

1. Record Nr.	UNINA9910483830403321
Titolo	Neural Nets : 16th Italian Workshop on Neural Nets, WIRN 2005, International Workshop on Natural and Artificial Immune Systems, NAIS 2005, Vietri sul Mare, Italy, June 8-11, 2005, Revised Selected Papers / / edited by Bruno Apolloni, Maria Marinaro, Giuseppe Nicosia, Roberto Tagliaferri
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2006
ISBN	3-540-33184-0
Edizione	[1st ed. 2006.]
Descrizione fisica	1 online resource (XIV, 370 p.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 3931
Altri autori (Persone)	ApolloniBruno <1946->
Disciplina	006.3/2
Soggetti	Artificial intelligence Machine theory Computer science Information storage and retrieval systems Pattern recognition systems Bioinformatics Artificial Intelligence Formal Languages and Automata Theory Theory of Computation Information Storage and Retrieval Automated Pattern Recognition
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"This volume reports the proceedings of the 16th Italian Workshop on Neural Nets WIRN 2005 and the satellite International Workshop on Natural and Artificial Immune Systems NAIS 2005"--Pref.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Eduardo R. Caianiello Lecture -- Kernel Methods for Clustering -- Models -- A New Neural Network Model for Contextual Processing of Graphs -- Approximation Properties of Positive Boolean Functions -- Switching Neural Networks: A New Connectionist Model for Classification -- Architectures and Algorithms -- Ensembles Based on Random Projections to Improve the Accuracy of Clustering Algorithms -- Recursive Neural Networks and Graphs: Dealing with Cycles -- A

System for Transmitting a Coherent Burst of Activity Through a Network of Spiking Neurons -- NEC: A Hierarchical Agglomerative Clustering Based on Fisher and Negentropy Information -- A Recurrent ICA Approach to a Novel BSS Convolutional Nonlinear Problem -- Signal Processing -- Hourly Forecasting of SO₂ Pollutant Concentration Using an Elman Neural Network -- Nonlinear Exploratory Data Analysis Applied to Seismic Signals -- Artifact Cancellation from Electrocardiogram by Mixed Wavelet-ICA Filter -- Intelligent Predictive Control of Micro Heat Exchanger -- Transient Power System Stabilizer Design Using Simple Neuron Structure -- Short Term Local Meteorological Forecasting Using Type-2 Fuzzy Systems -- Learning and Data Driven Methods for Short Term Meteorological Forecast -- Automatic Dictionary Creation by Sub-symbolic Encoding of Words -- Pattern Recognition -- An Automatic Feature Based Face Authentication System, -- On the Preprocessing of Mass Spectrometry Proteomics Data -- Clustering Causal Relationships in Genes Expression Data -- Application of E²Nets to Feature Recognition of Articulation Manner in Knowledge-Based Automatic Speech Recognition -- Fuzzy and Neurofuzzy Computing -- Granular Regression -- Fuzzy Logic Activities at the Microelectronics Institute of Seville -- Generalized Fuzzy Similarity Indexes -- Environmental Time Series Prediction by Improved Classical Feed-Forward Neural Networks -- New Similarity Rules for Mining Data -- Image File Compression Using Region Growing and Interpolation -- Fuzzy Connectivity and Its Application to Image Segmentation -- Soft Rank Clustering -- Natural Immune Systems -- An Evolution Hypothesis of Bacterial Populations -- Modelling the Immune System with Situated Agents -- Current Paradigms in Immunology -- Supporting Collaborative Knowledge Work: A Methodology for Developing ICT Tools for Biomedical Research -- Profiling Network Attacks Via AIS -- Fuzzy Continuous Petri Net-Based Approach for Modeling Immune Systems -- A General Learning Rule for Network Modeling of Neuroimmune Interactome -- Artificial Immune Systems -- On Diversity and Artificial Immune Systems: Incorporating a Diversity Operator into aiNet -- Lipschitzian Pattern Search and Immunological Algorithm with Quasi-Newton Method for the Protein Folding Problem: An Innovative Multistage Approach -- A Clonal Selection Algorithm for Coloring, Hitting Set and Satisfiability Problems -- Artificial Immune-Based Optimization Technique for Solving Economic Dispatch in Power System -- Securing IPv6-Based Mobile Ad Hoc Networks Through an Artificial Immune System -- Challenges for Artificial Immune Systems.

Sommario/riassunto

This book constitutes the thoroughly refereed postproceedings of the 16th Italian Workshop on Neural Nets, WIRN 2005, as well as the satellite International Workshop on Natural and Artificial Immune Systems, NAIS 2005, held in Vietri sul Mare, Italy in June 2005. The 41 revised papers presented together with a lecture by the winner of the Premio Caianiello award were carefully reviewed and improved during two rounds of selection and refereeing.
