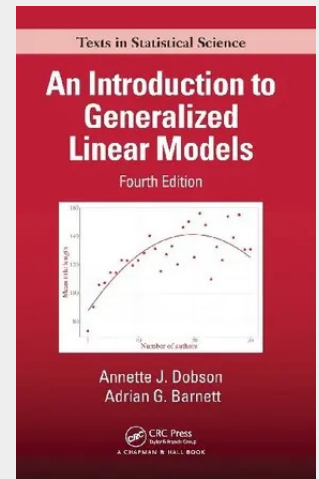


An Introduction to Generalized Linear Models

An Introduction to Generalized Linear Models, Fourth Edition provides a cohesive framework for statistical modelling, with an emphasis on numerical and graphical methods. This new edition of a bestseller has been updated with new sections on non-linear associations, strategies for model selection, and a Postface on good statistical practice. Like its predecessor, this edition presents the theoretical background of generalized linear models (GLMs) before focusing on methods for analyzing particular kinds of data. It covers Normal, Poisson, and Binomial distributions; linear regression models; classical estimation and model fitting methods; and frequentist methods of statistical inference. After forming this foundation, the authors explore multiple linear regression, analysis of variance (ANOVA), logistic regression, log-linear models, survival analysis, multilevel modeling, Bayesian models, and Markov chain Monte Carlo (MCMC) methods. - Introduces GLMs in a way that enables readers to understand the unifying structure that underpins them - Discusses common concepts and principles of advanced GLMs, including nominal and ordinal regression, survival analysis, non-linear associations and longitudinal analysis - Connects Bayesian analysis and MCMC methods to fit GLMs - Contains numerous examples from business, medicine, engineering, and the social sciences - Provides the example code for R, Stata, and WinBUGS to encourage implementation of the methods - Offers the data sets and solutions to the exercises online - Describes the components of good statistical practice to improve scientific validity and reproducibility of results. Using popular statistical software programs, this concise and accessible text illustrates practical approaches to estimation, model fitting, and model comparisons.

An Introduction to Generalized Linear Models, Fourth Edition provides a cohesive framework for statistical modelling, with an emphasis on numerical and graphical methods. This new edition of a bestseller has been updated with new sections on non-linear associations, strategies for model selection, and a Postface on good statistical practice. Like its predecessor, this edition presents the theoretical background of generalized linear models (GLMs) before focusing on methods for analyzing particular kinds of data. It covers Normal, Poisson, and Binomial distributions; linear regression models; classical estimation and model fitting methods; and frequentist methods of statistical inference. After forming this foundation, the authors explore multiple linear regression, analysis of variance (ANOVA), logistic regression, log-linear models, survival analysis, multilevel modeling, Bayesian models, and Markov chain Monte Carlo (MCMC) methods. Introduces GLMs in a way that enables readers to understand the unifying structure that underpins them. Discusses common concepts and principles of advanced GLMs, including nominal and ordinal regression, survival analysis, non-linear associations and longitudinal analysis. Connects Bayesian analysis and MCMC methods to fit GLMs. Contains numerous examples from business, medicine, engineering, and the social sciences. Provides the example code for R, Stata, and WinBUGS to encourage implementation of the methods. Offers the data sets and solutions to the exercises online. Describes the components of good statistical practice to improve scientific validity and reproducibility of results. Using popular statistical software programs, this concise and accessible text illustrates practical approaches to estimation, model fitting, and model comparisons.



273,30 €

273,30 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9781138741683

Medium: Buch

ISBN: 978-1-138-74168-3

Verlag: Chapman and Hall/CRC

Erscheinungstermin: 20.04.2018

Sprache(n): Englisch

Auflage: 4. Auflage 2018

Serie: Chapman & Hall/CRC Texts in Statistical Science

Produktform: Gebunden

Gewicht: 754 g

Seiten: 392

Format (B x H): 161 x 240 mm

