Scientific computing with case studies

O`Leary, Dianne P., author

Deskripsi Lengkap: https://lib.ui.ac.id/detail?id=20450990&lokasi=lokal

----

Abstrak

Learning through doing is the foundation of this book, which allows readers to explore case studies as well as expository material. The book provides a practical guide to the numerical solution of linear and nonlinear equations, differential equations, optimization problems, and eigenvalue problems. It treats standard problems and introduces important variants such as sparse systems, differential-algebraic equations, constrained optimization, Monte Carlo simulations, and parametric studies. Stability and error analysis is emphasized, and the MATLAB algorithms are grounded in sound principles of software design and in the understanding of machine arithmetic and memory management.