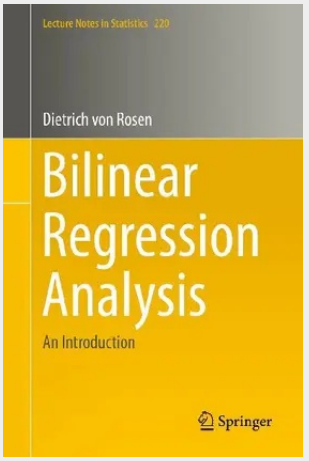
von Rosen

Bilinear Regression Analysis

An Introduction



This book expands on the classical statistical multivariate analysis theory by focusing on bilinear regression models, a class of models comprising the classical growth curve model and its extensions. In order to analyze the bilinear regression models in an interpretable way, concepts from linear models are extended and applied to tensor spaces. Further, the book considers decompositions of tensor products into natural subspaces, and addresses maximum likelihood estimation, residual analysis, influential observation analysis and testing hypotheses, where properties of estimators such as moments, asymptotic distributions or approximations of distributions are also studied. Throughout the text, examples and several analyzed data sets illustrate the different approaches, and fresh insights into classical multivariate analysis are provided. This monograph is of interest to researchers and Ph.D. students in mathematical statistics, signal processing and other fields where statistical multivariate analysis is utilized. It can also be used as a text for second graduate-level courses on multivariate analysis.

This book expands on the classical statistical multivariate analysis theory by focusing on bilinear regression models, a class of models comprising the classical growth curve model and its extensions. In order to analyze the bilinear regression models in an interpretable way, concepts from linear models are extended and applied to tensor spaces. Further, the book considers decompositions of tensor products into natural subspaces, and addresses maximum likelihood estimation, residual analysis, influential observation analysis and testing hypotheses, where properties of estimators such as moments, asymptotic distributions or approximations of distributions are also studied. Throughout the text, examples and several analyzed data sets illustrate the different approaches, and fresh insights into classical multivariate analysis are provided. This monograph is of interest to researchers and Ph.D. students in mathematical statistics, signal processing and other fields where statistical multivariate analysis is utilized. It can also be used as a text for second graduate-level courses on multivariate analysis.

80,24 €
74,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783319787824
Medium: Buch
ISBN: 978-3-319-78782-4
Verlag: Palgrave Macmillan
Erscheinungstermin: 03.08.2018
Sprache(n): Englisch
Auflage: 1. Auflage 2018
Serie: Lecture Notes in Statistics
Produktform: Kartoniert
Gewicht: 727 g
Seiten: 468
Format (B x H): 155 x 235 mm

fachmedien.de
WISSEN. EINFACH. FINDEN.

29.11.2026 | 13:11 Uhr

Kundenservice Verlag Dr. Otto Schmidt KG
Neumannstraße 10, 40235 Düsseldorf | kundenservice@otto-schmidt.de | 0221-93738-997 (Inland)