Hands-On Programming With R: Write Your Own Functions And Simulations
**Synopsis**

Learn how to program by diving into the R language, and then use your newfound skills to solve practical data science problems. With this book, you'll learn how to load data, assemble and disassemble data objects, navigate R's environment system, write your own functions, and use all of R's programming tools. Rstudio Master Instructor Garrett Grolemund not only teaches you how to program, but also shows you how to get more from R than just visualizing and modeling data. You'll gain valuable programming skills and support your work as a data scientist at the same time. Work hands-on with three practical data analysis projects based on casino games: Store, retrieve, and change data values in your computer's memory; Write programs and simulations that outperform those written by typical R users; Use R programming tools such as if else statements, for loops, and S3 classes; Learn how to write lightning-fast vectorized R code; Take advantage of R's package system and debugging tools; Practice and apply R programming concepts as you learn them.

**Book Information**

Paperback: 230 pages  
Publisher: O'Reilly Media (August 2, 2014)  
Language: English  
ISBN-10: 1449359019  
Product Dimensions: 7 x 0.6 x 9.2 inches  
Shipping Weight: 14.9 ounces (View shipping rates and policies)  
Average Customer Review: 3.9 out of 5 stars - See all reviews (13 customer reviews)  
Best Sellers Rank: #140,325 in Books (See Top 100 in Books)  
#99 in Books > Computers & Technology > Databases & Big Data > Data Processing  
#103 in Books > Computers & Technology > Software > Mathematical & Statistical  
#468 in Books > Textbooks > Science & Mathematics > Mathematics > Statistics

**Customer Reviews**

Full disclosure - I have worked with the author. I have considered him a friend and colleague since he taught a course at my employer. Part of the information in my review is based on conversations I have had with the author, so please discount my opinion accordingly. I don't think this book is meant to be a competitor to Norman Matloff's book (which I consider *the* tutorial/reference for base R). This book is trying to do something different, and I think it's an ambitious experiment. In recent
years, there has been a lot of activity surrounding the "Hadleyverse", a collection of R packages architected by Hadley Wickham and coworkers, the goal of which is to offer the user a consistent, simple, yet powerful set of tools to tidy, transform, and visualize data. The best way to jump into the Hadleyverse has been to just jump in. For someone who has just taken the leap to learn base R, it can be difficult to consider taking that second leap. There hasn't been a book (as least to my knowledge) that says, "start here, here's how to learn R in a way leads to dplyr". I think that's a goal of this book. For example, knowing how functions work will make it easier to work with the piping operator (\%\>%). Knowing how environments work will make it easier to navigate the vagaries of non-standard evaluation, to get the most out of dplyr and ggvis. I don't think these topics were chosen by accident. Part of my job is to help R users in my company, particularly those who are just starting out with the language. I will gladly recommend this book to them because: (1) it reveals to the reader just a little at a time, which is ideal for someone just starting out with R, (2) what is covered in the book is complementary to learning dplyr, etc.

Garrett’s book is exactly what I was looking for. Having some background in other languages, including some C++ and having just gone through Learning Python, I needed to get up to speed on R. The book is concise and well structured. The theme of the book, casino games, uses dice, cards, and a slot machine to systematically build up the complexity of what you can do in R. This cohesiveness helps to reinforce what you learned previously while better understanding the new topic. The depth into each topic was what I was hoping and expecting. You learn the structure and enough of the nuts and bolts that you can go look up more when necessary without it being too much to absorb at once. Garrett refers to websites and other books that have this detailed information that goes beyond the scope of this book. The focus of the book is obvious from the title. Garrett approaches R like a programmer. I found this focus to be better for me than the first book on R that I read, Jared Lander’s "R for Everyone: Advanced Analytics and Graphics". Jared’s book goes into much more complicated statistics, but misses some of the fundamentals that made it difficult for me to understand later parts of the book. Garrett’s approach, however, ensures you build up your base before moving on. If your background is more programming than stats, I think you should strongly consider Hand-On Programming with R. The main problem I had with the book were related to formatting and editorial issues. Many of the problems are listed in the Errata, so hopefully this gets fixed. In some cases the output did not match what would be expected. In one case, a code example did not run as written, and needed a small change. Without these issues I would have gone with five stars.
Hands-On Programming with R: Write Your Own Functions and Simulations How To Write A Book
In Less Than 24 Hours (How To Write A Kindle Book, How To Write A Novel, Book Writing, Writing
A Novel, Write For Kindle) Rich Dad Advisor’s Series: Own Your Own Corporation: Why the Rich
Own Their Own Companies and Everyone Else Works for Them (Rich Dad’s Advisors) How to Write
the Perfect Personal Statement: Write powerful essays for law, business, medical, or graduate
school application (Peterson’s How to Write the Perfect Personal Statement) Write to Market:
Deliver a Book that Sells (Write Faster, Write Smarter 3) CompTIA A+ Certification All-in-One Exam
Simulations and Video Training Neural and Adaptive Systems: Fundamentals through Simulations
Java: The Simple Guide to Learn Java Programming In No Time (Programming,Database, Java for
dummies, coding books, java programming)
(HTML, Javascript, Programming, Developers, Coding, CSS, PHP) (Volume 2) This book will teach you
how to write better: Learn how to get what you want, increase your conversion rates, and make it
easier to write anything (using formulas and mind-hacks) Health Is in Your Hands: Jin Shin Jyutsu -
Practicing the Art of Self-Healing (with 51 Flash Cards for the Hands-on Practice of Jin Shin Jyutsu)
(2014 Next Generation Indie Book Award Finalist) Event Planning: Plan Events Like a Professional,
Impress Your Clients and be Your Own Boss in 12 Simple Steps (event planning, experience,
organise, manage, ... be your own boss, work from home Book 4) Swift Programming Artificial
Intelligence: Made Easy, w/ Essential Programming Learn to Create your * Problem Solving *
Algorithms! TODAY! w/ Machine ... engineering, r programming, iOS development) 100
Write-and-Learn Sight Word Practice Pages: Engaging Reproducible Activity Pages That Help Kids
Recognize, Write, and Really LEARN the Top 100 High-Frequency Words That are Key to Reading
Success How to Write Better RÃ¶sumÃ©s and Cover Letters (How to Write Better Resumes
and Cover Letters) Songwriting 101 (2nd Edition): Inspiration, Tips, Tricks, and Lessons for the
Beginner, Intermediate, and Advanced Songwriter (lyrics, writing songs, songwriter, ... write music,
write lyrics, song writing) Learn CSS in One Day and Learn It Well (Includes HTML5): CSS for
Beginners with Hands-on Project. The only book you need to start coding in CSS ... Coding Fast
with Hands-On Project) (Volume 2) Learn C# in One Day and Learn It Well: C# for Beginners with
Hands-on Project (Learn Coding Fast with Hands-On Project) (Volume 3) How to write a song: How
to Write Lyrics for Beginners in 24 Hours or Less!: A Detailed Guide ((Songwriting, Writing better
lyrics, Writing melodies, Songwriting exercises Book 3)) How to Write the Perfect Personal
Statement: Write powerful essays for law, business, medical, or graduate school application
(Peterson's Perfect Personal Statements) You Can Write a Column (You Can Write It!)