Agresti, Alan
Categorical data analysis. 3rd ed. (English) Zbl 1281.62022
Wiley Series in Probability and Statistics. Hoboken, NJ: John Wiley & Sons (ISBN 978-0-470-46363-5/hbk). xi, 714 p. (2013).

Publisher's description: The use of statistical methods for analyzing categorical data has increased dramatically, particularly in the biomedical, social sciences, and financial industries. Responding to new developments, this book offers a comprehensive treatment of the most important methods for categorical data analysis.

This book summarizes the latest methods for univariate and correlated multivariate categorical responses. Readers will find a unified generalized linear models approach that connects logistic regression and Poisson and negative binomial loglinear models for discrete data with normal regression for continuous data. This edition also features:

– An emphasis on logistic and probit regression methods for binary, ordinal, and nominal responses for independent observations and for clustered data with marginal models and random effects models

– Two new chapters on alternative methods for binary response data, including smoothing and regularization methods, classification methods such as linear discriminant analysis and classification trees, and cluster analysis

– New sections introducing the Bayesian approach for methods in that chapter

– more than 100 analyses of data sets and over 600 exercises

– notes at the end of each chapter that provide references to recent research and topics not covered in the text, linked to a bibliography of more than 1,200 sources

– a supplementary website showing how to use R and SAS; for all examples in the text, with information also about SPSS and Stata and with exercise solutions.

See the reviews of the first and second editions in [Zbl 0716.62001; Zbl 1018.62002].

MSC:

62-02	Research exposition (monographs, survey articles) pertaining to statistics
62J12	Generalized linear models (logistic models)
62Pxx	Applications of statistics

Cited in **2** Reviews
Cited in **84** Documents

Software:

SAS; R; SPSS; Stata