

DEMYSTIFIES THE USE OF ADVANCED STATISTICAL METHODS

Primer of Applied Regression & Analysis of Variance provides intuitive and graphical explanations of the underlying statistical principles necessary for understanding complex physiological, clinical, and behavioral problems. Using data from actual published research in a wide variety of disciplines, this book teaches readers how to understand more advanced multivariate statistical methods and how to use statistical software to get the correct results.

Developed specifically for medical, life sciences, public health, social and behavioral sciences, and environmental science students, this new edition offers the modern, intuitive approaches that won previous editions a wide following, while reinforcing traditional methods for complete coverage of applied statistical methods.

FEATURES:

- Reader-friendly style makes complicated material approachable and usable, even for readers without an extensive math background
- End-of-chapter study problems that quickly test mastery of the material
- Practical guidelines for the correct application of statistical software, featuring worked examples with Minitab, SAS, SPSS, and Stata
- In-depth treatment of the problems posed by multicollinearity and how to resolve them
- Methods for variable selection for regression models, with new material on cross-validation to evaluate predictive optimism
- NEW expanded explanation of maximum likelihood estimation
- NEW chapter on modern methods to handle missing data using multiple imputation to appropriately fill in missing values
- NEW presentation of repeated measures analysis of variance using modern maximum likelihood methods
- NEW discussion of how to handle non-independent data for continuous and binary dependent variables
- NEW coverage of how to detect and address convergence problems in logistic regression due to empty cells or very small cell sizes
- NEW examples from published biological and health sciences research that clarify key points
- Full datasets for examples and problems (available at mhprofessional.com/appliedregression) to support statistics instruction and self-learning

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