

Contents

Part I Descriptive Techniques

1 Comparison of Batches 3

Part II Multivariate Random Variables

2 A Short Excursion into Matrix Algebra 21

3 Moving to Higher Dimensions..... 27

4 Multivariate Distributions 43

5 Theory of the Multinormal 71

6 Theory of Estimation 89

7 Hypothesis Testing..... 103

Part III Multivariate Techniques

8 Regression Models 141

9 Variable Selection..... 157

10 Decomposition of Data Matrices by Factors..... 167

11 Principal Component Analysis 183

12 Factor Analysis 205

13	Cluster Analysis	225
14	Discriminant Analysis	245
15	Correspondence Analysis	259
16	Canonical Correlation Analysis	281
17	Multidimensional Scaling	289
18	Conjoint Measurement Analysis	301
19	Applications in Finance	309
20	Highly Interactive, Computationally Intensive Techniques	319
A	Data Sets	343
A.1	Athletic Records Data	343
A.2	Bank Notes Data	343
A.3	Bankruptcy Data	344
A.4	Car Data	344
A.5	Car Marks	344
A.6	Classic Blue Pullover Data	345
A.7	Fertilizer Data	345
A.8	French Baccalauréat Frequencies	345
A.9	French Food Data	346
A.10	Geopol Data	346
A.11	German Annual Population Data	346
A.12	Journals Data	346
A.13	NYSE Returns Data	347
A.14	Plasma Data	347
A.15	Time Budget Data	347
A.16	Unemployment Data	349
A.17	U.S. Companies Data	349
A.18	U.S. Crime Data	349
A.19	U.S. Health Data	350
A.20	Vocabulary Data	350
A.21	WAIS Data	351
	References	353
	Index	357