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Nota di contenuto   Synthesis and Research of Neuro-Fuzzy Model of Ecopyrogenesis Multi-Circuit Circulatory System -- Investigation of Ordered Weighted Averaging Weights for Estimating fuzzy validity of Geometric Shapes -- Processing Quantities with Heavy-Tailed Distribution of Measurement Uncertainty:How to Estimate the Tails of the Results of Data Processing -- A Logic for Qualified Syllogisms -- Flexible Querying Using Criterion Trees -- Non-stationary Time Series Clustering with Application to Climate Systems -- A Generalized Fuzzy T-norm Formulation of Fuzzy Modularity for Community Detection in Social Networks -- Soft Computing Models in Online Real Estate -- Constraints Preserving Genetic Algorithm for Learning Fuzzy Measures with an Application to Ontology Matching -- Topology Preservation in Fuzzy Self-Organizing Maps -- Designing Type-2 Fuzzy Controllers Using Lyapunov Approach for Trajectory Tracking -- Decentralized Adaptive Fuzzy Control

Applied to a Robot Manipulator -- Modeling, Planning, Decision-making and Control in Fuzzy Environment -- Knowledge Integration for Uncertainty Management -- Co-reference resolution in Persian corpora -- Real-Time Implementation of a Neural Inverse Optimal Control for a Linear Induction Motor -- Preliminary Results on a New Fuzzy Cognitive Map Structure -- Time Series Image Data Analysis for Sport Skill -- Towards Incremental A-r-Star -- Comparative Analysis of Evaluation Algorithms for Decision-Making in Transport Logistics -- Handling Big Data with Fuzzy Based Classification Approach -- OWA based Model for Talent Selection in Cricket.-Knowledge Representation in ISpace Based Man-Machine Communicatio -- An alpha-level OWA Implementation of Bounded Rationality for Fuzzy Route Selection -- Indices for Introspection of the Choquet Integral -- Artificial neural network modeling of slaughter house wastewater removal of COD and TSS by electro coagulation -- Memetic Algorithm for Solving the Task of Providing Group Anonymity, Oleg Chertov -- Takagi-Sugeno approximation of a Mamdani fuzzy system -- Alpha-Rooting Image Enhancement Using a Traditional Algorithm and Genetic Algorithm -- Learning User's Characteristics in Collaborative Filtering Through Genetic Algorithms: Some New Results, Oswaldo Velez-Langs, Angelica De Anotonio Fuzzy Sets Can Be Interpreted as Limits of Crisp Sets and This Can Help to Fuzzify Crisp Notions -- How to Gauge Accuracy of Measurements and of Expert Estimates: Beyond Normal Distributions -- Automatic Tuning of SOM Neural Network by using Evolutionary Algorithms: An Application to the SHM Problem -- Density-Based Fuzzy Clustering as a First Step to Learning Rules: Challenges and Solutions -- Computing Covariance and Correlation in Optimally Privacy-Protected Statistical Databases: Feasible Algorithms -- Feature Selection with Fuzzy Entropy to Find Similar Cases-Computing Intensive Definition of Products, Laszlo Horvath -- PSO Optimal Tracking Control for State-Dependent Coefficient Nonlinear Systems -- Delphi-Neural Approach to Clinical Decision Making: A Preliminary Study -- Contextual bipolar queries -- Landing of a Quadcopter on a Mobile Base using Fuzzy Logic -- An Innovative Process for Qualitative Group Decision Making employing Fuzzy-Neural Decision Analyzer -- Preprocessing Method for Support Vector Machines Based on Center of.

Sommario/riassunto	This book is the proceedings of the 3rd World Conference on Soft Computing (WCSC), which was held in San Antonio, TX, USA, on December 16-18, 2013. It presents start-of-the-art theory and applications of soft computing together with an in-depth discussion of current and future challenges in the field, providing readers with a 360 degree view on soft computing. Topics range from fuzzy sets, to fuzzy logic, fuzzy mathematics, neuro-fuzzy systems, fuzzy control, decision making in fuzzy environments, image processing and many more. The book is dedicated to Lotfi A. Zadeh, a renowned specialist in signal analysis and control systems research who proposed the idea of fuzzy sets, in which an element may have a partial membership, in the early 1960s, followed by the idea of fuzzy logic, in which a statement can be true only to a certain degree, with degrees described by numbers in the interval [0,1]. The performance of fuzzy systems can often be improved with the help of optimization techniques, e.g. evolutionary computation, and by endowing the corresponding system with the ability to learn, e.g. by combining fuzzy systems with neural networks. The resulting "consortium" of fuzzy, evolutionary, and neural techniques is known as soft computing and is the main focus of this book.