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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 -- BlåtAnt: 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 Optimization for the Quadratic Assignment Problems with Symmetric Multi Processing -- Social Odometry in Populations of Autonomous Robots -- The Architecture of Ant-Based Clustering to Improve Topographic Mapping -- The Small World of Pheromone Trails -- Extended Abstracts -- A Particle Swarm Optimization Algorithm for Multiuser Scheduling in HSDPA -- AntLib v1.0: A Generic C++ 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 -- Swarm Class: 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.