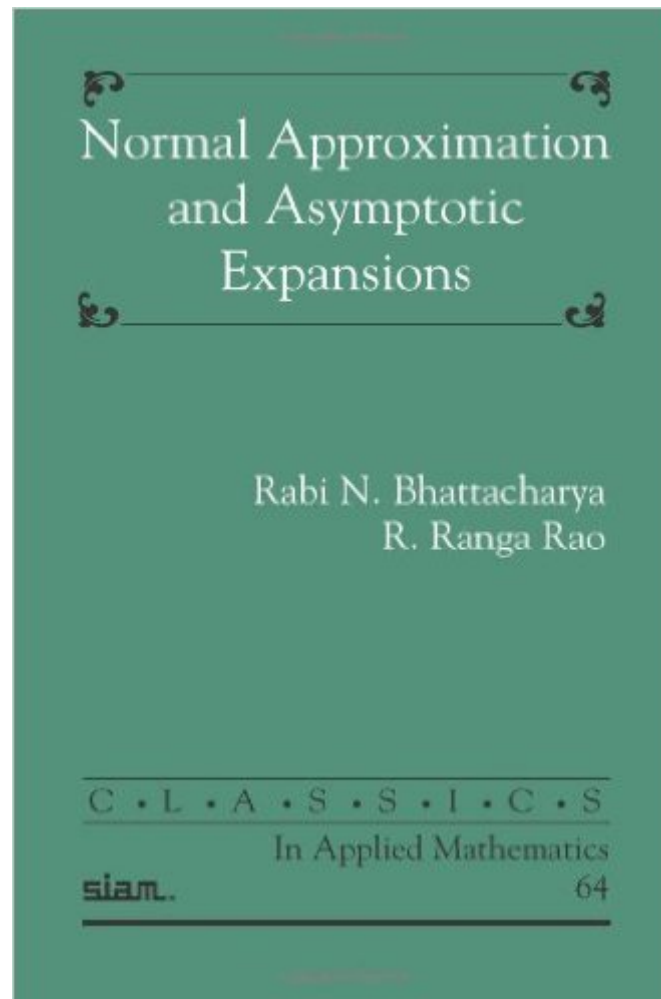


The book was found

Normal Approximation And Asymptotic Expansions (Classics In Applied Mathematics)



Synopsis

Although Normal Approximation and Asymptotic Expansions was first published in 1976, it has gained new significance and renewed interest among statisticians due to the developments of modern statistical techniques such as the bootstrap, the efficacy of which can be ascertained by asymptotic expansions. This also is the only book containing a detailed treatment of various refinements of the multivariate central limit theorem (CLT), including Berry Essen-type error bounds for probabilities of general classes of functions and sets, and asymptotic expansions for both lattice and non-lattice distributions. With meticulous care, the authors develop necessary background on weak convergence theory, Fourier analysis, geometry of convex sets, and the relationship between lattice random vectors and discrete subgroups of $\mathbb{R}^k$. The formalism developed in the book has been used in the extension of the theory by Goetze and Hipp to sums of weakly dependent random vectors. This edition of the book includes a new chapter that provides an application of Stein's method of approximation to the multivariate CLT. Audience: The book is appropriate for graduate students of probability and statistics as well as researchers in these and other fields whose work involves the asymptotic theory of statistics. Contents: Preface to the Classics Edition; Preface; Chapter 1: Weak Convergence of Probability Measures and Uniformity Classes; Chapter 2: Fourier Transforms and Expansions of Characteristic Functions; Chapter 3: Bounds for Errors of Normal Approximation; Chapter 4: Asymptotic Expansions Nonlattice Distributions; Chapter 5: Asymptotic Expansions Lattice Distributions; Chapter 6: Two Recent Improvements; Chapter 7: An Application of Stein's Method; Appendix A.1: Random Vectors and Independence; Appendix A.2: Functions of Bounded Variation and Distribution Functions; Appendix A.3: Absolutely Continuous, Singular, and Discrete Probability Measures; Appendix A.4: The Euler-MacLaurin Sum Formula for Functions of Several Variables; References; Index.

Book Information

Series: Classics in Applied Mathematics (Book 64)

Paperback: 338 pages

Publisher: SIAM-Society for Industrial and Applied Mathematics (September 17, 2010)

Language: English

ISBN-10: 089871897X

ISBN-13: 978-0898718973

Product Dimensions: 6.8 x 0.7 x 9.7 inches

Shipping Weight: 11.2 ounces (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars Â Â See all reviews Â (1 customer review)

Best Sellers Rank: #2,018,594 in Books (See Top 100 in Books) #195 in Â Books > Science & Math > Mathematics > Applied > Stochastic Modeling #4728 in Â Books > Textbooks > Science & Mathematics > Mathematics > Statistics #7069 in Â Books > Science & Math > Mathematics > Applied > Probability & Statistics

Customer Reviews

This should be one the best references in this area. It is a very well-written book by the authors. I am very glad this book is reprinted again with new editions.

[Download to continue reading...](#)

Normal Approximation and Asymptotic Expansions (Classics in Applied Mathematics) Principles Of Applied Mathematics: Transformation And Approximation Asymptotic Theory of Finite Dimensional Normed Spaces: Isoperimetric Inequalities in Riemannian Manifolds (Lecture Notes in Mathematics) Stochastic Approximation (Cambridge Tracts in Mathematics) Best Approximation in Inner Product Spaces (CMS Books in Mathematics) Obstetrics: Normal and Problem Pregnancies (Obstetrics Normal and Problem Pregnancies) The Other Side of Normal: How Biology Is Providing the Clues to Unlock the Secrets of Normal and Abnormal Behavior Finite Difference Methods for Ordinary and Partial Differential Equations: Steady-State and Time-Dependent Problems (Classics in Applied Mathematics) Convex Analysis and Variational Problems (Classics in Applied Mathematics) Applied Cryptography: Protocols, Algorithms, and Source Code in C [APPLIED CRYPTOGRAPHY: PROTOCOLS, ALGORITHMS, AND SOURCE CODE IN C BY Schneier, Bruce (Author) Nov-01-1995 Elementary Stochastic Calculus With Finance in View (Advanced Series on Statistical Science & Applied Probability, Vol 6) (Advanced Series on Statistical Science and Applied Probability) Elena Bablenis Haveles BS Pharm Pharm D's Applied Pharmacology 6th (Sixth) edition(Applied Pharmacology for the Dental Hygienist [Paperback])(2010) Applied Therapeutics: The Clinical Use of Drugs (APPLIED THERAPEUTICS (KODA-KIMBLE)) Applied Biopharmaceutics & Pharmacokinetics, Sixth Edition (Shargel, Applied Biopharmaceutics & Pharmacokinetics) Fibonacci and Lucas Numbers with Applications, Volume One (Pure and Applied Mathematics: A Wiley Series of Texts, Monographs and Tracts) The Kurzweil-Henstock Integral and Its Differential: A Unified Theory of Integration on $\mathbb{R}$ and $\mathbb{R}^n$ (Chapman & Hall/CRC Pure and Applied Mathematics) Coding Theory and Cryptography: The Essentials, Second Edition (Chapman & Hall/CRC Pure and Applied Mathematics) Biological Wastewater Treatment, Second Edition, Revised and Expanded (Lecture Notes in Pure and Applied Mathematics) Binary Polynomial Transforms and Non-Linear

Digital Filters (Chapman & Hall/CRC Pure and Applied Mathematics) Modeling and Simulation in
Medicine and the Life Sciences (Texts in Applied Mathematics)

[Dmca](#)