

Jmp Start Statistics A Guide To Statistics And Data Analysis Using Jmp Fifth Edition

The Only Book On The Market That Provides A Simple Nonmathematical Presentation Of The Statistics Needed By Six Sigma Green Belts. Every Concept Is Explained In Plain English With A Minimum Of Mathematical Symbols. Includes Real-World Examples, Step By Step Instructions And Sample Output For Minitab And Jmp Software As Well As Downloadable, Ready To Use Data Sets And Templates. Includes Applications To Service Industries To Help Managers Understand The Role Of Six Sigma In Nonmanufacturing Industries.

Modern Industrial Statistics The new edition of the prime reference on the tools of statistics used in industry and services, integrating theoretical, practical, and computer-based approaches Modern Industrial Statistics is a leading reference and guide to the statistics tools widely used in industry and services. Designed to help professionals and students easily access relevant theoretical and practical information in a single volume, this standard resource employs a computer-intensive approach to industrial statistics and provides numerous examples and procedures in the popular R language and for MINITAB and JMP statistical analysis software. Divided into two parts, the text covers the principles of statistical thinking and analysis, bootstrapping, predictive analytics, Bayesian inference, time series analysis, acceptance sampling, statistical process control, design and analysis of experiments, simulation and computer experiments, and reliability and survival analysis. Part A, on computer age statistical analysis, can be used in general courses on analytics and statistics. Part B is focused on industrial statistics applications. The fully revised third edition covers the latest techniques in R, MINITAB and JMP, and features brand-new coverage of time series analysis, predictive analytics and Bayesian inference. New and expanded simulation activities, examples, and case studies—drawn from the electronics, metal work, pharmaceutical, and financial industries—are complemented by additional computer and modeling methods. Helping readers develop skills for modeling data and designing experiments, this comprehensive volume: Explains the use of computer-based methods such as bootstrapping and data visualization Covers nonstandard techniques and applications of industrial statistical process control (SPC) charts Contains numerous problems, exercises, and data sets representing real-life case studies of statistical work in various business and industry settings Includes access to a companion website that contains an introduction to R, sample R code, csv files of all data sets, JMP add-ins, and downloadable appendices Provides an author-created R package, mistat, that includes all data sets and statistical analysis applications used in the book Part of the acclaimed Statistics in Practice series, Modern Industrial Statistics with Applications in R, MINITAB, and JMP, Third Edition, is the perfect textbook for advanced undergraduate and postgraduate courses in the areas of industrial statistics, quality and reliability engineering, and an important reference for industrial statisticians, researchers, and practitioners in related fields. The mistat R-package is available from the R CRAN repository.

Hot on the heels of Andy Field's best-selling *Discovering Statistics Using SPSS*, Third Edition (2009), the author has teamed up with a co-author, Jeremy Miles, to adapt this textbook for SAS® using the most up-to-date commands and programming language available in latest release 9.2. As with its sister textbook, *Discovering Statistics Using SAS®* takes the entry level student from first principles right the way through to advanced level statistical concepts all the while grounding knowledge through the use of SAS®. Its approach is to teach statistical concepts as well as the computational principles, commands and language of the SAS® software package in one textbook, and given this comprehensive coverage this textbook should be enthusiastically adopted on a wide variety of statistics courses.

JMP Start Statistics, Third Edition, is a complete and orderly introduction to analyzing data using JMP statistical discovery software from SAS. A mix of software manual and statistics text, the book provides hands-on tutorials with just the right amount of conceptual and motivational material to illustrate how to use the intuitive, easy-to-use JMP interface for data analysis. Each chapter features concept-specific tutorials, examples, brief reviews of concepts, step-by-step illustrations, and exercises. JMP Start Statistics, Third Edition, was written by JMP software development team members John Sall, Lee Creighton, and Ann Lehman. This title was previously published by Thomson Brooks/Cole under ISBN 978-0-534-99749-6. With the exception of the cover, title page, and copyright page, the content of both books is identical. NOTE: This title is printed on demand (POD) and is non-returnable and non-refundable

JMP IN® is an interactive software tool especially designed for statistical visualization and exploratory data analysis. JMP's goal is to analyze data in as graphical a way as possible, enabling you to discover more, interact more, and understand more.

