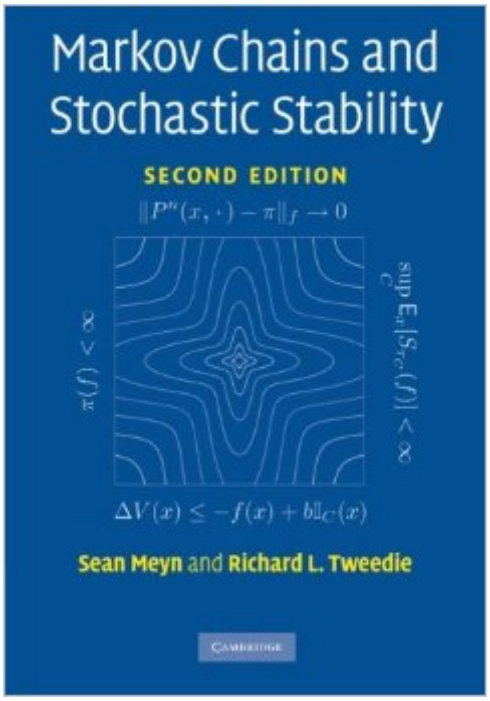
The book was found

Markov Chains And Stochastic Stability (Cambridge Mathematical Library)



PDF
Adobe
DOWNLOAD EBOOK

Synopsis

Meyn and Tweedie is back! The bible on Markov chains in general state spaces has been brought up to date to reflect developments in the field since 1996 - many of them sparked by publication of the first edition. The pursuit of more efficient simulation algorithms for complex Markovian models, or algorithms for computation of optimal policies for controlled Markov models, has opened new directions for research on Markov chains. As a result, new applications have emerged across a wide range of topics including optimisation, statistics, and economics. New commentary and an epilogue by Sean Meyn summarise recent developments and references have been fully updated. This second edition reflects the same discipline and style that marked out the original and helped it to become a classic: proofs are rigorous and concise, the range of applications is broad and knowledgeable, and key ideas are accessible to practitioners with limited mathematical background.

Book Information

Series: Cambridge Mathematical Library

Paperback: 624 pages

Publisher: Cambridge University Press; 2 edition (April 27, 2009)

Language: English

ISBN-10: 0521731828

ISBN-13: 978-0521731829

Product Dimensions: 6.8 x 1.3 x 9.7 inches

Shipping Weight: 2.7 pounds (View shipping rates and policies)

Average Customer Review: 4.5 out of 5 starsÂ Â See all reviewsÂ (2 customer reviews)

Best Sellers Rank: #1,218,948 in Books (See Top 100 in Books) #121 inÂ Books > Science & Math > Mathematics > Applied > Stochastic Modeling #3125 inÂ Books > Textbooks > Science & Mathematics > Mathematics > Statistics #4566 inÂ Books > Science & Math > Mathematics > Applied > Probability & Statistics

Customer Reviews

It is certainly great news for researchers working with Markov chains that this widely used book got reprinted with a new publisher. The content is almost the same as the first version, except for some notes and bibilographic updates by the second author and a nice foreward by Peter Glynn. Of course, sadly the first author is no longer with us today, and the second author has done a good job of putting a modern touch to the book. I think Markov chain theory is still of interest today for at least two reasons. First, Markov models seem to have more and more applications everyday, from

modern cummunication networks to molecular biological data analysis, and so it pays to have a grasp and some understanding of the basic properties of concrete models, whether being stable, or being sensitive to parameter perturbations. This book provides a good introduction and foundation for understanding stochastic dynamical systems. Secondly, there is an intrinsic need in statistical theory for Markov chain model, as it is perhaps the simplest and most natural model for dependence in data, generalizing standard evolution equations such as ODE or PDE models in the sciences literature. For example, both time series analysis and Bayesian statistical computation make heavy use of Markov chain theory. I think this book should be taught at the graduate level at most major statistics departments. This book makes an interesting comparison to another classic book on this subject: E. Nummelin's bookGeneral Irreducible Markov Chains and Non-Negative Operators (Cambridge Tracts in Mathematics) which is, often, overlooked and under-appreciated.

Download to continue reading...

Markov Chains and Stochastic Stability (Cambridge Mathematical Library) Cadenas Alimentarias De Los Pantanos / Wetland Food Chains (Cadenas Alimentarias / Food Chains) (Spanish Edition) Stochastic Integration in Banach Spaces: Theory and Applications (Probability Theory and Stochastic Modelling) Engineering Uncertainty and Risk Analysis, Second Edition: A Balanced Approach to Probability, Statistics, Stochastic Models, and Stochastic Differential Equations Lectures on BSDEs, Stochastic Control, and Stochastic Differential Games with Financial Applications (SIAM Series on Financial Mathematics) Elementary Algebraic Geometry (Student Mathematical Library, Vol. 20) (Student Mathematical Library, V. 20) Transformation Groups for Beginners (Student Mathematical Library, Vol. 25) (Student Mathematical Library, V. 25) Semigroups, Boundary Value Problems and Markov Processes (Springer Monographs in Mathematics) Markov Models for Pattern Recognition: From Theory to Applications Partially Observed Markov Decision Processes: From Filtering to Controlled Sensing Lectures from Markov Processes to Brownian Motion (Springer Advanced Texts in Life Sciences) Stochastic Processes (Cambridge Series in Statistical and Probabilistic Mathematics) Stochastic Approximation (Cambridge Tracts in Mathematics) Smooth Compactifications of Locally Symmetric Varieties (Cambridge Mathematical Library) Trigonometric Series (Cambridge Mathematical Library) An Introduction to Harmonic Analysis (Cambridge Mathematical Library) The Global Nonlinear Stability of the Minkowski Space (PMS-41) (Princeton Legacy Library) Medical and Para-medical Manuscripts in the Cambridge Genizah Collections (Cambridge University Library Genizah Series) Who Eats What? Food Chains and Food Webs (Let's-Read-and-Find-Out Science, Stage 2) DIY Jewelry Making Magazine #33: 8 amazing leather and chains jewelry making tutorials (DIY Beading

Magazine Book 34)

Dmca