Record Nr. UNISA996465531803316 Evolutionary Computation in Combinatorial Optimization [[electronic **Titolo** resource]]: 4th European Conference, EvoCOP 2004, Coimbra. Portugal, April 5-7, 2004, Proceedings / / edited by Jens Gottlieb, Günther R. Raidl Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2004 **ISBN** 1-280-30722-6 9786610307227 3-540-24652-5 Edizione [1st ed. 2004.] 1 online resource (X, 240 p.) Descrizione fisica Collana Lecture Notes in Computer Science, , 0302-9743 ; ; 3004 005.1 Disciplina Soggetti Mathematical optimization Computers Algorithms Numerical analysis Computer science—Mathematics Combinatorics Optimization Computation by Abstract Devices Algorithm Analysis and Problem Complexity **Numeric Computing** Discrete Mathematics in Computer Science Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Nota di contenuto EvoCOP Contributions -- Mutation Multiplicity in a Panmictic Two-Strategy Genetic Algorithm -- Solving the Vehicle Routing Problem by Using Cellular Genetic Algorithms -- Landscape Regularity and Random Walks for the Job-Shop Scheduling Problem -- A Comparison of

> Adaptive Operator Scheduling Methods on the Traveling Salesman Problem -- AntPacking – An Ant Colony Optimization Approach for the

One-Dimensional Bin Packing Problem -- Scatter Search and Memetic Approaches to the Error Correcting Code Problem -- A Hybrid Evolutionary Algorithm for Solving the Register Allocation Problem --Parallel Ant Systems for the Capacitated Vehicle Routing Problem -- A Hierarchical Social Metaheuristic for the Max-Cut Problem -- On the Structure of Sequential Search: Beyond "No Free Lunch" -- Dealing with Solution Diversity in an EA for Multiple Objective Decision Support – A Case Study -- A Study into Ant Colony Optimisation, Evolutionary Computation and Constraint Programming on Binary Constraint Satisfaction Problems -- Binary Merge Model Representation of the Graph Colouring Problem -- Hardness Prediction for the University Course Timetabling Problem -- Hybrid Estimation of Distribution Algorithm for Multiobjective Knapsack Problem -- On the Use of Path Relinking for the ? – Hub Median Problem -- Solving a Real-World Glass Cutting Problem -- Designing Reliable Communication Networks with a Genetic Algorithm Using a Repair Heuristic -- Improving Vehicle Routing Using a Customer Waiting Time Colony -- New Benchmark Instances for the QAP and the Experimental Analysis of Algorithms --Improving Edge Recombination through Alternate Inheritance and Greedy Manner -- Clustering Nominal and Numerical Data: A New Distance Concept for a Hybrid Genetic Algorithm -- On Search Space Symmetry in Partitioning Problems.

Sommario/riassunto

Evolutionary Computation (EC) involves the study of problem solving and op-mization techniques inspired by principles of natural evolution and genetics. EC has been able to draw the attention of an increasing number of researchers and practitioners in several ?elds. Evolutionary algorithms have in particular been showntobee?ectivefordi? cultcombinatorialoptimization problems appearing in various industrial. economic, and scienti?c domains. This volume contains the proceedings of EvoCOP 2004, the 4th European Conference on Evolutionary Computation in Combinatorial Optimization. Itwas held in Coimbra, Portugal, on April 5-7, 2004, jointly with EuroGP 2004, the 7th European Conference on Genetic Programming, and EvoWorkshops 2004, which consisted of the following six individual workshops: EvoBIO, the 2nd - ropean Workshop on Evolutionary Bioinformatics; EvoCOMNET, the 1st - ropean Workshop on Evolutionary Computation in Communications, Networks, and Connected Systems: EvoHOT, the 1st European Workshop on Hardware Optimisation; EvolASP, the 6th European Workshop on Evolutionary Com- tation in Image Analysis and Signal Processing; EvoMUSART, the 2nd Eu- pean Workshop on Evolutionary Music and Art; and EvoSTOC. the 1st Eu- pean Workshop on Evolutionary Algorithms in Stochastic and Dynamic En-ronments.