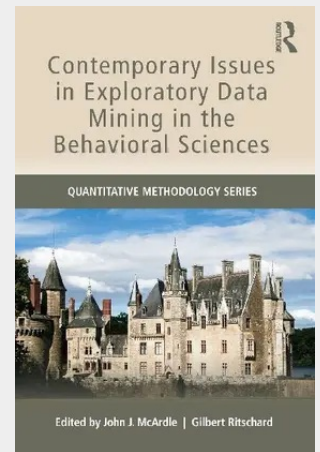


Contemporary Issues in Exploratory Data Mining in the Behavioral Sciences

This book reviews the latest techniques in exploratory data mining (EDM) for the analysis of data in the social and behavioral sciences to help researchers assess the predictive value of different combinations of variables in large data sets. Methodological findings and conceptual models that explain reliable EDM techniques for predicting and understanding various risk mechanisms are integrated throughout. Numerous examples illustrate the use of these techniques in practice. Contributors provide insight through hands-on experiences with their own use of EDM techniques in various settings. Readers are also introduced to the most popular EDM software programs. A related website at <http://mephisto.unige.ch/pub/edm-book-supplement/offers> color versions of the book's figures, a supplemental paper to chapter 3, and R commands for some chapters. The results of EDM analyses can be perilous – they are often taken as predictions with little regard for cross-validating the results. This carelessness can be catastrophic in terms of money lost or patients misdiagnosed. This book addresses these concerns and advocates for the development of checks and balances for EDM analyses. Both the promises and the perils of EDM are addressed. Editors McArdle and Ritschard taught the "Exploratory Data Mining" Advanced Training Institute of the American Psychological Association (APA). All contributors are top researchers from the US and Europe. Organized into two parts--methodology and applications, the techniques covered include decision, regression, and SEM tree models, growth mixture modeling, and time based categorical sequential analysis. Some of the applications of EDM (and the corresponding data) explored include: selection to college based on risky prior academic profiles the decline of cognitive abilities in older persons global perceptions of stress in adulthood predicting mortality from demographics and cognitive abilities risk factors during pregnancy and the impact on neonatal development. Intended as a reference for researchers, methodologists, and advanced students in the social and behavioral sciences including psychology, sociology, business, econometrics, and medicine, interested in learning to apply the latest exploratory data mining techniques. Prerequisites include a basic class in statistics.

This book reviews the latest techniques in exploratory data mining (EDM) for the analysis of data in the social and behavioral sciences to help researchers assess the predictive value of different combinations of variables in large data sets. Methodological findings and conceptual models that explain reliable EDM techniques for predicting and understanding various risk mechanisms are integrated throughout. Numerous examples illustrate the use of these techniques in practice. Contributors provide insight through hands-on experiences with their own use of EDM techniques in various settings. Readers are also introduced to the most popular EDM software programs. A related website at <http://mephisto.unige.ch/pub/edm-book-supplement/offers> color versions of the book's figures, a supplemental paper to chapter 3, and R commands for some chapters. The results of EDM analyses can be perilous - they are often taken as predictions with little regard for cross-validating the results. This carelessness can be catastrophic in terms of money lost or patients misdiagnosed. This book addresses these concerns and advocates for the development of checks and balances for EDM analyses. Both the promises and the perils of EDM are addressed. Editors McArdle and Ritschard taught the "Exploratory Data Mining" Advanced Training Institute of the American Psychological Association (APA). All contributors are top researchers from the US and Europe. Organized into two parts--methodology and applications, the techniques covered include decision, regression, and SEM tree models, growth mixture modeling, and time based categorical sequential analysis. Some of the applications of EDM (and the corresponding data) explored include: selection to college based on risky prior academic profile the decline of cognitive abilities in older persons global perceptions of stress in adulthood predicting mortality from demographics and cognitive abilities risk factors during pregnancy and the impact on neonatal development. Intended as a reference for



110,20 €

110,20 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780415817097

Medium: Buch

ISBN: 978-0-415-81709-7

Verlag: Routledge

Erscheinungstermin: 27.08.2013

Sprache(n): Englisch

Auflage: 1. Auflage 2013

Serie: Quantitative Methodology Series

Produktform: Kartoniert

Gewicht: 711 g

Seiten: 496

Format (B x H): 152 x 229 mm

