

1. Record Nr.	UNINA9910485021603321
Titolo	Artificial Intelligence and Knowledge Engineering Applications: A Bioinspired Approach : First International Work-Conference on the Interplay Between Natural and Artificial Computation, IWINAC 2005, Las Palmas, Canary Islands, Spain, June 15-18, 2005, Proceedings, Part II / / edited by José Mira, José R. Álvarez
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2005
Edizione	[1st ed. 2005.]
Descrizione fisica	1 online resource (XXIV, 638 p.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 3562
Altri autori (Persone)	MiraJ (Jose) AlvarezJose R <1965-> (Jose Ramon)
Disciplina	612.8/220113
Soggetti	Computer science Algorithms Artificial intelligence Computer vision Pattern recognition systems Evolution (Biology) Theory of Computation Artificial Intelligence Computer Vision Automated Pattern Recognition Evolutionary Biology
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	Evolutionary Computation -- Cultural Operators for a Quantum-Inspired Evolutionary Algorithm Applied to Numerical Optimization Problems -- New Codification Schemas for Scheduling with Genetic Algorithms -- Solving the Multidimensional Knapsack Problem Using an Evolutionary Algorithm Hybridized with Branch and Bound -- Cryptanalysis of Substitution Ciphers Using Scatter Search -- Combining Metaheuristics and Exact Algorithms in Combinatorial

Optimization: A Survey and Classification -- Convergence Analysis of a GA-ICA Algorithm -- An Evolutionary Strategy for the Multidimensional 0-1 Knapsack Problem Based on Genetic Computation of Surrogate Multipliers -- An Evolutionary Approach to Designing and Solving Fuzzy Job-Shop Problems -- Memetic Algorithms with Partial Lamarckism for the Shortest Common Supersequence Problem -- 2D and 3D Pictural Networks of Evolutionary Processors -- Analysing Sentences with Networks of Evolutionary Processors -- Simulating Evolutionary Algorithms with Eco-grammar Systems -- Timed Accepting Hybrid Networks of Evolutionary Processors -- A New Immunotronic Approach to Hardware Fault Detection Using Symbiotic Evolution -- A Basic Approach to Reduce the Complexity of a Self-generated Fuzzy Rule-Table for Function Approximation by Use of Symbolic Regression in 1D and 2D Cases -- Parallel Evolutionary Computation: Application of an EA to Controller Design -- MEPIDS: Multi-Expression Programming for Intrusion Detection System -- A Study of Heuristic Techniques Inspired in Natural Process for the Solution of the Container Fill Problem -- Attribute Grammar Evolution -- Evolution and Evaluation in Knowledge Fusion System -- The Allele Meta-model -- Developing a Common Language for Genetic Algorithms -- Using Bees to Solve a Data-Mining Problem Expressed as a Max-Sat One.-A Comparison of GA and PSO for Excess Return Evaluation in Stock Markets -- Nonlinear Robust Identification Using Multiobjective Evolutionary Algorithms -- Genetic Algorithms for Multiobjective Controller Design -- Grammar Based Crossover Operator in Genetic Programming -- GA-Selection Revisited from an ES-Driven Point of View -- Agent WiSARD in a 3D World -- One Generalization of the Naive Bayes to Fuzzy Sets and the Design of the Fuzzy Naive Bayes Classifier -- Towards a Methodology to Search for Near-Optimal Representations in Classification Problems -- Playing a Toy-Grammar with GCS -- A Genetic Approach to Data Dimensionality Reduction Using a Special Initial Population -- Engineering Optimizations via Nature-Inspired Virtual Bee Algorithms -- Solving Partitioning Problem in Codesign with Ant Colonies -- Electronics and Robotics -- A Neuromimetic Integrated Circuit for Interactive Real-Time Simulation -- A FPGA Architecture of Blind Source Separation and Real Time Implementation -- Description and Simulation of Bio-inspired Systems Using VHDL--AMS -- Transistor-Level Circuit Experiments Using Evolvable Hardware -- An Electronic Reconfigurable Neural Architecture for Intrusion Detection -- Construction and VHDL Implementation of a Fully Local Network with Good Reconstruction Properties of the Inputs -- Reconfigurable Hardware Implementation of Neural Networks for Humanoid Locomotion -- An Associative Cortical Model of Language Understanding and Action Planning -- Neural Clustering Analysis of Macroevolutionary and Genetic Algorithms in the Evolution of Robot Controllers -- Induced Behavior in a Real Agent Using the Multilevel Darwinist Brain -- Landscaping Model for Virtual Environment -- Other Applications -- Sensitivity from Short-Term Memory vs. Stability from Long-Term Memory in Visual Attention Method -- Visual Attention, Visual Saliency, and Eye Movements During the Inspection of Natural Scenes -- Model Performance for Visual Attention in Real 3D Color Scenes -- On the Evolution of Formal Models and Artificial Neural Architectures for Visual Motion Detection -- Estimation of Fuel Moisture Content Using Neural Networks -- Adjustment of Surveillance Video Systems by a Performance Evaluation Function -- Application of Machine Learning Techniques for Simplifying the Association Problem in a Video Surveillance System -- A Neurocalibration Model for Autonomous Vehicle Navigation -- Some Remarks on the Application of

Artificial Neural Networks to Optical Character Recognition -- Using Fuzzy Clustering Technique for Function Approximation to Approximate ECG Signals -- Information Retrieval and Classification with Wavelets and Support Vector Machines -- A New Approach to Clustering and Object Detection with Independent Component Analysis -- Bispectra Analysis-Based VAD for Robust Speech Recognition -- On-line Training of Neural Networks: A Sliding Window Approach for the Levenberg-Marquardt Algorithm -- Boosting Parallel Perceptrons for Label Noise Reduction in Classification Problems -- On the Connection Between the Human Visual System and Independent Component Analysis -- Image Classifier for the TJ-II Thomson Scattering Diagnostic: Evaluation with a Feed Forward Neural Network -- Computerized Adaptive Tests and Item Response Theory on a Distance Education Platform -- Stochastic Vs Deterministic Traffic Simulator. Comparative Study for Its Use Within a Traffic Light Cycles Optimization Architecture.
