

# Marketing Analytics In R

**Big Data Analytics with R Data Mining and Business Analytics with R** *R for Data Science R for Business Analytics R for Marketing Research and Analytics* **Forest Analytics with R** *Financial Analytics with R* **Data analytics using R** **Forest Analytics with R** **R for Everyone** **Data Analytics with R** **Data Science, Analytics and Machine Learning with R** *Business Analytics Using R - A Practical Approach* **Big Data Analytics with R and Hadoop** **R for Everyone** **Learning Analytics in R with SNA, LSA, and MPIA** **Basketball Data Science Learning Social Media Analytics with R** *Advanced Analytics with R and Tableau* **Handbook of Regression Modeling in People Analytics** **Data Analytics for the Social Sciences** **Applied Spatial Data Analysis with R** **Advanced Analytics with R and Tableau** *Software for Data Analysis* **Text Mining with R** *Audit Analytics* **Business Analytics Using R - A Practical Approach** **DATA ANALYTICS WITH R PROGRAMMING** *Data Analysis with R* **Advanced Splunk** **Beginning R** **Mastering Predictive Analytics with R** **Geocomputation with R** *Advancing Into Analytics* *Introduction to Data Science* **From Data to Decisions in Music Education Research** **Graphical Data Analysis with R** **Just Enough R! Discrete Data Analysis with R** *Customer and Business Analytics*

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By searching the title, publisher, or authors of guide you truly want, you can discover them rapidly. In the house, workplace, or perhaps in your method can be all best place within net connections. If you mean to download and install the Marketing Analytics In R, it is totally easy then, past currently we extend the partner to buy and make bargains to download and install Marketing Analytics In R hence simple!

**Learning Analytics in R with SNA, LSA, and MPIA** Jul 20 2021 This book introduces Meaningful Purposive Interaction Analysis (MPIA) theory, which combines social network analysis (SNA) with latent semantic analysis (LSA) to help create and analyse a meaningful learning landscape from the digital traces left by a learning community in the co-construction of knowledge. The hybrid algorithm is implemented in the statistical programming language and environment R, introducing packages which capture – through matrix algebra – elements of learners’ work with more knowledgeable others and resourceful content artefacts. The book provides comprehensive package-by-package application examples, and code samples that guide the reader through the MPIA model to show how the MPIA landscape can be constructed and the learner’s journey mapped and analysed. This building block application will allow the reader to progress to using and building analytics to guide students and support decision-making in learning.

*Advanced Analytics with R and Tableau* Apr 16 2021 Leverage the power of advanced analytics and predictive modeling in Tableau using the statistical powers of R About This Book\* Comprehensive guide that will bring out the creativity inside you in visualizing the results of complex calculations using Tableau and R\* Combine Tableau analytics and visualization with the power of R using this step-by-step guide\* Wondering how R can be used with Tableau? This book is your one-stop solution. Who This Book Is For This book will appeal to Tableau users who want to go beyond the Tableau interface and deploy the full potential of Tableau, by using R to perform advanced analytics with Tableau. A basic familiarity with R is useful but not compulsory, as the book will start off with concrete examples of R and will move quickly into more advanced spheres of analytics using online data sources to support hands-on learning. Those R developers who want to integrate R in Tableau will also benefit from this book. What you will learn\* Integrate Tableaus analytics with the industry-standard, statistical prowess of R.\* Make R function calls in Tableau, visualizing R functions with Tableau using R Serve.\* Use the CRISP-DM methodology to create a roadmap for analytics investigations.\* Implement various supervised and unsupervised learning algorithms in R that return values to Tableau.\* Get to grips with advanced calculations in R and Tableau for analytics and prediction with the help of use cases and hands-on examples.\* Make quick, cogent, and data-driven decisions for your business using advanced analytical techniques such as forecasting, predictions, association rules, clustering, classification, and other advanced Tableau R calculated field functions In Detail Moving from data visualization into deeper, more advanced analytics? This book will intensify data skills for data viz-savvy users who want to move into analytics and data science in order to enhance their businesses by harnessing the analytical power of R and the stunning visualization capabilities of Tableau. Together, Tableau and R offer accessible analytics by allowing a combination of easy-to-use data visualization along with industry-standard, robust statistical computation. Readers will come across a wide range of machine learning algorithms and learn how descriptive, prescriptive, predictive, and visually appealing analytical solutions can be designed with R and Tableau. In order to maximize learning, hands-on examples will ease the transition from being a data-savvy user to a data analyst using sound statistical tools to perform advanced analytics.

**Discrete Data Analysis with R** Jul 28 2019 An Applied Treatment of Modern Graphical Methods for Analyzing Categorical Data Discrete Data Analysis with R: Visualization and Modeling Techniques for Categorical and Count Data presents an applied treatment of modern methods for the analysis of categorical data, both discrete response data and frequency data. It explains how to use graphical meth

**Business Analytics Using R - A Practical Approach** Aug 09 2020 Learn the fundamental aspects of the business statistics, data mining, and machine learning techniques required to understand the huge amount of data generated by your organization. This book explains practical business analytics through examples, covers the steps involved in using it correctly, and shows you the context in which a particular technique does not make sense. Further, Practical Business Analytics using R helps you understand specific issues faced by organizations and how the solutions to these issues can be facilitated by business analytics. This book will discuss and explore the following through examples and case studies: An introduction to R: data management and R functions The architecture, framework, and life cycle of a business analytics project Descriptive analytics using R: descriptive statistics and data cleaning Data mining: classification, association rules, and clustering Predictive analytics: simple regression, multiple regression, and logistic regression This book includes case studies on important business analytic techniques, such as classification, association, clustering, and regression. The R language is the statistical tool used to demonstrate the concepts throughout the book. What You Will Learn • Write R programs to handle data • Build analytical models and draw useful inferences from them • Discover the basic concepts of data mining and machine learning • Carry out predictive modeling • Define a business issue as an analytical problem Who This Book Is For Beginners who want to understand and learn the fundamentals of analytics using R. Students, managers, executives, strategy and planning professionals, software professionals, and BI/DW professionals.

