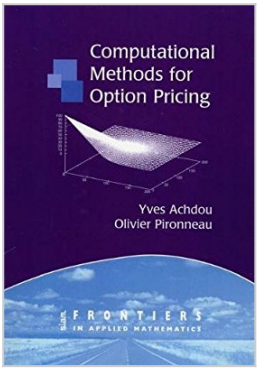

Computational Methods for Option Pricing (Frontiers in Applied Mathematics)

By Yves Achdou, Olivier Pironneau

Computational Methods for Option Pricing (Frontiers in Applied Mathematics) By Yves Achdou, Olivier Pironneau

This book is a must for becoming better acquainted with the modern tools of numerical analysis for several significant computational problems arising in finance. Important aspects of finance modeling are reviewed, involving partial differential equations and numerical algorithms for the fast and accurate pricing of financial derivatives and the calibration of parameters. The best numerical algorithms are fully explored and discussed, from their mathematical analysis up to their implementation in C++ with efficient numerical libraries. This is one of the few books that thoroughly covers the following topics: mathematical results and efficient algorithms for pricing American options; modern algorithms with adaptive mesh refinement for European and American options; regularity and error estimates are derived and give strong support to the mesh adaptivity, an essential tool for speeding up the numerical implementations; calibration of volatility with European and American options; the use of automatic differentiation of computer codes for computing greeks.

Computational Methods for Option Pricing (Frontiers in Applied Mathematics)

By Yves Achdou, Olivier Pironneau

Computational Methods for Option Pricing (Frontiers in Applied Mathematics) By Yves Achdou, Olivier Pironneau

This book is a must for becoming better acquainted with the modern tools of numerical analysis for several significant computational problems arising in finance. Important aspects of finance modeling are reviewed, involving partial differential equations and numerical algorithms for the fast and accurate pricing of financial derivatives and the calibration of parameters. The best numerical algorithms are fully explored and discussed, from their mathematical analysis up to their implementation in C++ with efficient numerical libraries. This is one of the few books that thoroughly covers the following topics: mathematical results and efficient algorithms for pricing American options; modern algorithms with adaptive mesh refinement for European and American options; regularity and error estimates are derived and give strong support to the mesh adaptivity, an essential tool for speeding up the numerical implementations; calibration of volatility with European and American options; the use of automatic differentiation of computer codes for computing greeks.

Computational Methods for Option Pricing (Frontiers in Applied Mathematics) By Yves Achdou, Olivier Pironneau Bibliography

- Sales Rank: #3339319 in Books
- Published on: 2005-07-01
- Original language: English
- Number of items: 1
- Dimensions: 8.98" h x .67" w x 5.98" l, 1.25 pounds
- Binding: Paperback
- 297 pages

Editorial Review

About the Author
Yves Achdou is a Professor at the Université Denis Diderot, Paris. He was awarded the Prix Blaise Pascal de l'Académie des Sciences in 1998.

Olivier Pironneau is a Professor at the Université Pierre et Marie Curie, Paris. He has been a member of the Académie des Sciences since 2002 and is the author of more than 300 articles and eight books.

Users Review

From reader reviews:

Judith Mandel:

Do you among people who can't read pleasurable if the sentence chained inside the straightway, hold on guys this particular aren't like that. This Computational Methods for Option Pricing (Frontiers in Applied Mathematics) book is readable through you who hate the perfect word style. You will find the information here are arrange for enjoyable looking at experience without leaving actually decrease the knowledge that want to provide to you. The writer associated with Computational Methods for Option Pricing (Frontiers in Applied Mathematics) content conveys objective easily to understand by most people. The printed and e-book are not different in the articles but it just different in the form of it. So , do you nevertheless thinking Computational Methods for Option Pricing (Frontiers in Applied Mathematics) is not loveable to be your top checklist reading book?

Elizabeth Hart:

The ability that you get from Computational Methods for Option Pricing (Frontiers in Applied Mathematics) could be the more deep you digging the information that hide inside words the more you get serious about reading it. It doesn't mean that this book is hard to recognise but Computational Methods for Option Pricing (Frontiers in Applied Mathematics) giving you excitement feeling of reading. The copy writer conveys their point in a number of way that can be understood through anyone who read that because the author of this publication is well-known enough. This kind of book also makes your own personal vocabulary increase well. Therefore it is easy to understand then can go along with you, both in printed or e-book style are available. We suggest you for having that Computational Methods for Option Pricing (Frontiers in Applied Mathematics) instantly.

Robert Younger:

Many people spending their time frame by playing outside along with friends, fun activity together with family or just watching TV all day long. You can have new activity to pay your whole day by examining a book. Ugh, ya think reading a book can definitely hard because you have to accept the book everywhere? It all right you can have the e-book, bringing everywhere you want in your Touch screen phone. Like

Computational Methods for Option Pricing (Frontiers in Applied Mathematics) which is finding the e-book version. So , why not try out this book? Let's find.

William Kavanaugh:

You can obtain this Computational Methods for Option Pricing (Frontiers in Applied Mathematics) by look at the bookstore or Mall. Only viewing or reviewing it can to be your solve challenge if you get difficulties to your knowledge. Kinds of this reserve are various. Not only by simply written or printed but also can you enjoy this book by simply e-book. In the modern era just like now, you just looking because of your mobile phone and searching what your problem. Right now, choose your current ways to get more information about your guide. It is most important to arrange you to ultimately make your knowledge are still change. Let's try to choose proper ways for you.

Read Computational Methods for Option Pricing (Frontiers in Applied Mathematics) By Yves Achdou, Olivier Pironneau for online ebook

Computational Methods for Option Pricing (Frontiers in Applied Mathematics) By Yves Achdou, Olivier Pironneau Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Computational Methods for Option Pricing (Frontiers in Applied Mathematics) By Yves Achdou, Olivier Pironneau books to read online.

Online Computational Methods for Option Pricing (Frontiers in Applied Mathematics) By Yves Achdou, Olivier Pironneau ebook PDF download

Computational Methods for Option Pricing (Frontiers in Applied Mathematics) By Yves Achdou, Olivier Pironneau Doc

Computational Methods for Option Pricing (Frontiers in Applied Mathematics) By Yves Achdou, Olivier Pironneau Mobipocket

Computational Methods for Option Pricing (Frontiers in Applied Mathematics) By Yves Achdou, Olivier Pironneau EPub

DL1YFPAZOHC: Computational Methods for Option Pricing (Frontiers in Applied Mathematics) By Yves Achdou, Olivier Pironneau