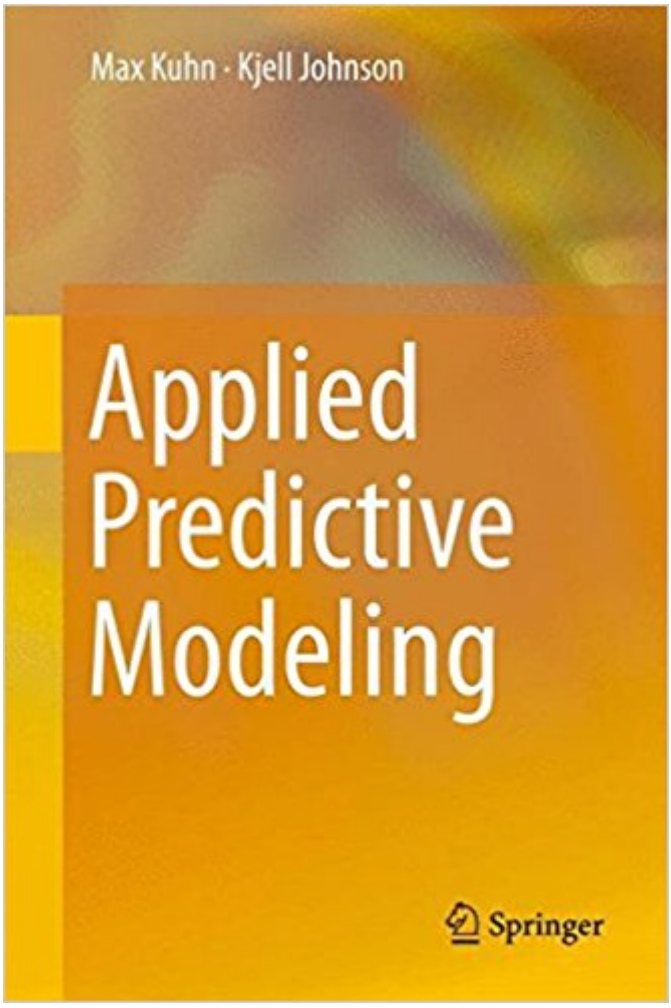
Ebook Directory
the best source of ebook

The book was found

Applied Predictive Modeling



PDF
Adobe
DOWNLOAD EBOOK

Synopsis

Winner of the 2014 Technometrics Ziegel Prize for Outstanding BookApplied Predictive Modeling covers the overall predictive modeling process, beginning with the crucial steps of data preprocessing, data splitting and foundations of model tuning.Â The text then provides intuitive explanations of numerous common and modern regression and classification techniques, always with an emphasis on illustrating and solving real data problems.Â Addressing practical concerns extends beyond model fitting to topics such as handling class imbalance, selecting predictors, and pinpointing causes of poor model performanceâ •all of which are problems that occur frequently in practice.Â The text illustrates all parts of the modeling process through many hands-on, real-life examples.Â And every chapter contains extensive R code for each step of the process.Â The data sets and corresponding code are available in the book's companion AppliedPredictiveModeling R package, which is freely available on the CRAN archive.Â This multi-purpose text can be used as an introduction to predictive models and the overall modeling process, a practitioner's reference handbook, or as a text for advanced undergraduate or graduate level predictive modeling courses.Â To that end, each chapter contains problem sets to help solidify the covered concepts and uses data available in the book's R package.Â Readers and students interested in implementing the methods should have some basic knowledge of R.Â And a handful of the more advanced topics require some mathematical knowledge.

Book Information

Hardcover: 600 pages

Publisher: Springer; 2013 edition (September 15, 2013)

Language: English

ISBN-10: 1461468485

ISBN-13: 978-1461468486

Product Dimensions: 6.1 x 1.3 x 9.2 inches

Shipping Weight: 2.3 pounds (View shipping rates and policies)

Average Customer Review: 4.7 out of 5 stars 63 customer reviews

Best Sellers Rank: #23,570 in Books (See Top 100 in Books) #11 inÂ Books > Textbooks > Medicine & Health Sciences > Research > Biostatistics #13 inÂ Books > Medical Books > Basic Sciences > Biostatistics #20 inÂ Books > Computers & Technology > Software > Mathematical & Statistical