Explore biostatistics using JMP® in this refreshing introduction Presented in an easy-to-understand way, *Introduction to Biostatistics with JMP®* introduces undergraduate students in the biological sciences to the most commonly used (and misused) statistical methods that they will need to analyze their experimental data using JMP. It covers many of the basic topics in statistics using biological examples for exercises so that the student biologists can see the relevance to future work in the problems addressed. The book starts by teaching students how to become confident in executing the right analysis by thinking like a statistician then moves into the application of specific tests. Using the powerful capabilities of JMP, the book addresses problems requiring analysis by chi-square tests, t tests, ANOVA analysis, various regression models, DOE, and survival analysis. Topics of particular interest to the biological or health science field include odds ratios, relative risk, and survival analysis. The author uses an engaging, conversational tone to explain concepts and keep readers interested in learning more. The book aims to create bioscientists who can competently incorporate statistics into their investigative toolkits to solve biological research questions as they arise.

Using JMP statistical discovery software from SAS, *Discovering Partial Least Squares with JMP* explores Partial Least Squares and positions it within the more general context of multivariate analysis. This book motivates current and

potential users of JMP to extend their analytical repertoire by embracing PLS. Dynamically interacting with JMP, you will develop confidence as you explore underlying concepts and work through the examples. The authors provide background and guidance to support and empower you on this journey.

JMP IN is the most complete and modern data-analysis program and combines outstanding graphics and amazing data analysis. JMP-INs spreadsheets, data tables, and graphing capabilities are designed to help the student visualize and learn important statistical concepts while it handles all calculations. JMP IN, developed by SAS Institute is the student version of the professional package JMP.

Learn data science concepts with real-world examples in SAS! End-to-End Data Science with SAS: A Hands-On Programming Guide provides clear and practical explanations of the data science environment, machine learning techniques, and the SAS programming knowledge necessary to develop machine learning models in any industry. The book covers concepts including understanding the business need, creating a modeling data set, linear regression, parametric classification models, and non-parametric classification models. Real-world business examples and example code are used to demonstrate each process step-by-step. Although a significant amount of background information and supporting mathematics are presented, the book is not structured as a textbook, but rather it is a user's guide for the application of data science and machine learning in a business environment. Readers will learn how to think like a data scientist, wrangle messy data, choose a model, and evaluate the model's effectiveness. New data scientists or professionals who want more experience with SAS will find this book to be an invaluable reference. Take your data science career to the next level by mastering SAS programming for machine learning models.

The JMP 11 Design of Experiments Guide covers classic DOE designs (for example, full factorial, response surface, and mixture designs). Read about more flexible custom designs, which you generate to fit your particular experimental situation. And discover JMP's definitive screening designs, an efficient way to identify important factor interactions using fewer runs than required by traditional designs. The book also provides guidance on determining an appropriate sample size for your study.

With the powerful interactive and visual functionality of JMP, you can dynamically analyze market data to transform it into actionable and useful information with clear, concise, and insightful reports and displays. Market Data Analysis Using JMP is a unique example-driven book because it has a specific application focus: market data analysis. A working knowledge of JMP will help you turn your market data into vital knowledge that will help you succeed in a highly competitive, fast-moving, and dynamic business world. This book can be used as a stand-alone resource for working professionals, or as a supplement to a business school course in market data research. Anyone who works with market data will benefit from reading and studying this book, then using JMP to apply the dynamic analytical concepts to their market data. After reading this book, you will be able to quickly and effortlessly use JMP to: prepare market data for analysis use and interpret sophisticated statistical methods build choice models estimate regression models to turn data into useful and actionable information Market Data Analysis Using JMP will teach you how to use dynamic graphics to illustrate your market data analysis and explore the vast possibilities that your data can offer!