**Data Mining and Business Analytics with R** Oct 03 2022 Collecting, analyzing, and extracting valuable information from a large amount of data requires easily accessible, robust, computational and analytical tools. Data Mining and Business Analytics with R utilizes the open source software R for the analysis, exploration, and simplification of large high-dimensional data sets. As a result, readers are provided with the needed guidance to model and interpret complicated data and become adept at building powerful models for prediction and classification. Highlighting both underlying concepts and practical computational skills, Data Mining and Business Analytics with R begins with coverage of standard linear regression and the importance of parsimony in statistical modeling. The book includes important topics such as penalty-based variable selection (LASSO); logistic regression; regression and classification trees; clustering; principal components and partial least squares; and the analysis of text and network data. In addition, the book presents: • A thorough discussion and extensive demonstration of the theory behind the most useful data mining tools • Illustrations of how to use the outlined concepts in real-world situations • Readily available additional data sets and related R code allowing readers to apply their own analyses to the discussed materials • Numerous exercises to help readers with computing skills and deepen their understanding of the material Data Mining and Business Analytics with R is an excellent graduate-level textbook for courses on data mining and business analytics. The book is also a valuable reference for practitioners who collect and analyze data in the fields of finance, operations management, marketing, and the information sciences.

**Data Analytics for the Social Sciences** Feb 12 2021 Data Analytics for the Social Sciences is an introductory, graduate-level treatment of data analytics for social science. It features applications in the R language, arguably the fastest growing and leading statistical tool for researchers. The book starts with an ethics chapter on the uses and potential abuses of data analytics. Chapters 2 and 3 show how to implement a broad range of statistical procedures in R. Chapters 4 and 5 deal with regression and classification trees and with random forests. Chapter 6 deals with machine learning models and the "caret" package, which makes available to the researcher hundreds of models. Chapter 7 deals with neural network analysis, and Chapter 8 deals with network analysis and visualization of network data. A final chapter treats text analysis, including web scraping, comparative word frequency tables, word clouds, word maps, sentiment analysis, topic analysis, and more. All empirical chapters have two "Quick Start" exercises designed to allow quick immersion in chapter topics, followed by "In Depth" coverage. Data are available for all examples and runnable R code is provided in a "Command Summary". An appendix provides an extended tutorial on R and RStudio. Almost 30 online supplements provide information for the complete book, "books within the book" on a variety of topics, such as agent-based modeling. Rather than focusing on equations, derivations, and proofs, this book emphasizes hands-on obtaining of output for various social science models and how to interpret the output. It is suitable for all advanced level undergraduate and graduate students learning statistical data analysis.

**Beginning R** Apr 04 2020 Conquer the complexities of this open source statistical language R is fast becoming the de facto standard for statistical computing and analysis in science, business, engineering, and related fields. This book examines this complex language using simple statistical examples, showing how R operates in a user-friendly context. Both students and workers in fields that require extensive statistical analysis will find this book helpful as they learn to use R for simple summary statistics, hypothesis testing, creating graphs, regression, and much more. It covers formula notation, complex statistics, manipulating data and extracting components, and rudimentary programming. R, the open source statistical language increasingly used to handle statistics and produces publication-quality graphs, is notoriously complex This book makes R easier to understand through the use of simple statistical examples, teaching the necessary elements in the context in which R is actually used Covers getting started with R and using it for simple summary statistics, hypothesis testing, and graphs Shows how to use R for formula notation, complex statistics, manipulating data, extracting components, and regression Provides beginning programming instruction for those who want to write their own scripts Beginning R offers anyone who needs to perform statistical analysis the information necessary to use R with confidence.

*R for Data Science* Sep 02 2022 Learn how to use R to turn raw data into insight, knowledge, and understanding. This book introduces you to R, RStudio, and the tidyverse, a collection of R packages designed to work together to make data science fast, fluent, and fun. Suitable for readers with no previous programming experience, R for Data Science is designed to get you doing data science as quickly as possible. Authors Hadley Wickham and Garrett Grolemund guide you through the steps of importing, wrangling, exploring, and modeling your data and communicating the results. You'll get a complete, big-picture understanding of the data science cycle, along with basic tools you need to manage the details. Each section of the book is paired with exercises to help you practice what you've learned along the way. You'll learn how to: Wrangle—transform your datasets into a form convenient for analysis Program—learn powerful R tools for solving data problems with greater clarity and ease Explore—examine your data, generate hypotheses, and quickly test them Model—provide a low-dimensional summary that captures true "signals" in your dataset Communicate—learn R Markdown for integrating prose, code, and results

[R for Everyone](#) Aug 21 2021 A guide to using and understanding the 'R' computer programming language.

*Audit Analytics* Sep 09 2020 Today, information technology plays a pivotal role in financial control and audit: most financial data is now digitally recorded and dispersed among servers, clouds and networks over which the audited firm has no control. Additionally, a firm's data—particularly in the case of finance, software, insurance and biotech firms— comprises most of the audited value of the firm. Financial audits are critical mechanisms for ensuring the integrity of information systems and the reporting of organizational finances. They help avoid the abuses that led to passage of legislation such as the Foreign Corrupt Practices Act (1977), and the Sarbanes-Oxley Act (2002). Audit effectiveness has declined over the past two decades as auditor skillsets have failed to keep up with advances in information technology. Information and communication technology lie at the core of commerce today and are integrated in business processes around the world. This book is designed to meet the increasing need of audit professionals to understand information technology and the controls required to manage it. The material included focuses on the requirements for annual Securities and Exchange Commission audits (10-K) for listed corporations. These represent the benchmark auditing procedures for specialized audits, such as internal, governmental, and attestation audits. Using R and RStudio, the book demonstrates how to render an audit opinion that is legally and statistically defensible; analyze, extract, and manipulate accounting data; build a risk assessment matrix to inform the conduct of a cost-effective audit program; and more.

