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Titolo	Basic Elements of Computational Statistics / / by Wolfgang Karl Härdle, Ostap Okhrin, Yarema Okhrin
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ISBN	3-319-55336-4
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Descrizione fisica	1 online resource (XXI, 305 p. 97 illus., 66 illus. in color.)
Collana	Statistics and Computing, , 2197-1706
Disciplina	519.50285
Soggetti	Mathematical statistics - Data processing Statistics Computer science - Mathematics Mathematical statistics Biometry Statistics and Computing Statistical Theory and Methods Probability and Statistics in Computer Science Biostatistics Statistics in Business, Management, Economics, Finance, Insurance Statistics in Engineering, Physics, Computer Science, Chemistry and Earth Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	The Basics of R -- Numerical Techniques -- Combinatorics and Discrete Distributions -- Univariate Distributions -- Univariate Statistical Analysis -- Basic Nonparametric Methods -- Multivariate Distributions -- Multivariate Statistical Analysis -- Random Numbers in R -- Advanced Graphical Techniques in R -- Symbols and Notations.
Sommario/riassunto	This textbook on computational statistics presents tools and concepts of univariate and multivariate statistical data analysis with a strong focus on applications and implementations in the statistical software R. It covers mathematical, statistical as well as programming problems in computational statistics and contains a wide variety of practical examples. In addition to the numerous R sniplets presented in the text,

all computer programs (quantlets) and data sets to the book are available on GitHub and referred to in the book. This enables the reader to fully reproduce as well as modify and adjust all examples to their needs. The book is intended for advanced undergraduate and first-year graduate students as well as for data analysts new to the job who would like a tour of the various statistical tools in a data analysis workshop. The experienced reader with a good knowledge of statistics and programming might skip some sections on univariate models and enjoy the various mathematical roots of multivariate techniques. The Quantlet platform quantlet.de, quantlet.com, quantlet.org is an integrated QuantNet environment consisting of different types of statistics-related documents and program codes. Its goal is to promote reproducibility and offer a platform for sharing validated knowledge native to the social web. QuantNet and the corresponding Data-Driven Documents-based visualization allows readers to reproduce the tables, pictures and calculations inside this Springer book.