Master the concepts and techniques of statistical analysis using JMP Practical Data Analysis with JMP, Third Edition, highlights the powerful interactive and visual approach of JMP to introduce readers to statistical thinking and data analysis. It helps you choose the best technique for the problem at hand by using real-world cases. It also illustrates best-practice workflow throughout the entire investigative cycle, from asking valuable questions through data acquisition, preparation, analysis, interpretation, and communication of findings. The book can stand on its own as a learning resource for professionals, or it can be used to supplement a college-level textbook for an introductory statistics course. It includes varied examples and problems using real sets of data. Each chapter typically starts with an important or interesting research question that an investigator has pursued. Reflecting the broad applicability of statistical reasoning, the problems come from a wide variety of disciplines, including engineering, life sciences, business, and economics, as well as international and historical examples. Application Scenarios at the end of each chapter challenge you to use your knowledge and skills with data sets that go beyond mere repetition of chapter examples. New in the third edition, chapters have been updated to demonstrate the enhanced capabilities of JMP, including projects, Graph Builder, Query Builder, and Formula Depot.

Grasp the essentials of JMP to generate rapid results. JMP Essentials: An Illustrated Guide for New Users, Third Edition, is designed for new or novice JMP users who need to generate meaningful analysis quickly. The book focuses on the most commonly used platforms and typical workflow of the user, from data importing, exploring, and visualizing to modeling and sharing results with others. Throughout the book, the authors emphasize results over theory, providing just the essential steps with corresponding screenshots. In most cases, each section completes a JMP task, which maximizes the book's utility as a reference. This edition has new instructions and screenshots reflecting the features added to the latest release of JMP software, including updated sections on JMP Dashboard Builder, Query Builder, the Fit Model platform, JMP Public and JMP Live, and a more detailed look at the JMP website. Each chapter contains a family of features that are carefully crafted to first introduce you to basic features and then move on to more advanced topics. JMP Essentials: An Illustrated Guide for New Users, Third Edition, is the quickest and most accessible reference book available.

"Statistical Analysis for Business Using JMP: A Student's Guide" by Willbann D. Terpening is a complete and thorough introduction to business statistics using JMP. While designed for introductory business statistics courses at the undergraduate or MBA level, industry professionals wanting to brush up on their knowledge of statistics and those wanting an introduction to using JMP for statistical analysis will also find the book useful. The book starts with an introduction to using JMP in statistical analysis, basic descriptive statistics and graphical analysis, and the fundamentals

of inferential statistics. The book then covers more advanced topics in inferential statistics organized around the analysis platforms of JMP. Topics include the effects of a qualitative variable on a quantitative variable (two group tests and analysis of variance), the effects of a qualitative variable on a qualitative variable (chi-square and contingency tables), the effects of a quantitative variable on a quantitative variable (simple regression and correlation), and the effects of a quantitative variable on a qualitative variable (logistic and multinomial regression). The final chapter provides an introduction to multivariate statistics and multiple regression.

This book provides hands-on tutorials with just the right amount of conceptual and motivational material to illustrate how to use the intuitive interface for data analysis in JMP. Each chapter features concept-specific tutorials, examples, brief reviews of concepts, step-by-step illustrations, and exercises. Updated for JMP 13, *JMP Start Statistics, Sixth Edition* includes many new features, including: The redesigned Formula Editor. New and improved ways to create formulas in JMP directly from the data table or dialogs. Interface updates, including improved menu layout. Updates and enhancements in many analysis platforms. New ways to get data into JMP and to save and share JMP results. Many new features that make it easier to use JMP.

