Record Nr. UNISA996466467403316 Advances in Swarm Intelligence [[electronic resource]]: 8th **Titolo** International Conference, ICSI 2017, Fukuoka, Japan, July 27 – August 1, 2017, Proceedings, Part I / / edited by Ying Tan, Hideyuki Takagi, Yuhui Shi Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2017 **ISBN** 3-319-61824-5 Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (XXVII, 631 p. 184 illus.) Theoretical Computer Science and General Issues, , 2512-2029;; Collana 10385 Disciplina 006.3 Soggetti Algorithms Numerical analysis Data mining Artificial intelligence Computer simulation **Numerical Analysis** Data Mining and Knowledge Discovery Artificial Intelligence Computer Modelling Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Nota di contenuto

Theories and Models of Swarm Intelligence -- Comparative Analysis of Swarm-based Metaheuristic Algorithms on Benchmark Functions -- A Mathematical Model of Information Theory: the Superiority of Collective Knowledge and Intelligence -- Modelling and Verification Analysis of the Predator Prey System via a First Order Logic Approach -- Flock Diameter Control in a Collision-Avoiding Cucker-Smale Flocking Model -- Building a Simulation Model for Distributed Human-based Evolutionary Computation -- Model of interruptions in swarm unit --Novel Swarm-based Optimization Algorithms -- Dolphin Pod Optimization -- Teaching-Learning-Feedback-Based Optimization -- A New Magnetotactic Bacteria Optimization Algorithm Based on Moment

Migration -- A Guide Sign Optimization Problem for an Added Road Based on Bird Mating Optimizer -- LGWO: An Improved Grey Wolf Optimization for Function Optimization -- An Improved Monarch Buttery Optimization with Equal Partition and F/T Mutation -- Particle Swarm Optimization -- A Scalability Analysis of Particle Swarm Optimization Roaming Behaviour -- The Analysis of Strategy for the Boundary Restriction in Particle Swarm Optimization Algorithm --Particle Swarm Optimization with Ensemble of Inertia Weight Strategies -- Hybrid Comprehensive Learning Particle Swarm Optimizer with Adaptive Starting Local Search -- A Bare Bones Particle Swarm Optimization Algorithm with Dynamic Local Search -- Improving Multilayer Particle Swarm Optimization using Powell Method -- On the Improvement of PSO Scripts for Slope Stability Analysis -- A High Dimensional Particle Swarm Optimization Based on Similarity Measurement -- A center multi-swarm cooperative particle swarm optimization with ratio and proportion learning -- Applications of Particle Swarm Optimization -- A Discrete Particle Swarm Algorithm for Combinatorial Auctions -- Registration of GPS and Stereo Vision for Point Cloud Localization in Intelligent Vehicles Using Particle Swarm Optimization -- Immersed Tunnel Element Translation Control under Current Flow Based on Particle Swarm Optimization -- Solving Inverse Kinematics with Vector Evaluated Particle Swarm Optimization --Particle Swarm Optimization for the Machine Repair Problem with Working Breakdowns -- Intelligent Behavioral Design of Non-Player Characters in a FPS Video Game Through PSO -- Ant Colony Optimization -- An Improved Ant Colony Optimization with Subpathbased Pheromone Modification Strategy -- Decentralized Congestion Control in Random Ant Interaction Networks -- An Energy-Saving Routing Strategy based on Ant Colony Optimization in Wireless Sensor Networks -- Pheromone inspired Morphogenic Distributed Control for Self-Organization of Unmanned Aerial Vehicle Swarm -- Solving the Selective Pickup and Delivery Problem Using Max-Min Ant System -- An Improved Ant-driven Approach to Navigation and Map Building --Artificial Bee Colony Algorithms -- A Multi-cores Parallel Artificial Bee Colony Optimization Algorithm based on Fork/Join Framework --Identification of Common Structural Motifs in RNA Sequences using Artificial Bee Colony Algorithm for Optimization -- A Mixed Artificial Bee Colony Algorithm for the Time-of-Use Pricing Optimization --Optimization of Office-Space Allocation Problem using Artificial Bee Colony Algorithm -- Genetic Algorithms -- Enhancing Exploration and Exploitation of NSGA-II with GP and PDL -- A Novel Strategy to Control Population Diversity and Convergence for Genetic Algorithm --Consecutive Meals Planning by Using Permutation GA: Evaluation Function Proposal for Measuring Appearance Order of Meal's Characteristics -- Improving Jaccard Index using Genetic Algorithms for Collaborative Filtering -- Optimizing least-cost Steiner tree in graphs via an encoding-free genetic algorithm -- An Energy Minimized Solution for Solving Redundancy of Underwater Vehicle-Manipulator System Based on Genetic Algorithm -- Study of an Improved Genetic Algorithm for Multiple Paths Automatic Software Test Case Generation -- Differential Evolution -- An Adaptive Differential Evolution with Learning Parameters According to Groups Defined by the Rank of Objective Values -- Comparison of Differential Evolution Algorithms on the Mapping between Problems and Penalty Parameters -- Cooperation Coevolution Differential Evolution with Gradient Descent Strategy for Large Scale Optimization -- Chebyshev Inequality based Approach to Chance Constrained Optimization Problems using Differential Evolution -- Eolving the Distributed Two Machine Flow-shop Scheduling Problem

