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| Nota di contenuto | Cover; Title Page; Copyright; Dedication; Contents; Preface; Acknowledgements; About the Companion Website; Chapter 1 Introduction; 1.1 Historical Remarks; 1.2 Ontological Remarks; 1.2.1 Forms of data representation; 1.2.2 Types of data statistics; 1.2.3 Principal aims of statistical data analysis; 1.2.4 Prior information about data distributions and related approaches to statistical data analysis; References; Chapter 2 Classical Measures of Correlation; 2.1 Preliminaries; 2.2 Pearson's Correlation Coefficient: Definitions and Interpretations; 2.2.1 Introductory remarks 2.2.2 Correlation via regression 2.2.3 Correlation via the coefficient of determination; 2.2.4 Correlation via the variances of the principal components; 2.2.5 Correlation via the cosine of the angle between the variable vectors; 2.2.6 Correlation via the ratio of two means; 2.2.7 Pearson's correlation coefficient between random events; 2.3 Nonparametric Measures of Correlation; 2.3.1 Introductory remarks; 2.3.2 The quadrant correlation coefficient; 2.3.3 The Spearman rank correlation coefficient; 2.3.4 The Kendall -rank correlation coefficient; |

2.3.5 Concluding remark

2.4 Informational Measures of Correlation
2.5 Summary; References;
Chapter 3 Robust Estimation of Location; 3.1 Preliminaries; 3.2 Huber's Minimax Approach; 3.2.1 Introductory remarks; 3.2.2 Minimax variance M-estimates of location; 3.2.3 Minimax bias M-estimates of location; 3.2.4 L-estimates of location; 3.2.5 R-estimates of location; 3.2.6 The relations between M-, L- and R-estimates of location; 3.2.7 Concluding remarks; 3.3 Hampel's Approach Based on Influence Functions; 3.3.1 Introductory remarks; 3.3.2 Sensitivity curve; 3.3.3 Influence function and its properties
3.3.4 Local measures of robustness
3.3.5 B- and V-robustness; 3.3.6 Global measure of robustness: the breakdown point; 3.3.7 Redescending M-estimates; 3.3.8 Concluding remark; 3.4 Robust Estimation of Location: A Sequel; 3.4.1 Introductory remarks; 3.4.2 Huber's minimax variance approach in distribution density models of a non-neighborhood nature; 3.4.3 Robust estimation of location in distribution models with a bounded variance; 3.4.4 On the robustness of robust solutions: stability of least informative distributions; 3.4.5 Concluding remark; 3.5 Stable Estimation; 3.5.1 Introductory remarks
3.5.2 Variance sensitivity
3.5.3 Estimation stability; 3.5.4 Robustness of stable estimates; 3.5.5 Maximin stable redescending M-estimates; 3.5.6 Concluding remarks; 3.6 Robustness Versus Gaussianity; 3.6.1 Introductory remarks; 3.6.2 Derivations of the Gaussian distribution; 3.6.3 Properties of the Gaussian distribution; 3.6.4 Huber's minimax approach and Gaussianity; 3.6.5 Concluding remarks; 3.7 Summary; References; Chapter 4 Robust Estimation of Scale; 4.1 Preliminaries; 4.1.1 Introductory remarks; 4.1.2 Estimation of scale in data analysis; 4.1.3 Measures of scale defined by functionals
4.2 M- and L-Estimates of Scale