Jump into JMP Scripting, by Wendy Murphrey and Rosemary Lucas, contains the essentials for getting started with the JMP Scripting Language (JSL). The first part of the book explains JSL topics in an easy-to-understand style based on the authors' extensive experience. Each topic includes step-by-step instructions and plenty of code examples. The second part of the book is a rich source of example scripts showing you how to perform specific tasks in JSL. Using a unique question-and-answer format, each example answers a question with a script sample. In addition, many examples include a discussion section that explains functions in detail or provides additional references. Taken together, these two parts give you all the tools you need to explore the JMP Scripting Language and create and use JMP scripts with confidence! Confidently navigate your JMP Scripting Language journey with this example-driven guide! With more than 200 example scripts and applications, *JSL Companion: Applications of the JMP Scripting Language, Second Edition* provides scripters with a resource that takes them beyond the basics of the JMP Scripting Language (JSL) and serves as a companion to writing applications. Avid JSL scripters Theresa L. Utlaut, Georgia Z. Morgan, and Kevin C. Anderson have tapped their expertise to write a task-oriented approach that allows readers to learn scripting by immersion. This edition builds on the earlier edition with substantial new content for scripting enhanced JMP features, such as Graph Builder, new query methods, and enriched display box functionality. A new chapter is dedicated to creating applications with the Add-In Builder and Application Builder. The "Know Your Tools" topic has been expanded, including a section on how to use the JMP Debugger. The book begins with an introduction that is intended for the JSL novice and quickly moves into the building blocks of JSL, which include input and output, working with data tables, script-writing essentials, and JMP data structures. The next chapters provide the foundation for building an application and focus on creating reports, communicating with users, customizing displays, and writing flexible scripts. The final chapters include building and deploying applications and helpful tips on planning scripts, debugging, and improving performance.

Stata is the most flexible and extensible data analysis package available from a commercial vendor. R is a similarly flexible free and open source package for data analysis, with over 3,000 add-on packages available. This book shows you how to extend the power of Stata through the use of R. It introduces R using Stata terminology with which you are already familiar. It steps through more than 30 programs written in both languages, comparing and contrasting the two packages' different approaches. When finished, you will be able to use R in conjunction with Stata, or separately, to import data, manage and transform it, create publication quality graphics, and perform basic statistical analyses. A glossary defines over 50 R terms using Stata jargon and again using more formal R terminology. The table of contents and index allow you to find equivalent R functions by looking up Stata commands and vice versa. The example programs and practice datasets for both R and Stata are available for download.

Solve your pharmaceutical product development and manufacturing problems using JMP®. *Pharmaceutical Quality by Design Using JMP®: Solving Product Development and Manufacturing Problems* provides broad-based techniques available in JMP to visualize data and run statistical analyses for areas common in healthcare product manufacturing. As international regulatory agencies push the concept of Quality by Design (QbD), there is a growing emphasis to optimize the processing of products. This book uses practical examples from the pharmaceutical and medical device industries to illustrate easy-to-understand ways of incorporating QbD elements using JMP. *Pharmaceutical Quality by Design Using JMP®* opens by demonstrating the easy navigation of JMP to visualize data through the distribution function and the graph builder and then highlights the following: the powerful dynamic nature of data visualization that enables users to be able to quickly extract meaningful information tools and techniques designed for the use of structured, multivariate sets of experiments examples of complex analysis unique to healthcare products such as particle size distributions/drug dissolution, stability of drug products over time, and blend uniformity/content uniformity. Scientists, engineers, and technicians involved throughout the pharmaceutical and medical device product life cycles will find this book invaluable. This book is part of the SAS Press program.

JMP 13 Scripting Guide provides details for taking advantage of the powerful JMP Scripting Language (JSL). Learn how to write and debug scripts, manipulate data tables, construct display boxes, create JMP applications, and more.

Doing statistics in JMP has never been easier as readers learn how to manage JMP data and perform the statistical analyses most commonly used in research in the social sciences and other fields. Clearly written instructions cover the basic concepts of research and data analysis, enabling users to easily perform statistical analyses and solve problems in real-world research.

Building Better Models with JMP® Pro provides an example-based introduction to business analytics, with a proven process that guides you in the application of modeling tools and concepts. It gives you the "what, why, and how" of using

JMP® Pro for building and applying analytic models. This book is designed for business analysts, managers, and practitioners who may not have a solid statistical background, but need to be able to readily apply analytic methods to solve business problems. In addition, this book will greatly benefit faculty members who teach any of the following subjects at the lower to upper graduate level: predictive modeling, data mining, and business analytics. Novice to advanced users in business statistics, business analytics, and predictive modeling will find that it provides a peek inside the black box of algorithms and the methods used. Topics include: regression, logistic regression, classification and regression trees, neural networks, model cross-validation, model comparison and selection, and data reduction techniques. Full of rich examples, *Building Better Models with JMP Pro* is an applied book on business analytics and modeling that introduces a simple methodology for managing and executing analytics projects. No prior experience with JMP is needed. Make more informed decisions from your data using this newest JMP book.

