<<Nonlinear optimizati>>

图书基本信息

书名: <<Nonlinear optimization with financial applications非线性优化以财政应用>>

第一图书网, tushu007.com

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内容概要

The book introduces the key ideas behind practical nonlinear optimization. Computational finance – an increasingly popular area of mathematics degree programs – is combined here with the study of an important class of numerical techniques. The financial content of the book is designed to be relevant and interesting to specialists. However, this material – which occupies about one-third of the text – is also sufficiently accessible to allow the book to be used on optimization courses of a more general nature. The essentials of most currently popular algorithms are described, and their performance is demonstrated on a range of optimization problems arising in financial mathematics. Theoretical convergence properties of methods are stated, and formal proofs are provided in enough cases to be instructive rather than overwhelming. Practical behavior of methods is illustrated by computational examples and discussions of efficiency, accuracy and computational costs. Supporting software for the examples and exercises is available (but the text does not require the reader to use or understand these particular codes). The author has been active in optimization for over thirty years in algorithm development and application and in teaching and research supervision.

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书籍目录

1.PORTFOLIO OPTIMIZATION2.ONE-VARIABLE OPTIMIZATION3.OPTIMAL PORTFOLIOS WITH N ASSETS4.UNCONSTRAINED OPTIMIZATION IN N VARIABLES5.THE STEEPEST DESCENT METHOD6.THE NEWTON METHOD7.QUASI-NEWTON METHODS8.CONJUGATE GRADIENT METHODS9.OPTIMALPORTFOLISO WITH RESTRICTIONS10.LARGER-SCALE PORTFOLIOS11.DATA-FITTING & THE GAUSS-NEWTON METHOD12.EQUALITY CONSTRSINED OPTIMIZATION13.LINEAR EQUALITY CONSTRAINTS14.PENALTY FUNCTION METHODS15.SEQUENTIAL QUADRATIC PROGRAMMING16.FURTHER PORTFOLIO PROBLEMS17.INEQUALITY CONSTRAINED OPTIMIZATION18.EXTENDING EQUALITY-CONSTRAINT METHODS19.BARRIER FUNCTION METHODS20.INTERIOR POINT METHODS21.DATA FITTING USING INEQUALITY CONSTRAINTS22.PORTFOLIO RE-BALANCING AND OTHER PROBLEMS23. GLOBAL UNCONSTRAINED OPTIMIZATIONAppendixReferencesIndex

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