
Description:

Providing accessible and in-depth coverage of the most common matrix methods now used in statistical applications, Matrix Analysis for Statistics, Third Edition features an easy-to-follow theorem-proof format. Featuring smooth transitions between topical coverage, the author carefully justifies the step-by-step process of the most common matrix methods now used in statistical applications, including eigenvalues and eigenvectors; the Moore–Penrose inverse; matrix differentiation; and the distribution of quadratic forms.

An ideal introduction to matrix analysis theory and practice, Matrix Analysis for Statistics, Third Edition features:

- New chapter or section coverage on inequalities, oblique projections, and antieigenvalues and antieigenvectors
- Additional problems and chapter-end practice exercises at the end of each chapter
- Extensive examples that are familiar and easy to understand
- Self-contained chapters for flexibility in topic choice
- Applications of matrix methods in least squares regression and the analyses of mean vectors and covariance matrices

Matrix Analysis for Statistics, Third Edition is an ideal textbook for upper-undergraduate and graduate-level courses on matrix methods, multivariate analysis, and linear models. The book is also an excellent reference for research professionals in applied statistics.

James R. Schott, PhD, is Professor in the Department of Statistics at the University of Central Florida. He has published numerous journal articles in the area of multivariate analysis. Dr. Schott’s research interests include multivariate analysis, analysis of covariance and correlation matrices, and dimensionality reduction techniques.

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