1. Record Nr. UNINA9910983031403321

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Titolo	Statistical Modeling and Computation / / by Joshua C. C. Chan, Dirk P. Kroese
Pubbl/distr/stampa	New York, NY : , : Springer US : , : Imprint : Springer, , 2025
ISBN	9781071641323 1071641328
Edizione	[2nd ed. 2025.]
Descrizione fisica	1 online resource (782 pages)
Collana	Springer Texts in Statistics, , 2197-4136
Altri autori (Persone)	KroeseDirk P
Disciplina	519.5
Soggetti	Mathematical statistics - Data processing Biometry Statistics Statistics and Computing Biostatistics Statistical Theory and Methods Estadística matemàtica Biometria Estadística Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Probability Models -- Random Variables and Probability Distributions -- Joint Distributions -- Common Statistical Models -- Statistical Inference -- Likelihood -- Monte Carlo Sampling -- Bayesian Inference -- Generalized Linear Models -- Dependent Data Models -- State Space Models -- References -- Solutions -- MATLAB Primer -- Mathematical Supplement -- Index.
Sommario/riassunto	This book, Statistical Modeling and Computation, provides a unique introduction to modern statistics from both classical and Bayesian perspectives. It also offers an integrated treatment of mathematical statistics and modern statistical computation, emphasizing statistical modeling, computational techniques, and applications. The 2nd edition changes the programming language used in the text from MATLAB to

Julia. For all examples with computing components, the authors provide data sets and their own Julia codes. The new edition features numerous full color graphics to illustrate the concepts discussed in the text, and adds three entirely new chapters on a variety of popular topics, including: Regularization and the Lasso regression Bayesian shrinkage methods Nonparametric statistical tests Splines and the Gaussian process regression Joshua C. C. Chan is Professor of Economics, and holds the endowed Olson Chair at Purdue University. He is an elected fellow at the International Association for Applied Econometrics and served as Chair for the Economics, Finance and Business Section of the International Society for Bayesian Analysis from 2020-2022. His research focuses on building new high-dimensional time-series models and developing efficient estimation methods for these models. He has published over 50 papers in peer-reviewed journals, including some top-field journals such as Journal of Econometrics, Journal of the American Statistical Association and Journal of Business and Economic Statistics. Dirk Kroese is Professor of Mathematics and Statistics at the University of Queensland. He is known for his significant contributions to the fields of applied probability, mathematical statistics, machine learning, and Monte Carlo methods. He has published over 140 articles and 7 books. He is a pioneer of the well-known Cross-Entropy (CE) method, which is being used around the world to help solve difficult estimation and optimization problems in science, engineering, and finance. In addition to his scholarly contributions, Dirk Kroese is recognized for his role as an educator and mentor, having supervised and inspired numerous students and researchers.