*Big Data Analytics with R and Hadoop* Sep 21 2021 Big Data Analytics with R and Hadoop is a tutorial style book that focuses on all the powerful big data tasks that can be achieved by integrating R and Hadoop. This book is ideal for R developers who are looking for a way to perform big data analytics with Hadoop. This book is also aimed at those who know Hadoop and want to build some intelligent applications over Big data with R packages. It would be helpful if readers have basic knowledge of R.

**Forest Analytics with R** Feb 24 2022 Forest Analytics with R combines practical, down-to-earth forestry data analysis and solutions to real forest management challenges with state-of-the-art statistical and data-handling functionality. The authors adopt a problem-driven approach, in which statistical and mathematical tools are introduced in the context of the forestry problem that they can help to resolve. All the tools are introduced in the context of real forestry datasets, which provide compelling examples of practical applications. The modeling challenges covered within the book include imputation and interpolation for spatial data, fitting probability density functions to tree measurement data using maximum likelihood, fitting allometric functions using both linear and non-linear least-squares regression, and fitting growth models using both linear and non-linear mixed-effects modeling. The coverage also includes deploying and using forest growth models written in compiled languages, analysis of natural resources and forestry inventory data, and forest estate planning and optimization using linear programming. The book would be ideal for a one-semester class in forest biometrics or applied statistics for natural resources management. The text assumes no programming background, some introductory statistics, and very basic applied mathematics.

*Introduction to Data Science* Dec 01 2019 Introduction to Data Science: Data Analysis and Prediction Algorithms with R introduces concepts and skills that can help you tackle real-world data analysis challenges. It covers concepts from probability, statistical inference, linear regression, and machine learning. It also helps you develop skills such as R programming, data wrangling, data visualization, predictive algorithm building, file organization with UNIX/Linux shell, version control with Git and GitHub, and reproducible document preparation. This book is a textbook for a first course in data science. No previous knowledge of R is necessary, although some experience with programming may be helpful. The book is divided into six parts: R, data visualization, statistics with R, data wrangling, machine learning, and productivity tools. Each part has several chapters meant to be presented as one lecture. The author uses motivating case studies that realistically mimic a data scientist's experience. He starts by asking specific questions and answers these through data analysis so concepts are learned as a means to answering the questions. Examples of the case studies included are: US murder rates by state, self-reported student heights, trends in world health and economics, the impact of vaccines on infectious disease rates, the financial crisis of 2007-2008, election forecasting, building a baseball team, image processing of hand-written digits, and movie recommendation systems. The statistical concepts used to answer the case study questions are only briefly introduced, so complementing with a probability and statistics textbook is highly recommended for in-depth understanding of these concepts. If you read and understand the chapters and complete the exercises, you will be prepared to learn the more advanced concepts and skills needed to become an expert.

**Handbook of Regression Modeling in People Analytics** Mar 16 2021 Despite the recent rapid growth in machine learning and predictive analytics, many of the statistical questions that are faced by researchers and practitioners still involve explaining why something is happening. Regression analysis is the best 'swiss army knife' we have for answering these kinds of questions. This book is a learning resource on inferential statistics and regression analysis. It teaches how to do a wide range of statistical analyses in both R and in Python, ranging from simple hypothesis testing to advanced multivariate modelling. Although it is primarily focused on examples related to the analysis of people and talent, the methods easily transfer to any discipline. The book hits a 'sweet spot' where there is just enough mathematical theory to support a strong understanding of the methods, but with a step-by-step guide and easily reproducible examples and code, so that the methods can be put into practice immediately. This makes the book accessible to a wide readership, from public and private sector analysts and practitioners to students and researchers. Key Features: • 16 accompanying datasets across a wide range of contexts (e.g. academic, corporate, sports, marketing) • Clear step-by-step instructions on executing the analyses. • Clear guidance on how to interpret results. • Primary instruction in R but added sections for Python coders. • Discussion exercises and data exercises for each of the main chapters. • Final chapter of practice material and datasets ideal for class homework or project work.

**Text Mining with R** Oct 11 2020 Chapter 7. Case Study : Comparing Twitter Archives; Getting the Data and Distribution of Tweets; Word Frequencies; Comparing Word Usage; Changes in Word Use; Favorites and Retweets; Summary; Chapter 8. Case Study : Mining NASA Metadata; How Data Is Organized at NASA; Wrangling and Tidying the Data; Some Initial Simple Exploration; Word Co-occurrences and Correlations; Networks of Description and Title Words; Networks of Keywords; Calculating tf-idf for the Description Fields; What Is tf-idf for the Description Field Words?; Connecting Description Fields to Keywords; Topic Modeling.

*Business Analytics Using R - A Practical Approach* Oct 23 2021 Learn the fundamental aspects of the business statistics, data mining, and machine learning techniques required to understand the huge amount of data generated by your organization. This book explains practical business analytics through examples, covers the steps involved in using it correctly, and shows you the context in which a particular technique does not make sense. Further, Practical Business Analytics using R helps you understand specific issues faced by organizations and how the solutions to these issues can be facilitated by business analytics. This book will discuss and explore the following through examples and case studies: An introduction to R: data management and R functions The architecture, framework, and life cycle of a business analytics project Descriptive analytics using R: descriptive statistics and data cleaning Data mining: classification, association rules, and clustering Predictive analytics: simple regression, multiple regression, and logistic regression This book includes case studies on important business analytic techniques, such as classification, association, clustering, and regression. The R language is the statistical tool used to demonstrate the concepts throughout the book. What You Will Learn • Write R programs to handle data • Build analytical models and draw useful inferences from them • Discover the basic concepts of data mining and machine learning • Carry out predictive modeling • Define a business issue as an analytical problem Who This Book Is For Beginners who want to understand and learn the fundamentals of analytics using R. Students, managers, executives, strategy and planning professionals, software professionals, and BI/DW professionals.