This textbook will familiarize students in economics and business, as well as practitioners, with the basic principles, techniques, and applications of applied statistics, statistical testing, and multivariate data analysis. Drawing on practical examples from the business world, it demonstrates the methods of univariate, bivariate, and multivariate statistical analysis. The textbook covers a range of topics, from data collection and scaling to the presentation and simple univariate analysis of quantitative data, while also providing advanced analytical procedures for assessing multivariate relationships. Accordingly, it addresses all topics typically covered in university courses on statistics and advanced applied data analysis. In addition, it does not limit itself to presenting applied methods, but also discusses the related use of Excel, SPSS, and Stata.

Learn the essentials of the JMP Scripting Language with this beginner's guide. Written in an easy-to-understand style based on the authors' extensive experience, *Jump into JMP Scripting, Second Edition* teaches beginner scripters how to take advantage of the robust JMP Scripting Language (JSL) using step-by-step instructions and real-world situations. The authors demonstrate how JSL offers the freedom to create scripts from the very simple and specific to the most generic and complex. With a new chapter on JSL language foundations, the first half of the book explains the fundamentals of JSL and walks you through creating your first scripts, such as opening a data table, adding columns, or selecting rows. A new chapter on the Dashboard and Application Builders provides helpful tips on creating custom dashboards and learning how to build applications. Also new to this edition, a chapter on advanced topics introduces more helpful tools and concepts in JSL. After learning the basics, you are ready to tackle specific tasks using JSL. The second half of the book provides more than 50 examples using a unique question-and-answer format. This book is part of the SAS Press program.

Access and clean up data easily using JMP®! Data acquisition and preparation commonly consume approximately 75% of the effort and time of total data analysis. JMP provides many visual, intuitive, and even innovative data-preparation capabilities that enable you to make the most of your organization's data. *Preparing Data for Analysis with JMP®* is organized within a framework of statistical investigations and model-building and illustrates the new data-handling features in JMP, such as the Query Builder. Useful to students and programmers with little or no JMP experience, or those looking to learn the new data-management features and techniques, it uses a practical approach to getting started with plenty of examples. Using step-by-step demonstrations and screenshots, this book walks you through the most commonly used data-management techniques that also include lots of tips on how to avoid common problems. With this book, you will learn how to: Manage database operations using the JMP Query Builder Get data into JMP from other formats, such as Excel, csv, SAS, HTML, JSON, and the web Identify and avoid problems with the help of JMP's visual and automated data-exploration tools Consolidate data from multiple sources with Query Builder for tables Deal with common issues and repairs that include the following tasks: reshaping tables (stack/unstack) managing missing data with techniques such as imputation and Principal Components Analysis cleaning and correcting dirty data computing new variables transforming variables for modelling reconciling time and date Subset and filter your data Save data tables for exchange with other platforms

Learn how to manage JMP data and perform the statistical analyses most commonly used in research in the social sciences and other fields with *JMP for Basic Univariate and Multivariate Statistics: Methods for Researchers and Social Scientists, Second Edition*. Updated for JMP 10 and including new features on the statistical platforms, this book offers clearly written instructions to guide you through the basic concepts of research and data analysis, enabling you to easily perform statistical analyses and solve problems in real-world research. Step by step, you'll discover how to obtain descriptive and inferential statistics, summarize results clearly in a way that is suitable for publication, perform a wide range of JMP analyses, interpret the results, and more. Topics include screening data for errors selecting subsets computing the coefficient alpha reliability index (Cronbach's alpha) for a multiple-item scale performing bivariate analyses for all types of variables performing a one-way analysis of variance (ANOVA), multiple regression, and a one-way multivariate analysis of variance (MANOVA) Advanced topics include analyzing models with interactions and repeated measures. There is also comprehensive coverage of principle components with emphasis on graphical interpretation. This user-friendly book introduces researchers and students of the social sciences to JMP and to elementary statistical procedures, while the more advanced statistical procedures that are presented make it an invaluable reference guide for experienced researchers as well.

