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Descrizione fisica	1 online resource (XVI, 222 p. 41 illus., 20 illus. in color.)
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Disciplina	519.50285
Soggetti	Statistics
	Big data
	Statistical Theory and Methods
	Big Data/Analytics Statistics for Business Management Economics Finance Insurance
Formato	
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Part I: Data Analysis Based on Latent or Dependent Variable Models Chapter 1: A New Method for Robust Mixture Regression and Outlier Detection Chapter 2: The Mixture Gatekeeping Procedure Based on Weighted Multiple Testing Correction for Correlated Tests Chapter 3: Regularization in Regime-switching Gaussian Autoregressive Models Chapter 4: Modeling Zero Inflation and Over-dispersion in the Length of Hospital Stay for Patients with Ischaemic Heart Disease Chapter 5: Robust Optimal Interval Design for High-Dimensional Dose Finding in Multi-Agent Combination Trials Part II: Life Time Data Analysis Chapter 6: Group Selection in Semi-parametric Accelerated Failure Time Model Chapter 7: A Proportional Odds Model for Regression Analysis of Case I Interval-Censored Data Chapter 8: Empirical Likelihood Inference under Density Ratio Models Based on Type I Censored Samples: Hypothesis Testing and Quantile Estimation Chapter 9: Recent Development in the Joint Modeling of Longitudinal Quality of Life Measurements and Survival Data from Cancer Clinical Trials Part III: Applied Data Analysis Chapter 10: Confidence Weighting Procedures for Multiple Choice Tests Chapter 11: Improving the Robustness of Parametric Imputation Chapter 12: Maximum

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	Smoothed Likelihood Estimation of the Centre of a Symmetric Distribution Chapter 13: Dividend Pay-out Problems with the Logarithmic Utility Chapter 14: Modeling the Common Risk among Equities: A Multivariate Time Series Model with an Additive GARCH Structure.
Sommario/riassunto	This book gathers invited presentations from the 2nd Symposium of the ICSA- CANADA Chapter held at the University of Calgary from August 4-6, 2015. The aim of this Symposium was to promote advanced statistical methods in big-data sciences and to allow researchers to exchange ideas on statistics and data science and to embraces the challenges and opportunities of statistics and data science in the modern world. It addresses diverse themes in advanced statistical analysis in big-data sciences, including methods for administrative data analysis, survival data analysis, missing data analysis, high-dimensional and genetic data analysis, longitudinal and functional data analysis, the design and analysis of studies with response-dependent and multi-phase designs, time series and robust statistics, statistical inference based on likelihood, empirical likelihood and estimating functions. The editorial group selected 14 high-quality presentations from this successful symposium and invited the presenters to prepare a full chapter for this book in order to disseminate the findings and promote further research collaborations in this area. This timely book offers new methods that impact advanced statistical model development in big-data sciences.