

1. Record Nr.	UNINA9910483814303321
Titolo	Fuzzy Logic and Applications : 8th International Workshop, WILF 2009 Palermo, Italy, June 9-12, 2009 Proceedings / / edited by Vito Di Gesù, Sankar Kumar Pal, Alfredo Petrosino
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2009
ISBN	3-642-02282-0
Edizione	[1st ed. 2009.]
Descrizione fisica	1 online resource (XIV, 378 p.)
Collana	Lecture Notes in Artificial Intelligence, , 2945-9141 ; ; 5571
Altri autori (Persone)	Di GesuV MasulliF (Francesco) PetrosinoAlfredo PalSankar K
Disciplina	006.3
Soggetti	Artificial intelligence Machine theory Computer vision Pattern recognition systems Information storage and retrieval systems Application software Artificial Intelligence Formal Languages and Automata Theory Computer Vision Automated Pattern Recognition Information Storage and Retrieval Computer and Information Systems Applications
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Advances in Theory of Fuzzy Sets -- Non Contradiction, Excluded Middle, and Fuzzy Sets -- Approximate Parallelism between Fuzzy Objects: Some Definitions -- Barycentric Algebras and Gene Expression -- Fuzzy Quantification Using Restriction Levels -- Least Squares Method for L-R Fuzzy Variables -- Modeling Interpretive Steps in Fuzzy Logic Computations -- Nestings of T-Conorms -- On Coherence and

Consistence in Fuzzy Answer Set Semantics for Residuated Logic Programs -- Rough Set Approach to Rule Induction from Imprecise Decision Tables -- Uninorm Based Fuzzy Network for Tree Data Structures -- Advances in Intuitionistic Fuzzy Sets -- A Note on the Conditional Expectation of IF-Observables -- A Survey on the Algebras of the So-Called Intuitionistic Fuzzy Sets (IFS) -- General Form of Probabilities on IF-Sets -- On the E-Probability on IF-Events -- Fuzzy Classification and Clustering -- Rough Ensemble Classifier: A Comparative Study -- A Fuzzy One Class Classifier for Multi Layer Model -- An Experimental Validation of Some Indexes of Fuzzy Clustering Similarity -- Combining Fuzzy C-Mean and Normalized Convolution for Cloud Detection in IR Images -- Fuzzy C-Means Inspired Free Form Deformation Technique for Registration -- Interpretability Assessment of Fuzzy Rule-Based Classifiers -- Metaclustering and Consensus Algorithms for Interactive Data Analysis and Validation -- Neuro-Fuzzy Approach for Reconstructing Fissures in Concrete's Reinforcing Bars -- Fuzzy Image Processing and Analysis -- Fuzzy Relational Calculus and Its Application to Image Processing -- A Combined Fuzzy and Probabilistic Data Descriptor for Distributed CBIR -- A Fuzzy Approach to the Role of Symmetry in Shape Formation: The Illusion of the Scalene Triangle -- A Unified Algebraic Framework for Fuzzy Image Compression and Mathematical Morphology -- Adaptive Image Watermarking Approach Based on Kernel Clustering and HVS -- An Automatic Three-Dimensional Fuzzy Edge Detector -- Fuzzy Sets for Image Texture Modelling Based on Human Distinguishability of Coarseness -- Geometry of Spatial Bipolar Fuzzy Sets Based on Bipolar Fuzzy Numbers and Mathematical Morphology -- Interactive Image Retrieval in a Fuzzy Framework -- Modelling the Effects of Internal Textures on Symmetry Detection Using Fuzzy Operators -- Multivalued Background/Foreground Separation for Moving Object Detection -- Periodic Pattern Detection for Real-Time Application -- Fuzzy Systems -- A System for Deriving a Neuro-Fuzzy Recommendation Model -- A Type-1 Approximation of Interval Type-2 FLS -- Control of a Non-isothermal CSTR by Type-2 Fuzzy Logic Controllers -- Evaluating Fuzzy Controller Robustness Using Model Checking -- Learning Fuzzy Systems by a Co-Evolutionary Artificial-Immune-Based Algorithm -- Advanced Applications -- A Fuzzy Inference Expert System to Support the Decision of Deploying a Military Naval Unit to a Mission -- A Reasoning Methodology for CW-Based Question Answering Systems -- An Intelligent Car Driver for Safe Navigation with Fuzzy Obstacle Avoidance -- Extending Fuzzy Sets with New Evidence for Improving a Sign Language Recognition System -- General Fuzzy Answer Set Programs -- Reverse Engineering of Regulatory Relations in Gene Networks by a Probabilistic Approach -- Temporal Features in Biological Warfare.

Sommario/riassunto

The 8th International Workshop on Fuzzy Logic and Applications (WILF 2009) held in Palermo (Italy), June 9-12, 2009, covered topics related to theoretical and experimental areas of fuzzy sets and systems with emphasis on different applications. This event represents the continuation of an established tradition of biannual interdisciplinary meetings. The previous editions of WILF were held, with an increasing number of participants, in Naples (1995), Bari (1997), Genoa (1999), Milan (2001), Naples (2003), Crema (2005) and Camogli (2007). Each event focused on distinct main thematic areas of fuzzy logic and related applications. WILF 2009 aimed to highlight connections and synergies of fuzzy sets theory with nonconventional computing (e.g., neural networks, evolutionary computation, support vector machines, molecular computing, quantum computing) and cognitive science,

in order to reach a better understanding of both natural and artificial complex systems as well as computing systems, inspired by nature, which are able to solve complex problems. From this perspective one of the main goals of the WILF workshops is to bring together researchers and developers from both academia and high-tech companies. WILF 2009 received more than 60 paper submissions from all over the world, including Algeria, Belgium, Benin, Brazil, Canada, China, France, Greece, India, Iran, Italy, Japan, Poland, Romania, Slovakia, Spain and the USA. A rigorous peer-review selection process was applied to ultimately select nearly 40 high-quality manuscripts to be published in this volume. Moreover, the volume also includes presentations from three keynote speakers Etienne Kerre (Ghent University, Belgium), Sankar K. Pal (ISI, India) and Enric Trillas (ECSC, Spain).