using Differential Evolution -- A Multi-Objective Differential Evolution for QoS Multicast Routing -- Energy-Saving Variable Bias Current Optimization for Magnetic Bearing Using Adaptive Differential Evolution -- Fireworks Algorithm -- Acceleration for Fireworks Algorithm Based on Amplitude Reduction Strategy and Local Optima-based Selection Strategy -- From Resampling to Non-Resampling: A Fireworks Algorithm-based Framework for Solving Noisy Optimization Problems -- Elite-leading Fireworks Algorithm -- Guided Fireworks Algorithm Applied to Maximal Covering Location Problem -- Brain Storm Optimization Algorithm -- An Improved Brain Storm Optimization with Learning Strategy -- Difference Brain Storm Optimization for Combined Heat and Power Economic Dispatch -- Cuckoo Search -- Multiple Chaotic Cuckoo Search Algorithm.-Cuckoo Search Algorithm Approach for the IFS Inverse Problem of 2D Binary Fractal Images -- Solving the Graph Coloring Problem using the Cuckoo Search Algorithm -- A Deep Learning-Cuckoo Search Method for Missing Data Estimation in High-Dimensional Datasets -- Strategies to Improve Cuckoo Search toward Adapting Randomly Changing Environment -- Firefly Algorithm --Firefly Algorithm Optimized Particle Filter for Relative Navigation of Non-cooperative Target -- An Improved Discrete Firefly Algorithm Used for Traveling salesman problem -- Firefly Clustering Method for Mining Protein Complexes -- Improved Two-dimensional Otsu based on Firefly Optimization for Low Signal-to-noise Ratio Images -- 3D-FOAdis: an improved fruit fly optimization for function optimization.

Sommario/riassunto

The two-volume set of LNCS 10385 and 10386, constitutes the proceedings of the 8th International Confrence on Advances in Swarm Intelligence, ICSI 2017, held in Fukuoka, Japan, in July/August 2017. The total of 133 papers presented in these volumes was carefully reviewed and selected from 267 submissions. The paper were organized in topical sections as follows: Part I: theories and models of swarm intelligence; novel swarm-based optimization algorithms; particle swarm optimization; applications of particle swarm optimization; ant colony optimization; artificial bee colony algorithms; genetic algorithms; differential evolution; fireworks algorithm; brain storm optimization algorithm; cuckoo searh; and firefly algorithm. Part II: multi-objective optimization; portfolio optimization; community detection; multi-agent systems and swarm robotics; hybrid optimization algorithms and applications; fuzzy and swarm approach; clustering and forecast; classification and detection; planning and routing problems; dialog system applications; robotic control; and other applications. .