Customer Reviews

"There are a wide variety of books available on predictive analytics and data modeling around the web...we've carefully selected the following 10 books, based on relevance, popularity, online ratings, and their ability to add value to your business. Â 1. Â Applied Predictive Modeling." Â (Timothy King, Business Intelligence Solutions Review, solutions-review.com, June, 2015) "I used this as a supplement in teaching a data science course that I use a range of different resources because I need to cover working with data, model evaluation, and machine learning methods. The next time I teach this course, I will use only this book because it covers all of these aspects of the field." Â (Louis Luangkesorn, lugerpitt.blogspot.com, June, 2015)"This is such a good book it has taken me awhile to work through the book. Â All the while finding examples of why people should read the book...Well thought out examples with the R packages and example code. Take your time and work through this book." Â (Mary Anne, Cats and Dogs with Data, maryannedata.com, February, 2015)"This monograph presents a very friendly practical course on prediction techniques for regression and classification models...The authors are recognized experts in modeling and forecasting , as well as developers of R packages and statistical methodologies...It is a well-written book very useful to students and practitioners who need an immediate and helpful way to apply complex statistical techniques." Â (Stan Lipovetsky, Technometrics, Vol. 56 (3), August, 2014)"There are hundreds of books that have something worthwhile to say about predictive modeling. However, in my judgment, Applied Predictive Modeling by Max Kuhn and Kjell Johnson (Springer 2013) ought to be at the very top of the reading list ...They come across like coaches who really, really want you to be able to do this stuff. They write simply and with great clarity...Applied Predictive Modeling is a remarkable text...it is the succinct distillation of years of experience of two expert modelers...." Â (Joseph Rickert, blog.revolutionanalytics.com, June, 2014)â œâ |In teaching a data science courseâ |I use a range of different resources because I need to cover working with data, model evaluation, and machine learning methods. The next time I teach this course, I will use only this book because it covers all of these aspects of the field.â • (Louis Luangkesorn, lugerpitt.blogspot.com, June 2015) â œThere are a wide variety of books available on predictive analytics and data modeling around the webâ |weâ ™ve carefully selected the following 10 books, based on relevance, popularity, online ratings, and their ability to add value to your business. 1. Applied Predictive Modeling.â • (Timothy King, Business Intelligence Solutions Review, solutions-review.com, June 2015) "Applied Predictive Modeling aims to expose many of these techniques in a very readable and self-contained book. This is a very applied and hands-on book. It guides the reader through many examples that serve to illustrate main points, and it raises possible issues and considerations that are oftentimes overlooked or not sufficiently reflected upon. Highly

recommended." (Bojan Tunguz, tunguzreview.com, June 2015)â œThis monograph presents a very friendly practical course on prediction techniques for regression and classification modelsâ | It is a well-written book very useful to students and practitioners who need an immediate and helpful way to apply complex statistical techniques.â • (Stan Lipovetsky, Technometrics, Vol. 56 (3), August 2014)â œIn my judgment,Â Applied Predictive ModelingÂ by Max Kuhn and Kjell Johnson (Springer 2013) ought to be at the very top of the reading list â |They come across like coaches who really, really want you to be able to do thisâ |Applied Predictive ModelingÂ is a remarkable textâ |it is the succinct distillation of years of experience of two expert modelersâ |â • (Joseph Rickert, blog.revolutionanalytics.com, June 2014)

"This strong, technical, hands-on treatment clearly spells out the concepts, and illustrates its themes tangibly with the language R, the most popular open source analytics solution." (Eric Siegel, Ph.D. Founder, Predictive Analytics World, Author,Â Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die)

I read "Applied predictive modeling" (which I will shorten to APM) shortly after I read "Introduction to statistical learning" (ISL) by James, Witten, Hastie and Tibshirani, and find that book both closest to APM, and helpful in highlighting APM’s strengths.The two books cover the same broad subject. If you google "kuhn caret", you will find Max Kuhn’s (very informative) presentation of his "caret" R package, and its first slide will tell you that he uses "predictive modeling" as a synonym of "machine learning" - what Hastie and Tibshirani call "statistical learning". Adopting H&T’s terminology choice, I will say that both books combine theory of "statistical learning" with hands-on illustrations and exercises implemented in R; the get-your-hands-dirty, try-it-out element is, in fact, ISL’s key difference from the earlier, venerable "Elements of statistical learning".Both books, inevitably, go over a catalog of statistical-learning techniques. The shorter ISL, in my opinion, is superior at explaining the concepts and communicating the principles, while APM takes the more straightforward approach of "beefing up" the catalog, by spending more pages on each item and including more items. While ISL is by design very accessible, APM can be more technical - the detail will surely be appreciated by any practitioner - and, as it talks about the various methods, it can and does discuss recent extensions, offering an extensive and "fresh" bibliography. R-wise, APM’s advantage is not decisive (if you look at content, not line count) but big; the book naturally favors "caret" - which has a useful role, "wrapping" a plethora of third-party R packages, and providing a common interface, plus helpful utilities - but both references and uses the specialist

packages as well.If you are wondering why I am not giving APM five stars, it’s because the book jumped into the catalog mode a bit too briskly, and delivered on the "applied" promise mostly by defining "applied" as "illustrated with R examples". I wish there were more chapters like Chapter 16, which talks about the very common problem of effective classification in highly unbalanced samples. Nonetheless, I am impressed by "Applied predictive modeling" and recommend it as a sensible follow-up, or maybe even alternative, to "Introduction to statistical learning".

