Contents

I Programming in the SAS/IML Language 1
Chapter 1. An Introduction to SAS/IML Software 3
Chapter 2. Getting Started with the SAS/IML Matrix Programming Language 17
Chapter 3. Programming Techniques for Data Analysis 55
Chapter 4. Calling SAS Procedures 89

II Programming in SAS/IML Studio 107
Chapter 5. IMLPlus: Programming in SAS/IML Studio 109
Chapter 6. Understanding IMLPlus Classes 129
Chapter 7. Creating Statistical Graphs 143
Chapter 8. Managing Data in IMLPlus 173
Chapter 9. Drawing on Graphs 187
Chapter 10. Marker Shapes, Colors, and Other Attributes of Data 225

III Applications 249
Chapter 11. Calling Functions in the R Language 251
Chapter 12. Regression Diagnostics 279
Chapter 13. Sampling and Simulation 311
Chapter 14. Bootstrap Methods 349
Chapter 15. Timing Computations and the Performance of Algorithms 371
Chapter 16. Interactive Techniques 385

IV Appendixes 413
Appendix A. Description of Data Sets 415
Appendix B. SAS/IML Operators, Functions, and Statements 419
Appendix C. IMLPlus Classes, Methods, and Statements 427
Appendix D. Modules for Compatibility with SAS/IML 9.22 435
Appendix E. ODS Statements 437
Index 441