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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Mean Value and Variance of Fuzzy Numbers with Non-continuous Membership Functions -- On the Construction of Radially Symmetric Trivariate Copulas -- Simulation of the Night Shift Solid Waste Collection System of Phuket Municipality -- Updating Context in the Equation: An Experimental Argument with Eye Tracking -- Black-Litterman Model with Multiple Experts' Linguistic Views -- Representing Lightweight Ontologies in a Product-Based Possibility Theory Framework -- Asymptotics of Predictive Distributions -- Independent K-Sample Equality Distribution Test Based on the Fuzzy Representation -- Agglomerative Fuzzy Clustering -- Bayesian Inference with Linkage Uncertainty: Applications in Official Statistics -- The Extension of Imprecise Probabilities Based on Generalized Credal Sets -- A Generalized SMART Fuzzy Disjunction of Volatility Indicators Applied to

Option Pricing in a Binomial Model -- The Representation of
 Conglomerative Functionals -- The Likelihood Interpretation of Fuzzy
 Data -- Combining the Information of Multiple Ranker in Ranked Set
 Sampling with Fuzzy Set Approach -- A Savage-like Representation
 Theorem for Preferences on Multi-acts -- On Some Functional
 Characterizations of (fuzzy) Set-Valued Random Elements -- Maximum
 Likelihood Under Incomplete Information: Toward a Comparison of
 Criteria -- The Use of Uncertainty to Choose Matching Variables in
 Statistical Matching -- Beyond Fuzzy, Possibilistic and Rough: An
 Investigation of Belief Functions in Clustering -- Small Area Estimation
 in Presence of Linkage Errors -- A Test for Truncation Invariant
 Dependence -- Finite Mixture Of Linear Regression Models: An
 Adaptive Constrained Approach to Maximum Likelihood Estimation --
 Detecting Dependence in Tourists' Spending Behavior -- Robust Fuzzy
 Clustering via Trimming and Constraints -- One-factor Levy-frailty
 Copulas with Inhomogeneous Trigger Rates -- A Perceptron Classifier
 and Corresponding Probabilities -- Fuzzy -Signals Fed to Gaussian
 Channels -- Fuzzy Clustering Through Robust Factor Analyzers --
 Consensus-based Clustering in Numerical Decision-Making -- Spatial
 Outlier Detection Using GAMs and Geographical Information Systems --
 Centering and Compound Conditionals Under Coherence --
 Approximate Bayesian Methods for Multivariate and Conditional Copulae
 -- The Sign Test for the Interval-Valued Data -- Probability
 Distributions Related to Fuzzy P-Values -- Probabilistic Semantics and
 Pragmatics for the Language of Uncertainty -- Dynamic Analysis of the
 Development of Scientific Communities in the Field of Soft Computing
 -- Talk to your Neighbour: a Belief Propagation Approach to Data
 Fusion -- The Qualitative Characteristics of Combining Evidence with
 Discounting -- Measuring the Dissimilarity Between the Distributions of
 Two Random Fuzzy Numbers -- An Empirical Analysis of the Coherence
 Between Fuzzy Rating Scale- and Likert Scale-Based Responses to
 Questionnaires -- Asymptotic Results for Sums of Independent
 Random Variables with Alternating Laws -- Dispersion Measures and
 Multidistances on R_k -- Full Conglomerability, Continuity and Marginal
 Extension -- On Extreme Points of P-Boxes and Belief Functions --
 Modelling the Dependence in Multivariate Longitudinal Data by Pair
 Copula Decomposition -- Predictability in Probabilistic Discrete Event
 Systems -- A Sandwich Theorem for Natural Extensions -- Envelopes of
 Joint Probabilities with Given Marginals Under Absolute Continuity or
 Equivalence Constraints -- Square of Opposition Under Coherence --
 Testing of Coarsening Mechanisms: Coarsening at Random Versus
 Subgroup Independence -- Two-sample Similarity Test for the
 Expected Value of Random Intervals -- Handling Uncertainty in
 Structural Equation Modeling -- Detecting Inconsistencies in Revision
 Problems -- Tukeys Biweight Loss Function for Fuzzy Set-Valued M-
 Estimators of Location -- Technical Gestures Recognition by Set-Valued
 Hidden Markov Models with Prior Knowledge -- Time Series
 Modeling Based on Fuzzy Transform -- Back to "Reasoning" --
 Lexicographic Choice Functions Without Archimedeanity --
 Composition Operator for Credal Sets Reconsidered -- A
 Nonparametric Linearity Test for a Sort of Multivariate Regression
 Model with Fuzzy Data -- Treat a Fuzzy Dependence Among Causes
 and Lives in Insurance with Some Copulas Based Approaches -- A
 Portfolio Diversification Strategy via Tail Dependence Clustering -- An
 Upper Bound Estimation About the Sample Average of Interval-valued
 Random Sets -- On Asymptotic Properties of the Multiple Fuzzy Least
 Squares Estimator.

presented at the 8th International Conference on Soft Methods in Probability and Statistics (SMPS 2016) held in Rome (Italy). The book is dedicated to Data science which aims at developing automated methods to analyze massive amounts of data and to extract knowledge from them. It shows how Data science employs various programming techniques and methods of data wrangling, data visualization, machine learning, probability and statistics. The soft methods proposed in this volume represent a collection of tools in these fields that can also be useful for data science.
