training copy of The Unscrambler (for Windows 95, Windows NT 3.51 or later versions) including data sets for the exercises is available. Tutorial exercises based on data from real-world applications are used throughout the book to illustrate the use of the techniques introduced, providing the reader with a working knowledge of modern multivariate data analysis and experimental design. All exercises use The Unscrambler, a de facto industry standard for multivariate data analysis software packages. Multivariate Data Analysis in Practice is an excellent self-study text for scientists, chemists and engineers

from all disciplines (non-statisticians) wishing to exploit the power of practical multivariate methods. It is very suitable for teaching purposes at the introductory level, and it can always be supplemented with higher level theoretical literature."Résumé de l'éditeur.

Statistical Sciences and Data Analysis

An introductory applied statistics text that can be used at either undergraduate or graduate level.

Longitudinal Data Analysis

Amstat News asked three review editors to rate their topfive favorite books in the September 2003 issue. CategoricalData Analysis was among those chosen. A valuable new edition of a standard reference "A 'musthave' book for anyone expecting to do research and/orapplications in categorical data analysis." -Statistics in Medicine on Categorical Data Analysis, First Edition The use of statistical methods for categorical data hasincreased dramatically, particularly for applications in the biomedical and social sciences. Responding to new developments in he field as well as to the needs of a new generation ofprofessionals and students, this new edition of the classicCategorical Data Analysis offers a comprehensiveintroduction to the most important methods for categorical dataanalysis. Designed for statisticians and biostatisticians as well asscientists and graduate students practicing statistics, Categorical Data Analysis, Second Edition

summarizes the latest methods for univariate and correlated multivariatecategorical responses. Readers will find a unified generalizedlinear models approach that connects logistic regression and Poisson and negative binomial regression for discrete data withnormal regression for continuous data. Adding to the value in thenew edition is coverage of: Three new chapters on methods for repeated measurement andother forms of clustered categorical data, including marginalmodels and associated generalized estimating equations (GEE)methods, and mixed models with random effects Stronger emphasis on logistic regression modeling of binaryand multicategory data An appendix showing the use of SAS for conducting nearly allanalyses in the book Prescriptions for how ordinal variables should be treateddifferently than nominal variables Discussion of exact small-sample procedures More than 100 analyses of real data sets to illustrateapplication of the methods, and more than 600 exercises An Instructor's Manual presenting detailed solutions to all the problems in the book is available from the Wiley editorialdepartment.

Making Sense of Multivariate Data Analysis

Incorporates mixed-effects modeling techniques for more powerful and efficient methods This book presents current and effective nonparametric regression techniques for longitudinal data analysis and systematically investigates the incorporation of mixed-effects modeling techniques into various nonparametric regression models. The authors emphasize modeling ideas and inference methodologies, although some theoretical results for the justification of the proposed methods are presented. With its logical structure and organization, beginning with basic principles, the text develops the foundation needed to master advanced principles and applications. Following a brief overview, data examples from biomedical research studies are presented and point to the need for nonparametric regression analysis approaches. Next, the authors review mixed-effects models and nonparametric regression models, which are the two key building blocks of the proposed modeling techniques. The core section of the book consists of four chapters dedicated to the major nonparametric regression methods: local polynomial, regression spline, smoothing spline, and penalized spline. The next two chapters extend these modeling techniques to semiparametric and time varying coefficient models for longitudinal data analysis. The final chapter examines discrete longitudinal data modeling and analysis. Each chapter concludes with a summary that highlights key points and also provides bibliographic notes that point to additional sources for further study. Examples of data analysis from biomedical research are used to illustrate the methodologies contained throughout the book. Technical proofs are presented in separate appendices. With its focus on solving problems, this is an excellent textbook for upper-level undergraduate and graduate courses in longitudinal data analysis. It is also recommended as a reference for biostatisticians and other theoretical and applied research statisticians with an interest in $\frac{Page}{9/26}$

longitudinal data analysis. Not only do readers gain an understanding of the principles of various nonparametric regression methods, but they also gain a practical understanding of how to use the methods to tackle real-world problems.

