

The book was found

Continuous-time Stochastic Control And Optimization With Financial Applications (Stochastic Modelling And Applied Probability)





Synopsis

Stochastic optimization problems arise in decision-making problems under uncertainty, and find various applications in economics and finance. On the other hand, problems in finance have recently led to new developments in the theory of stochastic control. This volume provides a systematic treatment of stochastic optimization problems applied to finance by presenting the different existing methods: dynamic programming, viscosity solutions, backward stochastic differential equations, and martingale duality methods. The theory is discussed in the context of recent developments in this field, with complete and detailed proofs, and is illustrated by means of concrete examples from the world of finance: portfolio allocation, option hedging, real options, optimal investment, etc. This book is directed towards graduate students and researchers in mathematical finance, and will also benefit applied mathematicians interested in financial applications and practitioners wishing to know more about the use of stochastic optimization methods in finance.

Book Information

Series: Stochastic Modelling and Applied Probability (Book 61) Hardcover: 232 pages Publisher: Springer; 2009 edition (July 21, 2009) Language: English ISBN-10: 3540894993 ISBN-13: 978-3540894995 Product Dimensions: 6.1 x 0.6 x 9.2 inches Shipping Weight: 1.1 pounds (View shipping rates and policies) Average Customer Review: Be the first to review this item Best Sellers Rank: #775,943 in Books (See Top 100 in Books) #100 inà Â Books > Computers & Technology > Software > Personal Finance #119 inà Â Books > Science & Math > Mathematics > Applied > Linear Programming #121 inà Â Books > Computers & Technology > Software >

Customer Reviews

Stochastic optimization problems arise in decision-making problems under uncertainty, and find various applications in economics and finance. On the other hand, problems in finance have recently led to new developments in the theory of stochastic control. This volume provides a systematic treatment of stochastic optimization problems applied to finance by presenting the

different existing methods: dynamic programming, viscosity solutions, backward stochastic differential equations, and martingale duality methods. The theory is discussed in the context of recent developments in this field, with complete and detailed proofs, and is illustrated by means of concrete examples from the world of finance: portfolio allocation, option hedging, real options, optimal investment, etc. This book is directed towards graduate students and researchers in mathematical finance, and will also benefit applied mathematicians interested in financial applications and practitioners wishing to know more about the use of stochastic optimization methods in finance.

1995: PhD in applied mathematics, University Paris Dauphine 1995: Assistant Professor, University Marne-la-Vall $\tilde{A}f\hat{A}$ ©e 1999: Professor, University Paris 7 2006: Member Institut Universitaire de France

Download to continue reading...

Continuous-time Stochastic Control and Optimization with Financial Applications (Stochastic Modelling and Applied Probability) Stochastic Simulation: Algorithms and Analysis (Stochastic Modelling and Applied Probability, No. 57) (No. 100) Continuous Color: A Month-by-Month Guide to Shrubs and Small Trees for the Continuous Bloom Garden Stochastic Calculus for Finance II: Continuous-Time Models (Springer Finance) Applied Probability and Stochastic Processes Pyomo $\hat{A}\phi\hat{a} - \hat{a}\phi$ Optimization Modeling in Python (Springer Optimization and Its Applications) Clay Modelling for Beginners: An Essential Guide to Getting Started in the Art of Sculpting Clay ~ (Clay Modelling | Clay Modeling | Clay Art) Problems from the Discrete to the Continuous: Probability, Number Theory, Graph Theory, and Combinatorics (Universitext) ISO/TS 20022-3:2004, Financial services - UNIversal Financial Industry message scheme - Part 3: ISO 20022 modelling guidelines Robotics: Modelling, Planning and Control (Advanced Textbooks in Control and Signal Processing) Wind Turbine Control Systems: Principles, Modelling and Gain Scheduling Design (Advances in Industrial Control) Modelling and Control of Dynamic Systems Using Gaussian Process Models (Advances in Industrial Control) Stochastic Models, Information Theory, and Lie Groups, Volume 2: Analytic Methods and Modern Applications (Applied and Numerical Harmonic Analysis) Stochastic Processes With Applications (Classics in Applied Mathematics) Quantum Probability (Probability and Mathematical Statistics) Probability: 2 Manuscripts $\tilde{A}\phi \hat{a} \neg \hat{a} \phi$ Probability with Permutations and Markov Models Probability, Statistics, and Stochastic Processes Probability and Stochastic Processes Concepts in Probability and Stochastic Modeling (An Alexander Kugushev Book) Fundamentals of Probability, with Stochastic Processes (3rd Edition)

Contact Us

DMCA

Privacy

FAQ & Help