1. Record Nr. UNINA9910586592203321

Titolo	Bayesian Inference and Computation in Reliability and Survival Analysis [[electronic resource] /] / edited by Yuhlong Lio, Ding-Geng Chen, Hon Keung Tony Ng, Tzong-Ru Tsai
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	3-030-88658-1
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (367 pages)
Collana	Emerging Topics in Statistics and Biostatistics, , 2524-7743
Disciplina	519.542
Soggetti	Statistics Clinical medicine - Research Bayesian Inference Bayesian Network Clinical Research Estadística bayesiana 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. A Bayesian Approach for Step-stress Accelerated Life-tests for One-shot Devices under Exponential Distributions -- 2. Bayesian Estimation of Stress-strength Parameter for Moran-Downton Bivariate Exponential Distribution under Progressive Type-II Censoring -- 3. Bayesian Computation in A Birnbaum-Saunders Reliability Model with Applications to Fatigue Data -- 4. A Competing Risks Model Based on A Two-parameter Exponential Family Distribution under Progressive Type-II Censoring -- 5. Bayesian Computations for Reliability Analysis in Dynamic Environments -- 6. Bayesian Analysis of Stochastic Processes in Reliability -- 7. Bayesian Analysis of A New Bivariate Wiener Degradation Process -- 8. Bayesian Estimation for Bivariate Gamma Processes with Copula -- 9. Review of Statistical Treatment for Oncology Dose Escalation Trial with Prolonged Evaluation Window or Fast Enrollment -- 10. A Bayesian Approach for the Analysis of Tumorigenicity Data from Sacrificial Experiments under Weibull

Lifetimes -- 11. Bayesian Sensitivity Analysis in Survival and Longitudinal Trial with Missing Data -- 12. Bayesian Analysis for Clustered Data under A Semi-competing Risks Framework -- 13. Survival Analysis for the Inverse Gaussian Distribution: Natural Conjugate and Jeffrey's Priors -- 14. Bayesian Inferences for Panel Count Data and Interval-censored Data with Nonparametric Modeling of the Baseline Functions -- 15. Bayesian Approach for Interval-censored Survival Data with Time-varying Coefficients -- 16. Bayesian Approach for Joint-modeling Longitudinal Data and Survival Data Simultaneously in Public Health Studies.

Sommario/riassunto

Bayesian analysis is one of the important tools for statistical modelling and inference. Bayesian frameworks and methods have been successfully applied to solve practical problems in reliability and survival analysis, which have a wide range of real world applications in medical and biological sciences, social and economic sciences, and engineering. In the past few decades, significant developments of Bayesian inference have been made by many researchers, and advancements in computational technology and computer performance has laid the groundwork for new opportunities in Bayesian computation for practitioners. Because these theoretical and technological developments introduce new questions and challenges, and increase the complexity of the Bayesian framework, this book brings together experts engaged in groundbreaking research on Bayesian inference and computation to discuss important issues, with emphasis on applications to reliability and survival analysis. Topics covered are timely and have the potential to influence the interacting worlds of biostatistics, engineering, medical sciences, statistics, and more. The included chapters present current methods, theories, and applications in the diverse area of biostatistical analysis. The volume as a whole serves as reference in driving quality global health research. .