Categorical Data Analysis

A fundamental book for social researchers. It provides a first-class, reliable guide to the basic issues in data analysis. Scholars and students can turn to it for teaching and applied needs with confidence.

Pharmacokinetic and Pharmacodynamic Data Analysis: Concepts and Applications, Third Edition

Although many books currently available describe statistical models and methods for analyzing longitudinal data, they do not highlight connections between various research threads in the statistical literature. Responding to this void, Longitudinal Data Analysis provides a clear, comprehensive, and unified overview of state-of-the-art theory and applications. It also focuses on the assorted challenges that arise in analyzing longitudinal data. After discussing historical aspects, leading researchers explore four broad themes: parametric modeling, nonparametric and semiparametric methods, joint models, and incomplete data. Each of these sections begins with an introductory chapter that provides useful background material and a broad outline to set the stage for subsequent chapters. Rather than focus on a narrowly defined topic, chapters integrate important research discussions from the statistical literature. They seamlessly blend theory with applications and include examples and case studies from various disciplines. Destined to become a landmark publication in the field, this carefully edited collection emphasizes statistical models and methods likely to endure in the future. Whether involved in the development of statistical methodology or the analysis of longitudinal data, readers will gain new perspectives on the field.

Nonparametric Functional Data Analysis

This book focuses on exploratory data analysis, learning of latent structures in datasets, and unscrambling of knowledge. Coverage details a broad range of methods from multivariate statistics, clustering and classification, visualization and scaling as well as from data and time series analysis. It provides new approaches for information retrieval and data mining and reports a host of challenging applications in various fields.

Data Analysis

An essential introduction to data analysis techniques using spreadsheets, for undergraduate and graduate students.

Quantitative Data Analysis with SPSS 12 and 13

This text provides a non-technical approach to quantitative data analysis and a user-friendly introduction to SPSS. It takes the reader step-by-step through the techniques, reinforced by exercises.

Exploratory Data Analysis

Data Analysis Methods in Physical Oceanography is a practical reference guide to established and modern data analysis techniques in earth and ocean sciences. This second and revised edition is even more comprehensive with numerous updates, and an additional appendix on 'Convolution and Fourier transforms'. Intended for both students and established scientists, the five major chapters of the book cover data acquisition and recording, data processing and presentation, statistical methods and error handling, analysis of spatial data fields, and time series analysis methods. Chapter 5 on time series analysis is a book in itself, spanning a wide diversity of topics from stochastic processes and stationarity, coherence functions, Fourier analysis, tidal harmonic analysis, spectral and cross-spectral analysis, wavelet and other related methods for processing nonstationary data series, digital filters, and fractals. The seven appendices include unit conversions, approximation methods and nondimensional numbers used in geophysical fluid dynamics, presentations on convolution, statistical terminology, and distribution functions, and a number of important statistical tables. Twenty pages are devoted to references. Featuring: • An in-depth presentation of modern techniques for the analysis of temporal and spatial

data sets collected in oceanography, geophysics, and other disciplines in earth and ocean sciences. • A detailed overview of oceanographic instrumentation and sensors - old and new - used to collect oceanographic data. • 7 appendices especially applicable to earth and ocean sciences ranging from conversion of units, through statistical tables, to terminology and non-dimensional parameters. In praise of the first edition: "()This is a very practical guide to the various statistical analysis methods used for obtaining information from geophysical data, with particular reference to oceanography() The book provides both a text for advanced students of the geophysical sciences and a useful reference volume for researchers." Aslib Book Guide Vol 63, No. 9, 1998 "()This is an excellent book that I recommend highly and will definitely use for my own research and teaching." EOS Transactions, D.A. Jay, 1999 "()In summary, this book is the most comprehensive and practical source of information on data analysis methods available to the physical oceanographer. The reader gets the benefit of extremely broad coverage and an excellent set of examples drawn from geographical observations." Oceanography, Vol. 12, No. 3, A. Plueddemann, 1999 "()Data Analysis Methods in Physical Oceanography is highly recommended for a wide range of readers, from the relative novice to the experienced researcher. It would be appropriate for academic and special libraries." E-Streams, Vol. 2, No. 8, P. Mofjelf, August 1999