Learn how to perform basic statistical analyses using the powerful JMP software. *Elementary Statistics Using JMP* bridges the gap between statistics texts and JMP documentation. Author Sandra Schlotzhauer opens with an explanation of the basics of JMP data tables, demonstrating how to use JMP for descriptive statistics and graphs. The author continues with a lucid discussion of fundamental statistical concepts, including normality and hypothesis testing. Using a step-by-step approach, she shows analyses for comparing two groups, comparing multiple groups, fitting regression

equations, and exploring contingency tables. For each analysis, the author clearly explains assumptions, the statistical approach, the JMP steps and results, and how to make conclusions from the results. Statistical methods include: *histograms, box plots, descriptive statistics, stem-and-leaf plots *mosaic plots, bar charts, and treemaps *t-tests and Wilcoxon tests to compare two independent or paired groups *one-way ANOVA and Kruskal-Wallis tests, and selected multiple comparison techniques *Pearson and Spearman correlation coefficients *regression models for lines, curves, and multiple variables *residuals plots and lack-of-fit tests for regression *Chi-square tests, Fisher's Exact test, and measures of association for contingency tables. Understand how to interpret both the graphs and text reports, as well as how to customize JMP results to meet your needs. Packed with examples from a broad range of industries, this text is ideal for novice to intermediate JMP users. Prior statistical knowledge, JMP experience, or programming skills are not required.

A holistic, step-by-step approach to analyzing health care data! Written for both beginner and intermediate JMP users working in or studying health care, *Data Management and Analysis Using JMP: Health Care Case Studies* bridges the gap between taking traditional statistics courses and successfully applying statistical analysis in the workplace. Authors Jane Oppenlander and Patricia Schaffer begin by illustrating techniques to prepare data for analysis, followed by presenting effective methods to summarize, visualize, and analyze data. The statistical analysis methods covered in the book are the foundational techniques commonly applied to meet regulatory, operational, budgeting, and research needs in the health care field. This example-driven book shows practitioners how to solve real-world problems by using an approach that includes problem definition, data management, selecting the appropriate analysis methods, step-by-step JMP instructions, and interpreting statistical results in context. Practical strategies for selecting appropriate statistical methods, remediating data anomalies, and interpreting statistical results in the domain context are emphasized. The cases presented in *Data Management and Analysis Using JMP* use multiple statistical methods. A progression of methods--from univariate to multivariate--is employed, illustrating a logical approach to problem-solving. Much of the data used in these cases is open source and drawn from a variety of health care settings. The book offers a welcome guide to working professionals as well as students studying statistics in health care-related fields.

Peter Goos, Department of Statistics, University of Leuven, Faculty of Bio-Science Engineering and University of Antwerp, Faculty of Applied Economics, Belgium David Meintrup, Department of Mathematics and Statistics, University of Applied Sciences Ingolstadt, Faculty of Mechanical Engineering, Germany Thorough presentation of introductory statistics and probability theory, with numerous examples and applications using JMP *JMP: Graphs, Descriptive Statistics and Probability* provides an accessible and thorough overview of the most important descriptive statistics for nominal, ordinal and quantitative data with particular attention to graphical representations. The authors distinguish their approach from many modern textbooks on descriptive statistics and probability theory by offering a combination of theoretical and mathematical depth, and clear and detailed explanations of concepts. Throughout the book, the user-friendly, interactive statistical software package JMP is used for calculations, the computation of probabilities and the creation of figures. The examples are explained in detail, and accompanied by step-by-step instructions and screenshots. The reader will therefore develop an understanding of both the statistical theory and its applications. Traditional graphs such as needle charts, histograms and pie charts are included, as well as the more modern mosaic plots, bubble plots and heat maps. The authors discuss probability theory, particularly discrete probability distributions and continuous probability densities, including the binomial and Poisson distributions, and the exponential, normal and lognormal densities. They use numerous examples throughout to illustrate these distributions and densities. Key features: Introduces each concept with practical examples and demonstrations in JMP. Provides the statistical theory including detailed mathematical derivations. Presents illustrative examples in each chapter accompanied by step-by-step instructions and screenshots to help develop the reader's understanding of both the statistical theory and its applications. A supporting website with data sets and other teaching materials. This book is equally aimed at students in engineering, economics and natural sciences who take classes in statistics as well as at masters/advanced students in applied statistics and probability theory. For teachers of applied statistics, this book provides a rich resource of course material, examples and applications. Based on real-world applications, this resource combines statistical instructions with a powerful and popular software platform to solve common problems in engineering and science. This step-by-step format enables users new to statistics or JMP to learn as they go.

