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MULTIVARIATE STATISTICAL MODELING AND DATA ANALYSIS

*Proceedings of the Advanced Symposium
on Multivariate Modeling and Data Analysis
May 15–16, 1986*

edited by

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PREFACE

This volume contains the Proceedings of the Advanced Symposium on Multivariate Modeling and Data Analysis held at the 64th Annual Meeting of the Virginia Academy of Sciences (VAS)--American Statistical Association's Virginia Chapter at James Madison University in Harrisonburg, Virginia during May 15-16, 1986.

This symposium was sponsored by financial support from the Center for Advanced Studies at the University of Virginia to promote new and modern information-theoretic statistical modeling procedures and to blend these new techniques within the classical theory. Multivariate statistical analysis has come a long way and currently it is in an evolutionary stage in the era of high-speed computation and computer technology. The Advanced Symposium was the first to address the new innovative approaches in multivariate analysis to develop modern analytical and yet practical procedures to meet the needs of researchers and the societal need of statistics.

Papers presented at the Symposium by eminent researchers in the field were geared not just for specialists in statistics, but an attempt has been made to achieve a well balanced and uniform coverage of different areas in multivariate modeling and data analysis. The areas covered included topics in the analysis of repeated measurements, cluster analysis, discriminant analysis, canonical correlations, distribution theory and testing, bivariate density estimation, factor analysis, principle component analysis, multidimensional scaling, multivariate linear models, nonparametric regression, etc.

The program organizing committee included Hamparsum Bozdogan as the program host and chairman, University of Virginia; Arjun K. Gupta as co-chairman, Bowling Green State University; Donald E. Ramirez, University of Virginia; and Ms. Julie Riddleberger as the secretary who efficiently handled all the correspondence, typing the abstracts of the papers, and the announcements for the Symposium.

We regret that it was not possible to include the paper, "Nonparametric Regression for Censored Survival Data," by Professor John Van Ryzin (who spoke at the Symposium) due to his untimely death. We gratefully acknowledge his contribution and encouragement throughout the organization of the Symposium.

Finally, we extend our thanks to Dean W. Dexter Whitehead, Director of the Center for Advanced Studies at the University of Virginia, for the financial support; to Golde Holtzman of the Department of Statistics at Virginia Tech for his help in the planning of the program; and to several referees who reviewed the papers. We also thank all the contributors to this volume and the Symposium. We hope that these contributions will stimulate more research and help further the advancement of the field of multivariate statistical modeling and data analysis.

Charlottesville, May 1987

H. Bozdogan

Bowling Green, May 1987

A. K. Gupta