1. Record Nr. UNINA9910299784203321

Autore	Härdle Wolfgang Karl
Titolo	Applied Multivariate Statistical Analysis / / by Wolfgang Karl Härdle, Léopold Simar
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2015
ISBN	3-662-45171-9
Edizione	[4th ed. 2015.]
Descrizione fisica	1 online resource (XIII, 580 p. 221 illus., 83 illus. in color.)
Disciplina	519.535
Soggetti	Statistics Economics, Mathematical Economic theory Statistics for Business, Management, Economics, Finance, Insurance Quantitative Finance Economic Theory/Quantitative Economics/Mathematical Methods Statistical Theory and Methods
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	I Descriptive Techniques: Comparison of Batches -- II Multivariate Random Variables: A Short Excursion into Matrix Algebra -- Moving to Higher Dimensions -- Multivariate Distributions -- Theory of the Multinormal -- Theory of Estimation -- Hypothesis Testing -- III Multivariate Techniques: Regression Models -- Variable Selection -- Decomposition of Data Matrices by Factors -- Principal Components Analysis -- Factor Analysis -- Cluster Analysis -- Discriminant Analysis -- Correspondence Analysis -- Canonical Correlation Analysis -- Multidimensional Scaling -- Conjoint Measurement Analysis -- Applications in Finance -- Computationally Intensive Techniques -- IV Appendix: Symbols and Notations -- Data.
Sommario/riassunto	Focusing on high-dimensional applications, this 4th edition presents the tools and concepts used in multivariate data analysis in a style that is also accessible for non-mathematicians and practitioners. It surveys the basic principles and emphasizes both exploratory and inferential statistics; a new chapter on Variable Selection (Lasso, SCAD and Elastic

Net) has also been added. All chapters include practical exercises that highlight applications in different multivariate data analysis fields: in quantitative financial studies, where the joint dynamics of assets are observed; in medicine, where recorded observations of subjects in different locations form the basis for reliable diagnoses and medication; and in quantitative marketing, where consumers' preferences are collected in order to construct models of consumer behavior. All of these examples involve high to ultra-high dimensions and represent a number of major fields in big data analysis. The fourth edition of this book on Applied Multivariate Statistical Analysis offers the following new features: A new chapter on Variable Selection (Lasso, SCAD and Elastic Net) All exercises are supplemented by R and MATLAB code that can be found on www.quantlet.de The practical exercises include solutions that can be found in Härdle, W. and Hlavka, Z., Multivariate Statistics: Exercises and Solutions. Springer Verlag, Heidelberg.