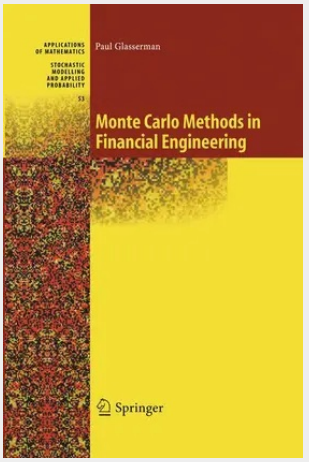
Glasserman

Monte Carlo Methods in Financial Engineering



Monte Carlo simulation has become an essential tool in the pricing of derivative securities and in risk management. These applications have, in turn, stimulated research into new Monte Carlo methods and renewed interest in some older techniques.

This book develops the use of Monte Carlo methods in finance and it also uses simulation as a vehicle for presenting models and ideas from financial engineering. It divides roughly into three parts. The first part develops the fundamentals of Monte Carlo methods, the foundations of derivatives pricing, and the implementation of several of the most important models used in financial engineering. The next part describes techniques for improving simulation accuracy and efficiency. The final third of the book addresses special topics: estimating price sensitivities, valuing American options, and measuring market risk and credit risk in financial portfolios.

The most important prerequisite is familiarity with the mathematical tools used to specify and analyze continuous-time models in finance, in particular the key ideas of stochastic calculus. Prior exposure to the basic principles of option pricing is useful but not essential.

The book is aimed at graduate students in financial engineering, researchers in Monte Carlo simulation, and practitioners implementing models in industry.

Mathematical Reviews, 2004: "... this book is very comprehensive, up-to-date and useful tool for those who are interested in implementing Monte Carlo methods in a financial context."

This book is devoted to the use of Monte Carlo methods in finance and is the first of its kind in this area. It will serve as a reference for practitioners and researchers and will also be suitable as a graduate text for courses on computational finance.

85,59 €
79,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780387004518
Medium: Buch
ISBN: 978-0-387-00451-8
Verlag: Springer
Erscheinungstermin: 07.08.2003
Sprache(n): Englisch
Auflage: Erscheinungsjahr 2003
Serie: Stochastic Modelling and Applied Probability
Produktform: Gebunden
Gewicht: 1029 g
Seiten: 596
Format (B x H): 160 x 241 mm

Kundenservice Verlag Dr. Otto Schmidt KG
Neumannstraße 10, 40235 Düsseldorf | kundenservice@otto-schmidt.de | 0221-93738-997 (Inland)