Functional Data Analysis

This book is a guide to the practical application of statistics in data analysis as typically encountered in the physical sciences. It is primarily addressed at students and professionals who need to draw quantitative conclusions from experimental data. Although most of the examples are taken from particle physics, the material is presented in a sufficiently general way as to be useful to people from most branches of the physical sciences. The first part of the book describes the basic tools of data analysis: concepts of probability and random variables, Monte Carlo techniques, statistical tests, and methods of parameter estimation. The last three chapters are somewhat more specialized than those preceding, covering interval estimation, characteristic functions, and the problem of correcting distributions for the effects of measurement errors (unfolding).

Data Analysis Using Stata

This book describes how surveys are conducted in such a way that they can be believed, explains how to read statistical reports and analyze data, and provides guidelines that are useful in evaluating polls. Using examples from contemporary large surveys and polls, as well as from the media, the authors stress the importance of understanding tables thoroughly before moving to interval statistics. In addition, they cover: the design of surveys; the steps for sampling and question writing; interviewing and coding strategies; survey analysis from frequency distributions and cross-tabulations through to control tables and correlation/regression; the ethics of survey research; and how to read and write reports of survey research.

Fatigue Crack Growth Measurement and Data Analysis

First Published in 2012. Routledge is an imprint of Taylor & Francis, an informa company.

Atmospheric Data Analysis

Data Analysis Methods in Physical Oceanography

This book is intended for use as the textbook in a second course in applied statistics that covers topics in multiple regression and analysis of variance at an intermediate level. Generally, students enrolled in such courses are p-marily graduate majors or advanced undergraduate students from a variety of disciplines. These students typically have taken an introductory-level s- tistical methods course that requires the use a software system such as SAS for performing statistical analysis. Thus students are expected to have an - derstanding of basic concepts of statistical inference such as estimation and hypothesis testing. Understandably, adequate time is not available in a ?rst course in stat- tical methods to cover the use of a software system adequately in the amount of time available for instruction. The aim of this book is to teach how to use the SAS system for data analysis. The SAS language is introduced at a $_{Page\ 15/26}$

level of sophistication not found in most introductory SAS books. Important features such as SAS data step programming, pointers, and line-hold spe- ?ers are described in detail. The powerful graphics support available in SAS is emphasized throughout, and many worked SAS program examples contain graphic components.

Advances in Data Analysis

This second edition is aimed at a wider range of readers, and especially those who would like to apply these techniques to their research problems. It complements the authors' other volume Applied Functional Data Analysis: Methods and Case Studies. In particular, there is an extended coverage of data smoothing and other matters arising in the preliminaries to a functional data analysis. The chapters on the functional linear model and modeling of the dynamics of systems through the use of differential equations and principal differential analysis have been completely rewritten and extended to include new developments. Other chapters have been revised substantially, often to give more weight to examples and practical considerations.

Data Analysis, Classification and the Forward Search

Why does the World Need—Excel Data Analysis, Modeling, and Simulation? When spreadsheets ?rst became widely available in the early 1980s, it spawned a revolution in teaching. What previously could only be done with arcane software and large scale computing was now available to the commonman, on a desktop. Also, before spreadsheets, most substantial analytical work was done outside the classroom where the tools were; spreadsheets and personal computers moved the work into the classroom. Not only did it change how the analysis curriculum was taught, but it also empowered students to venture out on their own to explore new ways to use the tools. I can't tell you how many phone calls, of?ce visits, and/or emails I have received in my teaching career from ecstatic students crowing about what they have just done with a spreadsheet model. I have been teaching courses related to spreadsheet based analysis and modeling for about 25 years and I have watched and participated in the spreadsheet revolution.

Data Analysis for the Behavioral Sciences Using SPSS

The Third Pacific Area Statistical Conference was held under the auspices of the Pacific Statistical Institute and with the support and cooperation of the Foundation for Advancement of International Science, the Japan Statistical Society and the Institute of Statistical Mathematics. The main theme of the conference was "Statistical Sciences and Data Analysis". The purpose was to bring together researchers in statistics and related fields to exchange results and problems in topics of mutual interest. The papers in this volume have been presented at the conference and have been carefully refereed and edited before their inclusion in the proceedings.

