Record Nr. UNINA9910483941803321 **Titolo** Learning and Intelligent Optimization: 7th International Conference, LION 7, Catania, Italy, January 7-11, 2013, Revised Selected Papers // edited by Giuseppe Nicosia, Panos Pardalos Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-642-44973-5 Edizione [1st ed. 2013.] 1 online resource (XV, 470 p. 120 illus.) Descrizione fisica Theoretical Computer Science and General Issues, , 2512-2029;; 7997 Collana 006.31 Disciplina Soggetti Algorithms Numerical analysis Artificial intelligence Computer science—Mathematics Discrete mathematics Computer science **Numerical Analysis** Artificial Intelligence Discrete Mathematics in Computer Science Theory of Computation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Interleaving Innovization with Evolutionary Multi-Objective Optimization in Production System Simulation for Faster Convergence -- Intelligent optimization for the minimum labelling spanning tree problem -- A Constraint Satisfaction Approach to Tractable Theory Induction -- Features for Exploiting Black-Box Optimization Problem Structure -- MOCA-I: Discovering Rules and Guiding Decision Maker in the Context of Partial Classification in Large and Imbalanced Datasets -- Sharing Information in Parallel Search with Search Space Partitioning -- Fast Computation of the Multi-points Expected Improvement with Applications in Batch Selection -- R2-EMOA: Focused Multiobjective Search Using R2-Indicator-Based Selection -- A Heuristic Algorithm for

the Set Multicover Problem with Generalized Upper Bound Constraints

-- A genetic algorithm approach for the multidimensional two-way number partitioning problem -- Adaptive Dynamic Load Balancing in Heterogeneous Multiple GPUs-CPUs Distributed Setting: Case Study of B&B Tree Search -- Multi-objective optimization for relevant sub-graph extraction -- PROGRESS: Progressive Reinforcement-Learning-Based Surrogate Selection -- Neutrality in the Graph Coloring Problem --Kernel multi label vector optimization (kMLVO) - A unified multi-label classification formalism -- Robust Benchmark Set Selection for Boolean Constraint Solvers -- Boosting Sequential Solver Portfolios: Knowledge Sharing and Accuracy Prediction -- A Fast and Adaptive Local Search Algorithm for Multi-Objective Optimization -- An Analysis of Hall-of-Fame Strategies in Competitive Coevolutionary Algorithms for Self-Learning in RTS Games -- Resources Optimization in (Video) Games: a Novel Approach to Teach Applied Mathematics -- CMF: a combinatorial tool to find composite motifs -- Hill-climbing Behaviour on Quantized NK-landscapes -- Neighbourhood Specification for Game Strategy Evolution in a Spatial Iterated Prisoners Dilemma Game -- A Study on the Specification of a Scalarizing Function in MOEA/D for Many-Objective Knapsack Problems -- Portfolio with Block Branching for Parallel SAT Solvers -- Parameter Setting with Dynamic Island Models -- A simulated annealing algorithm for the vehicle routing problem with time windows and synchronization constraints -- Solution of the maximum k-balanced subgraph problem -- Racing with a Fixed Budget and a Self-Adaptive Significance Level -- An efficient best response heuristic for a non-preemptive strictly periodic scheduling problem --Finding an evolutionary solution to the game of Mastermind with good scaling behaviour -- A Fast Local Search Approach For Multiobjective problems -- Generating Customized Landscapes in Permutation-based Combinatorial Optimization Problems -- Multiobjective Evolution of Mixed Nash Equilibria -- Hybridizing Constraint Programming and Monte-Carlo Tree Search: Application to the Job Shop problem -- From Grammars to Parameters: Automatic Iterated Greedy Design for the Permutation Flow-shop Problem with Weighted Tardiness --Architecture for Monitoring Learning Processes using Video Games --Quality Measures of Parameter Tuning for Aggregated Multi-Objective Temporal Planning -- Evolutionary FSM-Based Agents for Playing Super Mario Game -- Identifying Key Algorithm Parameters and Instance Features using Forward Selection -- Using Racing to Automatically Configure Algorithms for Scaling Performance -- Algorithm Selection for the Graph Coloring Problem -- Batched Mode Hyper-heuristics --Tuning algorithms for tackling large instances: An experimental protocol -- Automated Parameter Tuning Framework for Heterogeneous and Large Instances: Case Study in Quadratic Assignment Problem -- Practically Desirable Solutions Search on Multi-Objective Optimization -- Oversized Populations and Cooperative Selection: Dealing with Massive Resources in Parallel Infrastructures --Effects of Population Size on Selection and Scalability in Evolutionary Many-objective Optimization -- A novel feature selection method for classification using a fuzzy criterion.

Sommario/riassunto

This book constitutes the proceedings of the 7th International Conference on Learning and Optimization, LION 7, which was held in Catania, Italy, in January 2013. The 49 contributions presented in this volume were carefully reviewed and selected from 101 submissions. They explore the intersections and uncharted territories between machine learning, artificial intelligence, mathematical programming and algorithms for hard optimization problems.