*Customer and Business Analytics* Jun 26 2019 Customer and Business Analytics: Applied Data Mining for Business Decision Making Using R explains and demonstrates, via the accompanying open-source software, how advanced analytical tools can address various business problems. It also gives insight into some of the challenges faced when deploying these tools. Extensively classroom-tested, the text is ideal for students in customer and business analytics or applied data mining as well as professionals in small- to medium-sized organizations. The book offers an intuitive understanding of how different analytics algorithms work. Where necessary, the authors explain the underlying mathematics in an accessible manner. Each technique presented includes a detailed tutorial that enables hands-on experience with real data. The authors also discuss issues often encountered in applied data mining projects and present the CRISP-DM process model as a practical framework for organizing these projects. Showing how data mining can improve the performance of organizations, this book and its R-based software provide the skills and tools needed to successfully develop advanced analytics capabilities.

*R for Marketing Research and Analytics* Jun 30 2022 This book is a complete introduction to the power of R for marketing research practitioners. The text describes statistical models from a conceptual point of view with a minimal amount of mathematics, presuming only an introductory knowledge of statistics. Hands-on chapters accelerate the learning curve by asking readers to interact with R from the beginning. Core topics include the R language, basic statistics, linear modeling, and data visualization, which is presented throughout as an integral part of analysis. Later chapters cover more advanced topics yet are intended to be approachable for all analysts. These sections examine logistic regression, customer segmentation, hierarchical linear modeling, market basket analysis, structural equation modeling, and conjoint analysis in R. The text uniquely presents Bayesian models with a minimally complex approach, demonstrating and explaining Bayesian methods alongside traditional analyses for analysis of variance, linear models, and metric and choice-based conjoint analysis. With its emphasis on data visualization, model assessment, and development of statistical intuition, this book provides guidance for any analyst looking to develop or improve skills in R for marketing applications.

**Data Analytics with R** Dec 25 2021 Today we all have access to a lot of data. Even more crucially, we also have easy access, through our personal computers and powerful free software packages, to the means to process the corpus of data and extract intelligence from it. Quite needlessly though, the necessary knowledge skills remain the exclusive preserve of a few, which this book sets out to change. Although most data analytics techniques have a mathematical basis, people with a grasp of high school mathematics can gain a deep intuitive understanding of the underlying techniques and apply them correctly and effectively. To make this possible, the book: Focuses on intuitive explanations with examples, while avoiding deep mathematics; Provides numerous examples, tables and figures (over 200 figures and 110 tables), to help readers grasp the concepts and techniques; Introduces the R statistical programming environment and provides step-by-step guidance to learn R and apply it to the techniques covered; After working through the book readers will be able to independently apply the techniques covered on their own data. After completing the book, readers would have mastered an important subset of the R language. Recognizing that people master new topics only by doing, the book provides many instructive labs, -lab assignments and review questions with detailed guidance and explanations. Rather than just providing the steps in the form of "what" to do, the book also explains "why?" All the data files needed to work through the labs and lab assignments are available as free downloads from the book's web site. To shield those who are new to any form of computer programming, the book comes with many convenience functions that can serve to automate what might otherwise be confusing procedures. The book covers the following topics: Quick introduction to R programming -- assumes no prior background in R; Important data analytics concepts; Exploratory data analysis and graphing with R; Affinity analysis; Classification techniques like K nearest neighbors, Naive Bayes and Classification trees; Regression techniques like simple and multiple linear regression; K nearest neighbors for regression and regression trees; Time series analysis; and Data reduction techniques like Principal Component analysis (PCA) and cluster analysis (k-means clustering) After completing the book, readers would have had a huge amount of hands-on experience, with a great intuitive understanding of the underlying theory.

*R for Business Analytics* Aug 01 2022 This book examines common tasks performed by business analysts and helps the reader navigate the wealth of information in R and its 4000 packages to create useful analytics applications. Includes interviews with corporate users of R, and easy-to-use examples.

**Forest Analytics with R** May 30 2022 Forest Analytics with R combines practical, down-to-earth forestry data analysis and solutions to real forest management challenges with state-of-the-art statistical and data-handling functionality. The authors adopt a problem-driven approach, in which statistical and mathematical tools are introduced in the context of the forestry problem that they can help to resolve. All the tools are introduced in the context of real forestry datasets, which provide compelling examples of practical applications. The modeling challenges covered within the book include imputation and interpolation for spatial data, fitting probability density functions to tree measurement data using maximum likelihood, fitting allometric functions using both linear and non-linear least-squares regression, and fitting growth models using both linear and non-linear mixed-effects modeling. The coverage also includes deploying and using forest growth models written in compiled languages, analysis of natural resources and forestry inventory data, and forest estate planning and optimization using linear programming. The book would be ideal for a one-semester class in forest biometrics or applied statistics for natural resources management. The text assumes no programming background, some introductory statistics, and very basic applied mathematics.

[Graphical Data Analysis with R](#) Sep 29 2019 See How Graphics Reveal Information Graphical Data Analysis with R shows you what information you can gain from graphical displays. The book focuses on why you draw graphics to display data and which graphics to draw (and uses R

to do so). All the datasets are available in R or one of its packages and the R code is available at [rosuda.org/GDA](http://rosuda.org/GDA). Graphical data analysis is useful for data cleaning, exploring data structure, detecting outliers and unusual groups, identifying trends and clusters, spotting local patterns, evaluating modelling output, and presenting results. This book guides you in choosing graphics and understanding what information you can glean from them. It can be used as a primary text in a graphical data analysis course or as a supplement in a statistics course. Colour graphics are used throughout.

**Mastering Predictive Analytics with R** Mar 04 2020 This book is intended for the budding data scientist, predictive modeler, or quantitative analyst with only a basic exposure to R and statistics. It is also designed to be a reference for experienced professionals wanting to brush up on the details of a particular type of predictive model. Mastering Predictive Analytics with R assumes familiarity with only the fundamentals of R, such as the main data types, simple functions, and how to move data around. No prior experience with machine learning or predictive modeling is assumed, however you should have a basic understanding of statistics and calculus at a high school level.

