1. Record Nr. UNINA9910717428603321

Titolo	Robust and Multivariate Statistical Methods : Festschrift in Honor of David E. Tyler / / Mengxi Yi and Klaus Nordhausen, editors
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2023] ©2023
ISBN	3-031-22687-9
Edizione	[First edition.]
Descrizione fisica	1 online resource (XVIII, 495 p. 114 illus., 95 illus. in color.)
Disciplina	006.31
Soggetti	Machine learning Multivariate analysis Robust statistics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Part I About David E. Tyler’s Publications -- An Analysis of David E. Tyler’s Publication and Coauthor Network. A Review of Tyler’s Shape Matrix and Its Extensions -- Part II Multivariate Theory and Methods -- On the Asymptotic Behavior of the Leading Eigenvector of Tyler’s Shape Estimator Under Weak Identifiability -- On Minimax Shrinkage Estimation with Variable Selection -- On the Finite-Sample Performance of Measure-Transportation-Based Multivariate Rank Tests -- Refining Invariant Coordinate Selection via Local Projection Pursuit -- Directional Distributions and the Half-Angle Principle -- Part III Robust Theory and Methods -- Power M-Estimators for Location and Scatter -- On Robust Estimators of a Sphericity Measure in High Dimension -- Detecting Outliers in Compositional Data Using Invariant Coordinate Selection -- Robust Forecasting of Multiple Time Series with One-Sided Dynamic Principal Components -- Robust and Sparse Estimation of Graphical Models Based on Multivariate Winsorization -- Robustly Fitting Gaussian Graphical Models—the RPackage robFitConGraph -- Robust Estimation of General Linear Mixed Effects Models -- Asymptotic Behaviour of Penalized Robust Estimators in Logistic Regression When Dimension Increases -- Conditional Distribution-Based Downweighting for Robust Estimation of Logistic Regression Models -- Bias Calibration for Robust Estimation in Small Areas -- The Diverging Definition of

Robustness in Statistics and Computer Vision -- Part IV Other Methods -- Power Calculations and Critical Values for Two-Stage Nonparametric Testing Regimes -- Data Nuggets in Supervised Learning -- Improved Convergence Rates of Normal Extremes -- Local Spectral Analysis of Qualitative Sequences via Minimum Description Length.

Sommario/riassunto

This book presents recent developments in multivariate and robust statistical methods. Featuring contributions by leading experts in the field it covers various topics, including multivariate and high-dimensional methods, time series, graphical models, robust estimation, supervised learning and normal extremes. It will appeal to statistics and data science researchers, PhD students and practitioners who are interested in modern multivariate and robust statistics. The book is dedicated to David E. Tyler on the occasion of his pending retirement and also includes a review contribution on the popular Tyler’s shape matrix.