

*Learn how to write R code with fewer bugs.*

The problem with programming is that you are always one typo away from writing something silly. Likewise with data analysis, a small mistake in your model can lead to a big mistake in your results. Combining the two disciplines means that it is all too easy for a missed minus sign to generate a false prediction that you don't spot until it's too late. Testing is the only way to be sure that your code, and your results, are correct.

**Testing R Code** teaches you how to perform development-time testing using the `testthat` package, allowing you to ensure that your code works as intended. The book also teaches run-time testing using the `assertive` package; enabling your users to correctly run your code.

After beginning with an introduction to testing in R, the book explores more advanced cases such as integrating tests into R packages; testing code that accesses databases; testing C++ code with `Rcpp`; and testing graphics. Each topic is explained with real-world examples and has accompanying exercises for readers to practise their skills — only a small amount of experience with R is needed to get started!

*"In short, I loved it. There is a dearth of good material (or any material, really) on this topic so I'm excited to say that 'Testing R Code' met my high expectations. I know the subject rather well but not only did I see topics that were explained in new and easier ways than I have previously seen, I even learned quite a bit of new information myself. It is obvious that the author knows this topic inside and out."*

— **Tony Fischetti**, Rensselaer Polytechnic Institute



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