**Advanced Analytics with R and Tableau** Dec 13 2020 Leverage the power of advanced analytics and predictive modeling in Tableau using the statistical powers of R About This Book A comprehensive guide that will bring out the creativity in you to visualize the results of complex calculations using Tableau and R Combine Tableau analytics and visualization with the power of R using this step-by-step guide Wondering how R can be used with Tableau? This book is your one-stop solution. Who This Book Is For This book will appeal to Tableau users who want to go beyond the Tableau interface and deploy the full potential of Tableau, by using R to perform advanced analytics with Tableau. A basic familiarity with R is useful but not compulsory, as the book will start off with concrete examples of R and will move quickly into more advanced spheres of analytics using online data sources to support hands-on learning. Those R developers who want to integrate R in Tableau will also benefit from this book. What You Will Learn Integrate Tableau's analytics with the industry-standard, statistical prowess of R. Make R function calls in Tableau, and visualize R functions with Tableau using RServe. Use the CRISP-DM methodology to create a roadmap for analytics investigations. Implement various supervised and unsupervised learning algorithms in R to return values to Tableau. Make quick, cogent, and data-driven decisions for your business using advanced analytical techniques such as forecasting, predictions, association rules, clustering, classification, and other advanced Tableau/R calculated field functions. In Detail Tableau and R offer accessible analytics by allowing a combination of easy-to-use data visualization along with industry-standard, robust statistical computation. Moving from data visualization into deeper, more advanced analytics? This book will intensify data skills for data viz-savvy users who want to move into analytics and data science in order to enhance their businesses by harnessing the analytical power of R and the stunning visualization capabilities of Tableau. Readers will come across a wide range of machine learning algorithms and learn how descriptive, prescriptive, predictive, and visually appealing analytical solutions can be designed with R and Tableau. In order to maximize learning, hands-on examples will ease the transition from being a data-savvy user to a data analyst using sound statistical tools to perform advanced analytics. By the end of this book, you will get to grips with advanced calculations in R and Tableau for analytics and prediction with the help of use cases and hands-on examples. Style and approach Tableau (uniquely) offers excellent visualization combined with advanced analytics; R is at the pinnacle of statistical computational languages. When you want to move from one view of data to another, backed up by complex computations, the combination of R and Tableau makes the perfect solution. This example-rich guide will teach you how to combine these two to perform advanced analytics by integrating Tableau with R and create beautiful data visualizations.

**Advancing Into Analytics** Jan 02 2020 Data analytics may seem daunting, but if you're familiar with Excel, you have a head start that can help you make the leap into analytics. Advancing into Analytics will lower your learning curve. Author George Mount, founder and CEO of Stringfest Analytics, clearly and gently guides intermediate Excel users to a solid understanding of analytics and the data stack. This book demonstrates key statistical concepts from spreadsheets and pivots your existing knowledge about data manipulation into R and Python programming. With this practical book at your side, you'll learn how to: Explore a dataset for potential research questions to check assumptions and to build hypotheses Make compelling business recommendations using inferential statistics Load, view, and write datasets using R and Python Perform common data wrangling tasks such as sorting, filtering, and aggregating using R and Python Navigate and execute code in Jupyter notebooks Identify, install, and implement the most useful open source packages for your needs And more

**Data Analysis with R** Jun 06 2020 Load, wrangle, and analyze your data using the world's most powerful statistical programming language About This Book Load, manipulate and analyze data from different sources Gain a deeper understanding of fundamentals of applied statistics A practical guide to performing data analysis in practice Who This Book Is For Whether you are learning data analysis for the first time, or you want to deepen the understanding you already have, this book will prove to be an invaluable resource. If you are looking for a book to bring you all the way through the fundamentals to the application of advanced and effective analytics methodologies, and have some prior programming experience and a mathematical background, then this is for you. What You Will Learn Navigate the R environment Describe and visualize the behavior of data and relationships between data Gain a thorough understanding of statistical reasoning and sampling Employ hypothesis tests to draw inferences from your data Learn Bayesian methods for estimating parameters Perform regression to predict continuous variables Apply powerful classification methods to predict categorical data Handle missing data gracefully using multiple imputation Identify and manage problematic data points Employ parallelization and Rcpp to scale your analyses to larger data Put best practices into effect to make your job easier and facilitate reproducibility In Detail Frequently the tool of choice for academics, R has spread deep into the private sector and can be found in the production pipelines at some of the most advanced and successful enterprises. The power and domain-specificity of R allows the user to express complex analytics easily, quickly, and succinctly. With over 7,000 user contributed packages, it's easy to find support for the latest and greatest algorithms and techniques. Starting with the basics of R and statistical reasoning, Data Analysis with R dives into advanced predictive analytics, showing how to apply those techniques to real-world data though with real-world examples. Packed with engaging problems and exercises, this book begins with a review of R and its syntax. From there, get to grips with the fundamentals of applied statistics and build on this knowledge to perform sophisticated and powerful analytics. Solve the difficulties relating to performing data analysis in practice and find solutions to working with "messy data", large data, communicating results, and facilitating reproducibility. This book is engineered to be an invaluable resource through many stages of anyone's career as a data analyst. Style and approach Learn data analysis using engaging examples and fun exercises, and with a gentle and friendly but comprehensive "learn-by-doing" approach.

