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Titolo	Ant Colony Optimization and Swarm Intelligence : 6th International Conference, ANTS 2008, Brussels, Belgium, September 22-24, 2008, Proceedings / / edited by Marco Dorigo, Mauro Birattari, Christian Blum, Maurice Clerc, Thomas Stützle, Alan Winfield
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Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 5217
Disciplina	512.7
Soggetti	Artificial intelligence Computer programming Computer networks Algorithms Computer science Numerical analysis Artificial Intelligence Programming Techniques Computer Communication Networks Theory of Computation Numerical Analysis
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	A Combined Ant Colony and Differential Evolution Feature Selection Algorithm -- A Combined Ant Colony and Differential Evolution Feature Selection Algorithm -- An Improved ACO Based Plug-in to Enhance the Interpretability of Fuzzy Rule Bases with Exceptions -- Ant Colony Optimization for Energy-Efficient Broadcasting in Ad-Hoc Networks -- Ant Colony Optimization for Genome-Wide Genetic Analysis -- cAnt-Miner: An Ant Colony Classification Algorithm to Cope with Continuous Attributes -- Finding Minimum Spanning/Distances Trees by Using River Formation Dynamics -- Gathering Multiple Robotic Agents with Crude Distance Sensing Capabilities -- Integration of ACO in a

Constraint Programming Language -- Learning from House-Hunting
 Ants: Collective Decision-Making in Organic Computing Systems --
 Modeling Phase Transition in Self-organized Mobile Robot Flocks --
 Molecular Structure Elucidation Using Ant Colony Optimization: A
 Preliminary Study -- Rigorous Analyses for the Combination of
 Ant Colony Optimization and Local Search -- Simple Dynamic Particle
 Swarms without Velocity -- Swarming in a Virtual World: A PSO
 Approach to Virtual Camera Composition -- The Binary Bridge Selection
 Problem: Stochastic Approximations and the Convergence of a Learning
 Algorithm -- Two-Level ACO for Haplotype Inference Under Pure
 Parsimony -- What Hides in Dimension X? A Quest for Visualizing
 Particle Swarms -- Short Papers -- A Dynamic Swarm for Visual
 Location Tracking -- A Simulation Study of Routing Performance in
 Realistic Urban Scenarios for MANETs -- ACO-Based Scheduling of
 Parallel Batch Processing Machines with Incompatible Job Families to
 Minimize Total Weighted Tardiness -- Adaptive Particle Swarm
 Optimization -- Ant Based Heuristics for the Capacitated Fixed Charge
 Location Problem -- Ant Colony Optimization and the Single Round
 Robin Maximum Value Problem -- Artificial Ants to Extract Leaf
 Outlines and Primary Venation Patterns -- Autonomous
 Reconfiguration in a Self-assembling Multi-robot System -- Beanbag
 Robotics: Robotic Swarms with 1-DoF Units -- BlåAnt: Bounding
 Networks' Diameter with a Collaborative Distributed Algorithm --
 Dependency by Concentration of Pheromone Trail for Multiple Robots
 -- Dissemination of Information with Fair Load Distribution in Self-
 organizing Grids -- Emergent Sorting in Networks of Router Agents --
 Enhancing the Cooperative Transport of Multiple Objects -- Formal
 Modeling of BeeAdHoc: A Bio-inspired Mobile Ad Hoc Network Routing
 Protocol -- Incorporating Heuristics in a Swarm Intelligence Framework
 for Inferring Gene Regulatory Networks from Gene Expression Time
 Series -- Incorporating Preferences to a Multi-objective Ant Colony
 Algorithm for Time and Space Assembly Line Balancing -- KANTS:
 Artificial Ant System for Classification -- Lattice Formation in Space for
 a Swarm of Pico Satellites -- Merging Groups for the Exploration of
 Complex State Spaces in the CPSO Approach -- Parallel Ant Colony
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 Framework for Ant Colony Optimization -- Applying a Distributed
 Swarm-Based Algorithm to Solve Instances of the RCPSP -- bicACO: An
 Ant Colony Inspired Biclustering Algorithm -- Dynamic Routing and
 Travel Time Prediction with Ant Based Control -- Network Formation
 Using Ant Colony Optimization.-On the Stability and the Parameters of
 Particle Swarm Optimization -- Regional Traffic Assignment by ACO --
 SwarmClass: A Novel Data Clustering Approach by a Hybridization of an
 Ant Colony with Flying Insects -- The Differential Ant-Stigmergy
 Algorithm for Large Scale Real-Parameter Optimization.

Sommario/riassunto

This book constitutes the refereed proceedings of the 6th International
 Workshop on Ant Colony Optimization and Swarm Intelligence, ANTS
 2008, held in Brussels, Belgium, in September 2008. The 17 revised full
 papers, 24 revised short papers, and 10 extended abstracts presented
 were carefully reviewed and selected from 91 submissions. The papers
 cover theoretical and foundational aspects of computational
 intelligence and related disciplines with special focus on swarm
 intelligence and are devoted to behavioral models of social insects and

new algorithmic approaches, empirical and theoretical research in swarm intelligence, applications such as ant colony optimization or particle swarm optimization, and theoretical and experimental research in swarm robotics systems.
