

Contents

Part 1: Classification, Data Analysis and Statistics . . .	1
Sliced Inverse Regression for High-dimensional Time Series <i>C. Becker, R. Fried</i>	3
Symbolic Clustering of Constrained Probabilistic Data <i>P. Brito, F.A.T. de Carvalho</i>	12
On Memory Requirement with Normal Symbolic Form <i>M. Csernel, F.A.T. de Carvalho</i>	22
On the Roles of Galois Connections in Classification <i>F. Domenach, B. Leclerc</i>	31
Mining Sets of Time Series: Description of Time Points <i>A. Dugarjapov, G. Lausen</i>	41
Spatial Smoothing with Robust Priors in Functional MRI <i>L. Fahrmeir, C. Gössl, A. Hennerfeind</i>	50
Clustering in the Presence of Outliers <i>M.T. Gallegos</i>	58
Two Models of Random Intersection Graphs for Classification <i>E. Godehardt, J. Jaworski</i>	67
Classification Techniques based on Methods of Computational Intelligence <i>A. Grauel, I. Renners, E. Saavedra</i>	82
Constrained Correspondence Analysis for Seriation in Archaeology Applied to Sagalassos Ceramic Tablewares <i>P.J.F. Groenen, J. Poblome</i>	90
The Moment Preservation Method of Cluster Analysis <i>B. Harris</i>	98
On The General Distance Measure <i>K. Jajuga, M. Walesiak, A. Bak</i>	104
Tests for One-dimensional Nearest Neighbors Clusters <i>J. Krauth</i>	110
Integration of Cluster Analysis and Visualization Techniques for Visual Data Analysis <i>M. Kreuzeler, T. Nocke, H. Schumann</i>	119
Bayesian Space-time Analysis of Health Insurance Data <i>S. Lang, P. Kragler, G. Haybach, L. Fahrmeir</i>	133

On Clustering by Mixture Models <i>G.J. McLachlan, S.K. Ng, D. Peel</i>	141
Using Additive Conjoint Measurement in Analysis of Social Network Data <i>A. Okada</i>	149
Bayesian Latent Class Metric Conjoint Analysis - A Case Study from the Austrian Mineral Water Market <i>Th. Otter, R. Tüchler, S. Frühwirth-Schnatter</i>	157
Diagnostics in Multivariate Data Analysis: Sensitivity Analysis for Principal Components and Canonical Correlations <i>Y. Tanaka, F. Zhang, W. Yang</i>	170
Classification of Natural Languages by Word Ordering Rule <i>S. Ueda, Y. Itoh</i>	180
Combining Mental Fit and Data Fit for Classification Rule Selection <i>C. Weihs, U. M. Sondhauss</i>	188
Bayesian Analysis of Econometric Models for Count Data: A Survey <i>R. Winkelmann</i>	204
k-Means Clustering with Outlier Detection, Mixed Variables and Missing Values <i>D. Wishart</i>	216
Part 2: Web Mining, Data Mining and Computer Science	227
Repeat-buying Theory and its Application for Recommender Services <i>W. Böhm, A. Geyer-Schulz, M. Hahsler, M. Jahn</i>	229
Joker – Visualization of an Object Model for a Cost Accounting Educational Software <i>K. Friesen, H. Schmitz</i>	240
Data Preparation in Large Real-world Data Mining Projects: Methods for Imputing Missing Values <i>Th. Liehr</i>	248
Clustering of Document Collections to Support Interactive Text Exploration <i>A. Nürnberger, A. Klose, R. Kruse, G. Hartmann, M. Richards</i>	257
Web Usage Mining - Languages and Algorithms <i>J. R. Punin, M. S. Krishnamoorthy, M. J. Zaki</i>	266

Thesaurus Migration in Practice <i>U. Rist</i>	282
Relational Clustering for the Analysis of Internet Newsgroups <i>T. A. Runkler, J. C. Bezdek</i>	291
The Theory of On-line Learning - A Statistical Physics Approach <i>D. Saad</i>	300
A Framework for Web Usage Mining on Anonymous Logfile Data <i>F. Säuberlich, K.-P. Huber</i>	309
Part 3: Medicine, Biological Sciences and Health	319
Knee Replacement Surgery and Learning Effects - Data Evidence from a German Hospital <i>C. Ernst, G. Ernst, A. Szczesny</i>	321
Self-organizing Maps and its Applications in Sleep Apnea Research and Molecular Genetics <i>G. Guimarães, W. Urfer</i>	332
Automated Classification of Optic Nerve Head Topography Images for Glaucoma Screening <i>T. Hothorn, I. Pal, O. Gefeller, B. Lausen, G. Michelson, D. Paulus</i>	346
Comparing Split Criteria for Constructing Survival Trees <i>M. Radespiel-Tröger, T. Rabenstein, L. Höpfner, H.T. Schneider</i>	357
A Type of Bayesian Small Area Estimation for the Analysis of Cancer Mortality Data <i>U. Schach</i>	366
DEA-Benchmarks for Austrian Physicians <i>M. Staat</i>	375
Data Mining Tools for Quality Management in Health Care <i>J. Stausberg, Th. Albrecht</i>	385
The Effects of Simultaneous Misclassification on the Attributable Risk <i>C. Vogel, O. Gefeller</i>	392
Statistical Genetics - Present and Future <i>A. Ziegler, O. Hartmann, I. R. König, H. Schäfer</i>	401

Part 4: Marketing, Finance and Management Science . 411

Market Simulation Using Bayesian Procedures in Conjoint Analysis
D. Baier, W. Polasek 413

Value Based Benchmarking and Market Partitioning
H. H. Bauer, M. Staat, M. Hammerschmidt 422

Optimization of Corporate Reorganization Portfolios based on a Genetic Algorithm
R. Bennert, M. Missler-Behr 433

Key Success Factors in City Marketing - Some Empirical Evidence
C. Bornemeyer, R. Decker 443

From Credit Scores to Stable Default Probabilities: A Model Based Approach
S. Höse, S. Huschens 454

Dimensions of Credit Risk
R. Kiesel, U. Stadtmüller 463

Cognitive Organization of Person Attributes: Measurement Procedures and Statistical Models
S. Krolak-Schwerdt, B. Ganter 472

Manufacturing Branches in Poland - A Classification Attempt
D. Kwiatkowska-Ciotucha, U. Zaluska, J. Dziechciarz . . . 483

Market-Segments of Automotive Brands: Letting Multivariate Analyses Reveal Additional Insights
M. Löffler 492

Sequence Mining in Marketing
M. Meyer 504

Portfolio Management Using Multivariate Time Series Forecasts
M. Pojarliev, W. Polasek 514

Value-at-Risk for Financial Assets Determined by Moment Estimators of the Tail Index
N. Wagner 522

Keywords 531

Authors 534