'A statistical national treasure' Jeremy Vine, BBC Radio 2 'Required reading for all politicians, journalists, medics and anyone who tries to influence people (or is influenced) by statistics. A tour de force' Popular Science Do busier hospitals have higher survival rates? How many trees are there on the planet? Why do old men have big ears? David Spiegelhalter reveals the answers to these and many other questions - questions that can only be addressed using statistical science. Statistics has played a leading role in our scientific understanding of the world for centuries, yet we are all familiar with the way statistical claims can be sensationalised, particularly in the media. In the age of big data, as data science becomes established as a discipline, a basic grasp of statistical literacy is more important than ever. In *The Art of Statistics*, David Spiegelhalter guides the reader through the essential principles we need in order to derive knowledge from data. Drawing on real world problems to introduce conceptual issues, he shows us how statistics can help us determine the luckiest passenger on the Titanic, whether serial killer Harold Shipman could have been caught earlier, and if screening for ovarian cancer is beneficial. 'Shines a light on how we can use the ever-growing deluge of data to improve our understanding of the world' Nature

For decades researchers and programmers have used SAS to analyze, summarize, and report clinical trial data. Now Chris Holland and Jack Shostak have updated their popular *Implementing CDISC Using SAS*, the first comprehensive book on applying clinical research data and metadata to the Clinical Data Interchange Standards Consortium (CDISC)

standards. *Implementing CDISC Using SAS: An End-to-End Guide, Revised Second Edition*, is an all-inclusive guide on how to implement and analyze the Study Data Tabulation Model (SDTM) and the Analysis Data Model (ADaM) data and prepare clinical trial data for regulatory submission. Updated to reflect the 2017 FDA mandate for adherence to CDISC standards, this new edition covers creating and using metadata, developing conversion specifications, implementing and validating SDTM and ADaM data, determining solutions for legacy data conversions, and preparing data for regulatory submission. The book covers products such as Base SAS, SAS Clinical Data Integration, and the SAS Clinical Standards Toolkit, as well as JMP Clinical. Topics included in this edition include an implementation of the Define-XML 2.0 standard, new SDTM domains, validation with Pinnacle 21 software, event narratives in JMP Clinical, SDTM and ADaM metadata spreadsheets, and of course new versions of SAS and JMP software. The second edition was revised to add the latest C-Codes from the most recent release as well as update the `make_define` macro that accompanies this book in order to add the capability to handle C-Codes. The metadata spreadsheets were updated accordingly. Any manager or user of clinical trial data in this day and age is likely to benefit from knowing how to either put data into a CDISC standard or analyzing and finding data once it is in a CDISC format. If you are one such person--a data manager, clinical and/or statistical programmer, biostatistician, or even a clinician--then this book is for you.

Analyze your biostatistics data with JMP! Trevor Bihl's *Biostatistics Using JMP: A Practical Guide* provides a practical introduction on using JMP, the interactive statistical discovery software, to solve biostatistical problems. Providing extensive breadth, from summary statistics to neural networks, this essential volume offers a comprehensive, step-by-step guide to using JMP to handle your data. The first biostatistical book to focus on software, *Biostatistics Using JMP* discusses such topics as data visualization, data wrangling, data cleaning, histograms, box plots, Pareto plots, scatter plots, hypothesis tests, confidence intervals, analysis of variance, regression, curve fitting, clustering, classification, discriminant analysis, neural networks, decision trees, logistic regression, survival analysis, control charts, and metaanalysis. Written for university students, professors, those who perform biological/biomedical experiments, laboratory managers, and research scientists, *Biostatistics Using JMP* provides a practical approach to using JMP to solve your biostatistical problems.