This really is a fantastic book. I see a lot of mentions to ISL in the comments, but I really feel that this book is a great compliment to ISL - specifically for reading after reading ISL - it dives deeper than ISL does into various recent developments but never dives too deeply into overly technical mathematics. It is almost a natural extension for supervised learning. I could not recommend this strongly enough.

I readÂ Data Science for Business: What you need to know about data mining and data-analytic thinkingÂ before this one which gave a introduction and intuitive feel for data science. This book goes much deeper into the algorithms used in data science. As the title says, this book focuses on algorithms and models used for prediction, but that covers most applications of data science. This is a great book if you want to get an understanding of a wide variety of models and how to implement them using R. You will want to find another book if you want to focus on just a few models.Pros:Covers a wide array of modelsShows you how to use those models in RContains references for further studyContains exercises to help practice what is taughtWarnings:Avoids heavy theoretical mathematicsExpects you to know basic statistics and some higher level maths (like matrices)

My husband is in love with this book. I have not read it myself but I can see that his models have inproved significantly since he started reading this. His feedbsck is that the book summarizes the main concepts in a very clear, precise manner and explains more complex ideas in a understandable simple way.

I have an extensive personal library on statistical books and this is the best. It is one of the best summaries of complex data modeling and understanding in the market (together with Lantz’s Machine Learning with R). It is not for the weak-hearted and some basics in statistics are needed. However, from those with an introductory knowledge in data mining to those that are experts, this

book is a jewel. I cannot praise it enough and the tools that it contains makes Analytics not only easier but also fascinating.

While this was largely a review for me, there are always gems to be found in comprehensive texts like this. I would have loved to have this book 6-7 years ago. Even though I don't agree with the entirety of the espoused approach (see e.g. "Practical Data Science with R" for an alternative approach to the cross validation/test/train/holdout set), it is a valid one and I highly recommend this to anyone implementing supervised learning models. In particular, the author's caret package (which is a perfect companion to this book) provides a great basis for data->model pipelining that I would dearly love to see other ML frameworks adopt (scikit learn is close, but not quite there), and will provide a practical baseline for those building custom model pipelines and frameworks (or evaluating what is available off the shelf.

Applied Predictive Modeling is one of the few good examples where the word applied is aptly used for a book title. Like other texts on predictive modeling, the material in this book covers the why, but more importantly the authors detail the how-to in the predictive modeling process. Each chapter shows that the authors invested careful consideration for their audience; the concepts and practices outlined in each chapter have been reinforced with real-life problem solving, detailed graphs and reproducible R syntax. In addition, there is an R package that has been thoughtfully prepared, which includes examples from the book and data sets so that the reader can perform the examples independently to solidify the concepts quickly. I would recommend this text to anyone who has an interest in getting into predictive modeling.

Download to continue reading...

Applied Predictive Modeling The Model's Bible & Global Modeling Agency Contact List - An Insider's Guide on How to Break into the Fashion Modeling Industry Modeling Agency Tips: Get Listed with Fashion Modeling Agencies and Find Your Dream Job 3ds Max Modeling for Games: Insider's Guide to Game Character, Vehicle, and Environment Modeling: Volume I Atmospheric and Space Flight Dynamics: Modeling and Simulation with MATLABÂ® and SimulinkÂ® (Modeling and Simulation in Science, Engineering and Technology) Introduction to the Numerical Modeling of Groundwater and Geothermal Systems: Fundamentals of Mass, Energy and Solute Transport in Poroelastic Rocks (Multiphysics Modeling) Modeling Dynamic Biological Systems (Modeling Dynamic Systems) Dynamic Modeling in the Health Sciences (Modeling Dynamic Systems) 3ds Max Modeling for Games: Insider's Guide to Game Character, Vehicle, and Environment Modeling:

1 Analytics: Data Science, Data Analysis and Predictive Analytics for Business Fraud Analytics Using Descriptive, Predictive, and Social Network Techniques: A Guide to Data Science for Fraud Detection (Wiley and SAS Business Series) Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die, Revised and Updated Predictive Analytics For Dummies Practical Machinery Vibration Analysis and Predictive Maintenance (Practical Professional Books from Elsevier) Data Analytics: What Every Business Must Know About Big Data And Data Science (Data Analytics for Business, Predictive Analysis, Big Data Book 1) Analytics: Business Intelligence, Algorithms and Statistical Analysis (Predictive Analytics, Data Visualization, Data Analytics, Business Analytics, Decision Analysis, Big Data, Statistical Analysis) Data Analytics and Python Programming: 2 Bundle Manuscript: Beginners Guide to Learn Data Analytics, Predictive Analytics and Data Science with Python Programming Model Predictive Control of Wind Energy Conversion Systems (IEEE Press Series on Power Engineering) Model Predictive Control of High Power Converters and Industrial Drives

Contact Us

DMCA

Privacy

FAQ & Help