Record Nr. UNINA9910624380703321 Advances and Innovations in Statistics and Data Science / / edited by Titolo Wenging He, Liqun Wang, Jiahua Chen, Chunfang Devon Lin Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2022 **ISBN** 3-031-08329-6 Edizione [1st ed. 2022.] 1 online resource (338 pages) Descrizione fisica Collana ICSA Book Series in Statistics, , 2199-0999 519.5 Disciplina 001.422 Soggetti **Biometry** Statistics Artificial intelligence - Data processing Machine learning **Biostatistics Applied Statistics Data Science** Machine Learning Estadística matemàtica Processament de dades Congressos Llibres electrònics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto 1. MiRNA-Gene Activity Interaction Networks (miGAIn): Integrated joint models of miRNA-gene targeting and disturbance in signal processing -- 2. Feature Screening for Ultrahigh-Dimensional Regression with Error-Prone Varables -- 3. Cosine Distribution in the Post-selection Inference of Least Angle Regression -- 4. Learning Finite Gaussian Mixture via Wasserstein Distance -- 5. An Entropy-based Method with Word Embedding Clustering for Comment Ranking -- 6. Estimation in

Functional Linear Model with Incomplete Functional Observations -- 7. A Flexible Linear Single Index Proportional Hazards Regression Model

for Multivariate Survival Data -- 8. Efficient Estimation of Semiparametric Linear Transformation Model with Left-Truncated and Current Status Data -- 9. Flexible Transformations for Modeling Compositional Data -- 10. Identifiability and Estimation of Autoregressive ARCH Models with Measurement Error -- 11. Modal Regression for Skewed, Truncated, or Contaminated Data with Outliers -- 12. Spatial Multilevel Modeling in the Galveston Bay Recovery Study Survey -- 13. Efficient Experimental Design for Regularized Linear Models -- 14. A Selective Overview of Statistical Models for Identification of Treatment-sensitive Subset -- 15. Analysis of Discrete Compositional Series While Accounting for Informative Time-dependent Cluster Sizes with Application to Air Pollution Related Emergency Room Visits.

## Sommario/riassunto

This book highlights selected papers from the 4th ICSA-Canada Chapter Symposium, as well as invited articles from established researchers in the areas of statistics and data science. It covers a variety of topics, including methodology development in data science, such as methodology in the analysis of high dimensional data, feature screening in ultra-high dimensional data and natural language ranking; statistical analysis challenges in sampling, multivariate survival models and contaminated data, as well as applications of statistical methods. With this book, readers can make use of frontier research methods to tackle their problems in research, education, training and consultation.