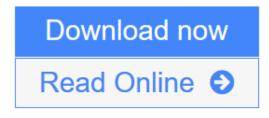


Introduction to Scientific Programming and Simulation Using R, Second Edition (Chapman & Hall/CRC The R Series)

Owen Jones, Robert Maillardet, Andrew Robinson



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Learn How to Program Stochastic Models

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- Core knowledge of R and programming concepts
- How to think about mathematics from a numerical point of view, including the application of these concepts to root finding, numerical integration, and optimisation
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In a new chapter on systems of ordinary differential equations (ODEs), the authors cover the Euler, midpoint, and fourth-order Runge-Kutta (RK4) schemes for solving systems of first-order ODEs. They compare the numerical efficiency of the different schemes experimentally and show how to improve the RK4 scheme by using an adaptive step size.

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Building readers' statistical intuition, **Introduction to Scientific Programming and Simulation Using R**, **Second Edition** shows how to turn algorithms into code. It is designed for those who want to make tools, not just use them. The code and data are available for download from CRAN.

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