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Sommario/riassunto

The scientific field of data analysis is constantly expanding due to the rapid growth of the computer industry and the wide applicability of computational and algorithmic techniques, in conjunction with new advances in statistical, stochastic and analytic tools. There is a constant need for new, high-quality publications to cover the recent advances in all fields of science and engineering. This book is a collective work by a number of leading scientists, computer experts, analysts, engineers, mathematicians, probabilists and statisticians who have been working at the forefront of data analysis and related applications. The chapters of this collaborative work represent a cross-section of current concerns, developments and research interests in the above scientific areas. The collected material has been divided into appropriate sections to provide the reader with both theoretical and applied information on data analysis methods, models and techniques, along with related applications.