Multivariate Data Analysis

This is a revised and very expanded version of the previous second edition of the book. "Pharmacokinetic and Pharmacodynamic Data Analysis" provides an introduction into pharmacokinetic and pharmacodynamic concepts using simple illustrations and reasoning. It describes ways in which pharmacodynamic and pharmacodynamic theory may be used to give insight into modeling guestions and how these questions can in turn lead to new knowledge. This book differentiates itself from other texts in this area in that it bridges the gap between relevant theory and the actual application of the theory to real life situations. The book is divided into two parts; the first introduces fundamental principles of PK and PD concepts, and principles of mathematical modeling, while the second provides case studies obtained from drug industry and academia. Topics included in the first part include a discussion of the statistical principles of model fitting, including how to assess the adequacy of the fit of a model, as well as strategies for selection of time points to be included in the design of a study. The first part also introduces basic pharmacokinetic and pharmacodynamic concepts, including an excellent discussion of effect compartment (link) models as well as indirect response models. The second part of the text includes over 70 modeling case studies. These

include a discussion of the selection of the model. derivation of initial parameter estimates and interpretation of the corresponding output. Finally, the authors discuss a number of pharmacodynamic modeling situations including receptor binding models, synergy, and tolerance models (feedback and precursor models). This book will be of interest to researchers, to graduate students and advanced undergraduate students in the PK/PD area who wish to learn how to analyze biological data and build models and to become familiar with new areas of application. In addition, the text will be of interest to toxicologists interested in learning about determinants of exposure and performing toxicokinetic modeling. The inclusion of the numerous exercises and models makes it an excellent primary or adjutant text for traditional PK courses taught in pharmacy and medical schools. A diskette is included with the text that includes all of the exercises and solutions using WinNonlin.

Longitudinal Data Analysis

This second and revised edition contains a detailed introduction to the key classes of intelligent data analysis methods. The twelve coherently written chapters by leading experts provide complete coverage of the core issues. The first half of the book is devoted to the discussion of classical statistical issues. The following chapters concentrate on machine learning and artificial intelligence, rule induction methods, neural networks, fuzzy logic, and stochastic search methods. The book concludes with a chapter on visualization and an advanced overview of IDA processes.

Statistics and Data Analysis for Financial Engineering

The intention of Mass Spectrometry Data Analysis in Proteomics is to support researchers in deciding which programs to use in various tasks related to analysis of mass spectrometry data in proteomics. The chapters give a precise description of the theoretical background of each topic followed accurate descriptions of programs and the parameters best suited for different cases.

Nonparametric Regression Methods for Longitudinal Data Analysis

This book is designed solely for the use of the fire service and is modular in form. Many departments' information needs can be met by studying only the first few chapters, while others with a more statistical bent may want to dig deeper.

Handbook of Data Analysis

The authors use worked examples throughout to guide the reader on how best to incorporate NVivo into every stage of the research process.

Longitudinal Data Analysis

The book provides an application-oriented overview of $P_{Age 20/26}^{Page 20/26}$

functional analysis, with extended and accessible presentations of key concepts such as spline basis functions, data smoothing, curve registration, functional linear models and dynamic systems Functional data analysis is put to work in a wide a range of applications, so that new problems are likely to find close analogues in this book The code in R and Matlab in the book has been designed to permit easy modification to adapt to new data structures and research problems