Written for students in undergraduate and graduate statistics courses, as well as for the practitioner who wants to make better decisions from data and models, this updated and expanded second edition of *Fundamentals of Predictive Analytics with JMP(R)* bridges the gap between courses on basic statistics, which focus on univariate and bivariate analysis, and courses on data mining and predictive analytics. Going beyond the theoretical foundation, this book gives you the technical knowledge and problem-solving skills that you need to perform real-world multivariate data analysis. First, this book teaches you to recognize when it is appropriate to use a tool, what variables and data are required, and what the results might be. Second, it teaches you how to interpret the results and then, step-by-step, how and where to perform and evaluate the analysis in JMP. Using JMP 13 and JMP 13 Pro, this book offers the following new and enhanced features in an example-driven format: an add-in for Microsoft Excel Graph Builder dirty data visualization regression ANOVA logistic regression principal component analysis LASSO elastic net cluster analysis decision trees k-nearest neighbors neural networks bootstrap forests boosted trees text mining association rules model comparison With today's emphasis on business intelligence, business analytics, and predictive analytics, this second edition is invaluable to anyone who needs to expand his or her knowledge of statistics and to apply real-world, problem-solving analysis. This book is part of the SAS Press program.

Data Mining for Business Analytics: Concepts, Techniques, and Applications in Python presents an applied approach to data mining concepts and methods, using Python software for illustration Readers will learn how to implement a variety of popular data mining algorithms in Python (a free and open-source software) to tackle business problems and opportunities. This is the sixth version of this successful text, and the first using Python. It covers both statistical and machine learning algorithms for prediction, classification, visualization, dimension reduction, recommender systems, clustering, text mining and network analysis. It also includes: A new co-author, Peter Gedeck, who brings both experience teaching business analytics courses using Python, and expertise in the application of machine learning methods to the drug-discovery process A new section on ethical issues in data mining Updates and new material based on feedback from instructors teaching MBA, undergraduate, diploma and executive courses, and from their students More than a dozen case studies demonstrating applications for the data mining techniques described End-of-chapter exercises that help readers gauge and expand their comprehension and competency of the material presented A companion website with more than two dozen data sets, and instructor materials including exercise solutions, PowerPoint slides, and case solutions *Data Mining for Business Analytics: Concepts, Techniques, and Applications in Python* is an ideal textbook for graduate and upper-undergraduate level courses in data mining, predictive analytics, and business analytics. This new edition is also an excellent reference for analysts, researchers, and practitioners working with quantitative methods in the fields of business, finance, marketing, computer science, and information technology. "This book has by far the most comprehensive review of business analytics methods that I have ever seen, covering everything from classical approaches such as linear and logistic regression, through to modern methods like neural networks, bagging and boosting, and even much more business specific procedures such as social network analysis and text mining. If not the bible, it is at the least a definitive manual on the subject." —Gareth M. James, University of Southern California and co-author (with Witten, Hastie and Tibshirani) of the best-selling book *An Introduction to Statistical Learning, with Applications in R*

STATISTICS: LEARNING FROM DATA, by respected and successful author Roxy Peck, resolves common problems faced by both students and instructors with an innovative approach to elementary statistics. Peck tackles the areas students struggle with most--probability, hypothesis testing, and selecting an appropriate method of analysis--unlike any

text on the market. Probability coverage is based on current research that shows how students best learn the subject. Two unique chapters, one on statistical inference and another on learning from experiment data, address two common areas of student confusion: choosing a particular inference method and using inference methods with experimental data. Supported by learning objectives, real-data examples and exercises, and technology notes, this brand new text guides students in gaining conceptual understanding, mechanical proficiency, and the ability to put knowledge into practice. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

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