Modern Fortran In Practice
Synopsis

From its earliest days, the Fortran programming language has been designed with computing efficiency in mind. The latest standard, Fortran 2008, incorporates a host of modern features, including object-orientation, array operations, user-defined types, and provisions for parallel computing. This tutorial guide shows Fortran programmers how to apply these features in twenty-first-century style: modular, concise, object-oriented, and resource-efficient, using multiple processors. It offers practical real-world examples of interfacing to C, memory management, graphics and GUIs, and parallel computing using MPI, OpenMP, and coarrays. The author also analyzes several numerical algorithms and their implementations and illustrates the use of several open source libraries. Full source code for the examples is available on the book’s Web site.

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Customer Reviews

I shall praise this book as a major contribution to Fortran Practice. Certainly a must read for anyone who has to develop in this always renewing programming language: Fortran. The author, despite the deep vision providedon discussions, offers a catching language, sometimes giving the pace of a thriller which brings us to the expectancy of the next scene of the plot (or would it be the next sample program?). The chapter about the problem interface, in which the author presents not only 1 but 7 solutions spanning the different standard resources for the problem, for instance, is a superb example of the flexibility offered by Fortran revealed by the experience of the author. On the other hand, many issues, like OOP or coarray features linked to modern programming as used in JAVA or C++, are scrutinised, which leads to an even broder public, despite the book been intended for
Fortran programmers. In a nutshell, even purchased, the book put us programmers in debt to this most needed work.

Excellent reference text.

Good service

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