Mass Spectrometry Data Analysis in Proteomics

A practical guide for multivariate statistical techniques-- nowupdated and revised In recent years, innovations in computer technology and statisticalmethodologies have dramatically altered the landscape of multivariate data analysis. This new edition of Methods forStatistical Data Analysis of Multivariate Observations explores current multivariate concepts and techniques while retaining thesame practical focus of its predecessor. It integrates methods anddata-based interpretations relevant to multivariate analysis in away that addresses real-world problems arising in many areas ofinterest. Greatly revised and updated, this Second Edition provides helpfulexamples, graphical orientation, numerous illustrations, and anappendix detailing statistical software, including the S (or Splus)and SAS systems. It also offers * An expanded chapter on cluster analysis that covers advances inpattern recognition * New sections on inputs to

clustering algorithms and aids forinterpreting the results of cluster analysis * An exploration of some new techniques of summarization and exposure * New graphical methods for assessing the separations among the eigenvalues of a correlation matrix and for comparing sets of eigenvectors * Knowledge gained from advances in robust estimation and distributional models that are slightly broader than themultivariate normal This Second Edition is invaluable for graduate students, applied statisticians, engineers, and scientists wishing to use multivariate techniques in a variety of disciplines.

Robustness in Data Analysis

Financial engineers have access to enormous quantities of data but need powerful methods for extracting quantitative information, particularly about volatility and risks. Key features of this textbook are: illustration of concepts with financial markets and economic data, R Labs with real-data exercises. and integration of graphical and analytic methods for modeling and diagnosing modeling errors. Despite some overlap with the author's undergraduate textbook Statistics and Finance: An Introduction, this book differs from that earlier volume in several important aspects: it is graduate-level; computations and graphics are done in R; and many advanced topics are covered, for example, multivariate distributions, copulas, Bayesian computations, VaR and expected shortfall, and cointegration. The prerequisites are basic statistics and probability, matrices and linear algebra, and calculus. Some

exposure to finance is helpful.

An Introduction to Survey Research, Polling, and Data Analysis

Toon Taris' survival guide takes the reader through the strengths and weaknesses of longitudinal research, making clear how to design a longitudinal study, how to collect data most effectively and how to interpret results.

Qualitative Data Analysis with NVivo

Intended to fill a void in the atmospheric science literature, this self-contained text outlines the physical and mathematical basis of all aspects of atmospheric analysis as well as topics important in several other fields outside of it, including atmospheric dynamics and statistics.

Fire Data Analysis Handbook

Provides an introduction to Stata with an emphasis on data management, linear regression, logistic modeling, and using programs to automate repetitive tasks. This book gives an introduction to the Stata interface and then proceeds with a discussion of Stata syntax and simple programming tools like for each loops.

Functional Data Analysis with R and MATLAB

Making Sense of Multivariate Data Analysis is a short introduction to multivariate data analysis (MDA) for students and practitioners in the behavioral and social sciences. It provides a conceptual overview of the foundations of MDA and of a range of specific techniques including multiple regression, logistic regression, discriminant analysis, multivariate analysis of variance, factor analysis, and log-linear analysis. As a conceptual introduction, the book assumes no prior statistical knowledge, and contains very few symbols or equations. Its primary objective is to expose the conceptual unity of MDA techniques both in their foundations and in the common analytic strategies that lie at the heart of all of the techniques. Although introductory, the book encourages the reader to reflect critically on the general strengths and limitations of MDA techniques. Each chapter includes references for further reading accessible to the beginner.

Methods for Statistical Data Analysis of Multivariate Observations

Modern apparatuses allow us to collect samples of functional data, mainly curves but also images. On the other hand, nonparametric statistics produces useful tools for standard data exploration. This book links these two fields of modern statistics by explaining how functional data can be studied through parameter-free statistical ideas. At the same time it shows how functional data can be studied through parameter-free statistical ideas, and offers an original presentation of new nonparametric statistical methods for functional data analysis.

Statistical Data Analysis

Helps users of computerized statistical packages make correct statistical choices to match data they have collected, in cases of bivariate data analysis. Overviews popular statistical packages, then gives instructions on classifying data, frequency distributions, descriptive statistics, and hypothesis testing. Also covers Chi-square, t tests of two means, ANOVA, correlation, and testing scales. Includes exercises, answers, and a glossary. ROMANCE ACTION & ADVENTURE MYSTERY & THRILLER BIOGRAPHIES & HISTORY CHILDREN'S YOUNG ADULT FANTASY HISTORICAL FICTION HORROR LITERARY FICTION NON-FICTION SCIENCE FICTION