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Altri autori (Persone)	TalbiEl-Ghazali <1965->
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Nota di contenuto	Genetic Programming -- Santa Fe Trail Hazards -- Size Control with Maximum Homologous Crossover -- Machine Learning -- A New Classification-Rule Pruning Procedure for an Ant Colony Algorithm -- Swarm-Based Distributed Clustering in Peer-to-Peer Systems -- Simultaneous Optimization of Weights and Structure of an RBF Neural Network -- An Exponential Representation in the API Algorithm for Hidden Markov Models Training -- Applications -- Memetic Algorithms for the MinLA Problem -- Niching in Evolution Strategies and Its Application to Laser Pulse Shaping -- A Modified Genetic Algorithm for the Beam Angle Optimization Problem in Intensity-Modulated Radiotherapy Planning -- Combinatorial Optimization -- On a Property

Analysis of Representations for Spanning Tree Problems -- A Cooperative Multilevel Tabu Search Algorithm for the Covering Design Problem -- Enhancements of NSGA II and Its Application to the Vehicle Routing Problem with Route Balancing -- The Importance of Scalability When Comparing Dynamic Weighted Aggregation and Pareto Front Techniques -- Co-evolution -- A Backbone-Based Co-evolutionary Heuristic for Partial MAX-SAT -- Analysing Co-evolution Among Artificial 3D Creatures -- Self-assembling -- A Critical View of the Evolutionary Design of Self-assembling Systems -- Algorithmic Self-assembly by Accretion and by Carving in MGS -- Evolutionary Design of a DDPD Model of Ligation -- Artificial Life and Bioinformatics -- Population Structure and Artificial Evolution -- Outlines of Artificial Life: A Brief History of Evolutionary Individual Based Models -- An Enhanced Genetic Algorithm for Protein Structure Prediction Using the 2D Hydrophobic-Polar Model -- Incorporating Knowledge of Secondary Structures in a L-System-Based Encoding for Protein Folding -- Advances -- The Electromagnetism Meta-heuristic Applied to the Resource-Constrained Project Scheduling Problem -- Applications of Racing Algorithms: An Industrial Perspective -- An Immunological Algorithm for Global Numerical Optimization -- Algorithms (X, sigma, eta): Quasi-random Mutations for Evolution Strategies.

Sommario/riassunto

This book constitutes the thoroughly refereed post-proceedings of the 7th International Conference on Artificial Evolution, EA 2005, held in Lille, France, in October 2005. The 26 revised full papers presented were carefully reviewed and selected from 78 submissions. The papers cover all aspects of artificial evolution: genetic programming, machine learning, combinatorial optimization, co-evolution, self-assembling, artificial life and bioinformatics.