**DATA ANALYTICS WITH R PROGRAMMING**, Jul 08 2020

**Just Enough R!** Aug 28 2019 Just Enough R! An Interactive Approach to Machine Learning and Analytics presents just enough of the R language, machine learning algorithms, statistical methodology, and analytics for the reader to learn how to find interesting structure in data. The approach might be called "seeing then doing" as it first gives step-by-step explanations using simple, understandable examples of how the various machine learning algorithms work independent of any programming language. This is followed by detailed scripts written in R that apply the algorithms to solve nontrivial problems with real data. The script code is provided, allowing the reader to execute the scripts as they study the explanations given in the text. Features Gets you quickly using R as a problem-solving tool Uses RStudio's integrated development environment Shows how to interface R with SQLite Includes examples using R's Rattle graphical user interface Requires no prior knowledge of R, machine learning, or computer programming Offers over 50 scripts written in R, including several problem-solving templates that, with slight modification, can be used again and again Covers the most popular machine learning techniques, including ensemble-based methods and logistic regression Includes end-of-chapter exercises, many of which can be solved by modifying existing scripts Includes datasets from several areas, including business, health and medicine, and science About the Author Richard J. Roiger is a professor emeritus at Minnesota State University, Mankato, where he taught and performed research in the Computer and Information Science Department for over 30 years.

**R for Everyone** Jan 26 2022 Statistical Computation for Programmers, Scientists, Quants, Excel Users, and Other Professionals Using the open source R language, you can build powerful statistical models to answer many of your most challenging questions. R has traditionally been difficult for non-statisticians to learn, and most R books assume far too much knowledge to be of help. R for Everyone, Second Edition, is the solution. Drawing on his unsurpassed experience teaching new users, professional data scientist Jared P. Lander has written the perfect tutorial for anyone new to statistical programming and modeling. Organized to make learning easy and intuitive, this guide focuses on the 20 percent of R functionality you'll need to accomplish 80 percent of modern data tasks. Lander's self-contained chapters start with the absolute basics, offering extensive hands-on practice and sample code. You'll download and install R; navigate and use the R environment; master basic program control, data import, manipulation, and visualization; and walk through several essential tests. Then, building on this foundation, you'll construct several complete models, both linear and nonlinear, and use some data mining techniques. After all this you'll make your code reproducible with LaTeX, RMarkdown, and Shiny. By the time you're done, you won't just know how to write R programs, you'll be ready to tackle the statistical problems you care about most. Coverage includes Explore R, RStudio, and R packages Use R for math: variable types, vectors, calling functions, and more Exploit data structures, including data.frames, matrices, and lists Read many different types of data Create attractive, intuitive statistical graphics Write user-defined functions Control program flow with if, ifelse, and complex checks Improve program efficiency with group manipulations Combine and reshape multiple datasets Manipulate strings using R's facilities and regular expressions Create normal, binomial, and Poisson probability distributions Build linear, generalized linear, and nonlinear models Program basic statistics: mean, standard deviation, and t-tests Train machine learning models Assess the quality of models and variable selection Prevent overfitting and perform variable selection, using the Elastic Net and Bayesian methods Analyze univariate and multivariate time series data Group data via K-means and hierarchical clustering Prepare reports, slideshows, and web pages with knitr Display interactive data with RMarkdown and htmlwidgets Implement dashboards with Shiny Build reusable R packages with devtools and Rcpp Register your product at [informit.com/register](http://informit.com/register) for convenient access to downloads, updates, and corrections as they become available.

**Financial Analytics with R** Apr 28 2022 Financial Analytics with R sharpens readers' skills in time-series, forecasting, portfolio selection, covariance clustering, prediction, and derivative securities.

**Data analytics using R** Mar 28 2022

**Advanced Splunk** May 06 2020 Master the art of getting the maximum out of your machine data using Splunk About This Book A practical and comprehensive guide to the advanced functions of Splunk., including the new features of Splunk 6.3 Develop and manage your own Splunk apps for greater insight from your machine data Full coverage of high-level Splunk techniques including advanced searches, manipulations, and visualization Who This Book Is For This book is for Splunk developers looking to learn advanced strategies to deal with big data from an enterprise architectural perspective. It is expected that readers have a basic understanding and knowledge of using Splunk Enterprise. What You Will Learn Find out how to develop and manage apps in Splunk Work with important search commands to perform data analytics on uploaded data Create visualizations in Splunk Explore tweaking Splunk Integrate Splunk with any pre-existing application to perform data crunching efficiently and in real time Make your big data speak with analytics and visualizations using Splunk Use SDK and Enterprise integration with tools such as R and Tableau In Detail Master the power of Splunk and learn the advanced strategies to get the most out of your machine data with this practical advanced guide. Make sense of the hidden data of your organization – the insight of your servers, devices, logs, traffic and clouds. Advanced Splunk shows you how. Dive deep into Splunk to find the most efficient solution to your data problems. Create the robust Splunk solutions you need to make informed decisions in big data machine analytics. From visualizations to enterprise integration, this well-organized high level guide has everything you need for Splunk mastery. Start with a complete overview of all the new features and advantages of the latest version of Splunk and the Splunk Environment. Go hands on with uploading data, search commands for basic and advanced analytics, advanced visualization techniques, and dashboard customizing. Discover how to tweak Splunk to your needs, and get a complete on Enterprise Integration of Splunk with various analytics and visualization tools. Finally, discover how to set up and use all the new features of the latest version of Splunk. Style and approach This book follows a step by step approach. Every new concept is built on top of its previous chapter, and it is full of examples and practical scenarios to help the reader experiment as they read.

**Software for Data Analysis** Nov 11 2020 John Chambers turns his attention to R, the enormously successful open-source system based on the S language. His book guides the reader through programming with R, beginning with simple interactive use and progressing by gradual stages, starting with simple functions. More advanced programming techniques can be added as needed, allowing users to grow into software contributors, benefiting their careers and the community. R packages provide a powerful mechanism for contributions to be organized and communicated. This is the only advanced programming book on R, written by the author of the S language from which R evolved.

**Applied Spatial Data Analysis with R** Jan 14 2021 Applied Spatial Data Analysis with R, second edition, is divided into two basic parts, the first presenting R packages, functions, classes and methods for handling spatial data. This part is of interest to users who need to access and visualise spatial data. Data import and export for many file formats for spatial data are covered in detail, as is the interface between R and the open source GRASS GIS and the handling of spatio-temporal data. The second part showcases more specialised kinds of spatial data analysis,

including spatial point pattern analysis, interpolation and geostatistics, areal data analysis and disease mapping. The coverage of methods of spatial data analysis ranges from standard techniques to new developments, and the examples used are largely taken from the spatial statistics literature. All the examples can be run using R contributed packages available from the CRAN website, with code and additional data sets from the book's own website. Compared to the first edition, the second edition covers the more systematic approach towards handling spatial data in R, as well as a number of important and widely used CRAN packages that have appeared since the first edition. This book will be of interest to researchers who intend to use R to handle, visualise, and analyse spatial data. It will also be of interest to spatial data analysts who do not use R, but who are interested in practical aspects of implementing software for spatial data analysis. It is a suitable companion book for introductory spatial statistics courses and for applied methods courses in a wide range of subjects using spatial data, including human and physical geography, geographical information science and geoinformatics, the environmental sciences, ecology, public health and disease control, economics, public administration and political science. The book has a website where complete code examples, data sets, and other support material may be found: <http://www.asdar-book.org>. The authors have taken part in writing and maintaining software for spatial data handling and analysis with R in concert since 2003.

**Geocomputation with R** Feb 01 2020 Geocomputation with R is for people who want to analyze, visualize and model geographic data with open source software. It is based on R, a statistical programming language that has powerful data processing, visualization, and geospatial capabilities. The book equips you with the knowledge and skills to tackle a wide range of issues manifested in geographic data, including those with scientific, societal, and environmental implications. This book will interest people from many backgrounds, especially Geographic Information Systems (GIS) users interested in applying their domain-specific knowledge in a powerful open source language for data science, and R users interested in extending their skills to handle spatial data. The book is divided into three parts: (I) Foundations, aimed at getting you up-to-speed with geographic data in R, (II) extensions, which covers advanced techniques, and (III) applications to real-world problems. The chapters cover progressively more advanced topics, with early chapters providing strong foundations on which the later chapters build. Part I describes the nature of spatial datasets in R and methods for manipulating them. It also covers geographic data import/export and transforming coordinate reference systems. Part II represents methods that build on these foundations. It covers advanced map making (including web mapping), "bridges" to GIS, sharing reproducible code, and how to do cross-validation in the presence of spatial autocorrelation. Part III applies the knowledge gained to tackle real-world problems, including representing and modeling transport systems, finding optimal locations for stores or services, and ecological modeling. Exercises at the end of each chapter give you the skills needed to tackle a range of geospatial problems. Solutions for each chapter and supplementary materials providing extended examples are available at <https://geocompr.github.io/geocompr/articles/>. Dr. Robin Lovelace is a University Academic Fellow at the University of Leeds, where he has taught R for geographic research over many years, with a focus on transport systems. Dr. Jakub Nowosad is an Assistant Professor in the Department of Geoinformation at the Adam Mickiewicz University in Poznan, where his focus is on the analysis of large datasets to understand environmental processes. Dr. Jannes Muenchow is a Postdoctoral Researcher in the GIScience Department at the University of Jena, where he develops and teaches a range of geographic methods, with a focus on ecological modeling, statistical geocomputing, and predictive mapping. All three are active developers and work on a number of R packages, including `stplanr`, `sabre`, and `RQGIS`.

**Big Data Analytics with R** Nov 04 2022 Utilize R to uncover hidden patterns in your Big Data About This Book Perform computational analyses on Big Data to generate meaningful results Get a practical knowledge of R programming language while working on Big Data platforms like Hadoop, Spark, H2O and SQL/NoSQL databases, Explore fast, streaming, and scalable data analysis with the most cutting-edge technologies in the market Who This Book Is For This book is intended for Data Analysts, Scientists, Data Engineers, Statisticians, Researchers, who want to integrate R with their current or future Big Data workflows. It is assumed that readers have some experience in data analysis and understanding of data management and algorithmic processing of large quantities of data, however they may lack specific skills related to R. What You Will Learn Learn about current state of Big Data processing using R programming language and its powerful statistical capabilities Deploy Big Data analytics platforms with selected Big Data tools supported by R in a cost-effective and time-saving manner Apply the R language to real-world Big Data problems on a multi-node Hadoop cluster, e.g. electricity consumption across various socio-demographic indicators and bike share scheme usage Explore the compatibility of R with Hadoop, Spark, SQL and NoSQL databases, and H2O platform In Detail Big Data analytics is the process of examining large and complex data sets that often exceed the computational capabilities. R is a leading programming language of data science, consisting of powerful functions to tackle all problems related to Big Data processing. The book will begin with a brief introduction to the Big Data world and its current industry standards. With introduction to the R language and presenting its development, structure, applications in real world, and its shortcomings. Book will progress towards revision of major R functions for data management and transformations. Readers will be introduced to Cloud based Big Data solutions (e.g. Amazon EC2 instances and Amazon RDS, Microsoft Azure and its HDInsight clusters) and also provide guidance on R connectivity with relational and non-relational databases such as MongoDB and HBase etc. It will further expand to include Big Data tools such as Apache Hadoop ecosystem, HDFS and MapReduce frameworks. Also other R compatible tools such as Apache Spark, its machine learning library Spark MLlib, as well as H2O. Style and approach This book will serve as a practical guide to tackling Big Data problems using R programming language and its statistical environment. Each section of the book will present you with concise and easy-to-follow steps on how to process, transform and analyse large data sets.

**Learning Social Media Analytics with R** May 18 2021 Tap into the realm of social media and unleash the power of analytics for data-driven insights using R About This Book A practical guide written to help leverage the power of the R eco-system to extract, process, analyze, visualize and model social media data Learn about data access, retrieval, cleaning, and curation methods for data originating from various social media platforms. Visualize and analyze data from social media platforms to understand and model complex relationships using various concepts and techniques such as Sentiment Analysis, Topic Modeling, Text Summarization, Recommendation Systems, Social Network Analysis, Classification, and Clustering. Who This Book Is For It is targeted at IT professionals, Data Scientists, Analysts, Developers, Machine Learning Enthusiasts, social media marketers and anyone with a keen interest in data, analytics, and generating insights from social data. Some background experience in R would be helpful, but not necessary, since this book is written keeping in mind, that readers can have varying levels of expertise. What You Will Learn Learn how to tap into data from diverse social media platforms using the R ecosystem Use social media data to formulate and solve real-world problems Analyze user social networks and communities using concepts from graph theory and network analysis Learn to detect opinion and sentiment, extract themes, topics, and trends from unstructured noisy text data from diverse social media channels Understand the art of representing actionable insights with effective visualizations Analyze data from major social media channels such as Twitter, Facebook, Flickr, Foursquare, Github, StackExchange, and so on Learn to leverage popular R packages such as `ggplot2`, `topicmodels`, `caret`, `e1071`, `tm`, `wordcloud`, `twittR`, `Rfacebook`, `dplyr`, `reshape2`, and many more In Detail The Internet has truly become humongous, especially with the rise of various forms of social media in the last decade, which give users a platform to express themselves and also communicate and collaborate with each other. This book will help the reader to understand the current social media landscape and to learn how analytics can be leveraged to derive insights from it. This data can be analyzed to gain valuable insights into the behavior and engagement of users, organizations, businesses, and brands. It will help readers frame business problems and solve them using social data. The book will also cover several practical real-world use cases on social media using R and its advanced packages to utilize data science methodologies such as sentiment analysis, topic modeling, text summarization, recommendation systems, social network analysis, classification, and clustering. This will enable readers to learn different hands-on approaches to obtain data from diverse social media sources such as Twitter and Facebook. It will also show readers how to establish detailed workflows to process, visualize, and analyze data to transform social data into actionable insights. Style and approach This book follows a step-by-step approach with detailed strategies for understanding, extracting, analyzing, visualizing, and modeling data from several major social network platforms such as Facebook, Twitter, Foursquare, Flickr, Github, and StackExchange. The chapters cover several real-world use cases and leverage data science, machine learning, network analysis, and graph theory concepts along with the R ecosystem, including popular packages such as `ggplot2`, `caret`, `dplyr`, `topicmodels`, `tm`, and so on.

**From Data to Decisions in Music Education Research** Oct 30 2019 From Data to Decisions in Music Education Research provides a structured and hands-on approach to working with empirical data in the context of music education research. Using step-by-step tutorials with in-depth examples of music education data, this book draws upon concepts in data science and statistics to provide a comprehensive framework for working with a variety of data and solving data-driven problems. All of the skills presented here use the R programming language, a free, open-source statistical computing and graphics environment. Using R enables readers to refine their computational thinking abilities and data literacy skills while facilitating reproducibility, replication, and transparency of data analysis in the field. The book offers: A clear and comprehensive framework for thinking about data analysis processes in a music education context. An overview of common data structures and data types used in statistical programming and data analytics. Techniques for cleaning, preprocessing, manipulating, aggregating, and mining data in ways that facilitate organization and interpretation. Methods for summarizing and visualizing data to help identify structures, patterns, and trends within data sets. Detailed applications of descriptive, diagnostic, and predictive analytics processes. Step-by-step code for all concepts and analyses. Direct access to all data sets and R script files through the accompanying eResource. From Data to Decisions in Music Education Research offers a reference "cookbook" of code and programming recipes written with the graduate music education student in mind and breaks down data analysis processes and skills in an approachable fashion. It can be used across a wide range of graduate music education courses that rely on the application of empirical data analyses and will be useful to all music education scholars and professionals seeking to enhance their use of quantitative data.

**Basketball Data Science** Jun 18 2021 Using data from one season of NBA games, Basketball Data Science: With Applications in R is the perfect book for anyone interested in learning and applying data analytics in basketball. Whether assessing the spatial performance of an MBA player's shots or doing an analysis of the impact of high pressure game situations on the probability of scoring, this book discusses a variety of case studies and hands-on examples using a custom R package. The codes are supplied so readers can reproduce the analyses themselves or create their own. Assuming a basic statistical knowledge, Basketball Data Science with R is suitable for students, technicians, coaches, data analysts and applied researchers. Features: · One of the first books to provide statistical and data mining methods for the growing field of analytics in basketball. · Presents tools for modelling graphs and figures to visualize the data. · Includes real world case studies and examples, such as estimations of scoring probability using the Golden State Warriors as a test case. · Provides the source code and data so readers can do their own analyses on NBA teams and players.

**Data Science, Analytics and Machine Learning with R** Nov 23 2021 Data Science, Analytics, and Machine Learning with R explains the principles of data mining and machine learning techniques and accentuates the importance of applied and multivariate modeling. The book emphasizes the fundamentals of each technique, with step-by-step codes and real-world examples with data from areas such as medicine and health, biology, engineering, technology, and related sciences. The authors want to mitigate the readers' feeling that they may be sitting in front of a black box. Toward this end, examples use the most recent R language syntax, with recognized robust, widespread and current packages. Code scripts are exhaustively commented, making it clear to readers what happens in each command. For data collection, readers are instructed how to build their own robots from the very beginning (not only API type, but also handcrafted ones). An entire chapter focuses on the concept of spatial analysis, allowing readers to build their own maps through geo-referenced data (such as in epidemiologic research) and some basic statistical techniques. Other chapters cover ensemble and uplift modelling, and GLMM (Generalized Linear Mixed Models) estimations, both linear and nonlinear. The book will serve computer and data scientists working with researchers, clinicians, and engineers, as well as the researchers and engineers themselves who find themselves working in multidisciplinary teams and need a more in-depth understanding of machine learning, data mining and AI than is normally taught in their courses. Presents a comprehensive and practical overview of machine learning, data mining and AI techniques for a broad multidisciplinary audience Serves both readers who are interested in statistics, analytics and modeling and those who wish to deepen their knowledge in programming through the use of R Teaches readers how to apply machine learning techniques to a wide range of data and subject areas Presents data in a graphically appealing way, promoting greater information transparency and interactive learning