Record Nr. UNINA9910485030803321 Evolutionary Computation in Combinatorial Optimization [[electronic **Titolo** resource]]: 9th European Conference, EvoCOP 2009, Tübingen, Germany, April 15-17, 2009, Proceedings / / edited by Carlos Cotta, Peter I. Cowling Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2009 **ISBN** 3-642-01009-1 Edizione [1st ed. 2009.] Descrizione fisica 1 online resource (XIV, 253 p.) Theoretical Computer Science and General Issues, , 2512-2029 ; ; 5482 Collana Disciplina 004.0151 Soggetti Computer science Algorithms Numerical analysis Computer science—Mathematics Discrete mathematics **Bioinformatics** Theory of Computation **Numerical Analysis** Discrete Mathematics in Computer Science Computational and Systems Biology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Includes bibliographical references and index. Nota di bibliografia Nota di contenuto A Critical Element-Guided Perturbation Strategy for Iterated Local Search -- A Genetic Algorithm for Net Present Value Maximization for Resource Constrained Projects -- A Hybrid Algorithm for Computing Tours in a Spare Parts Warehouse -- A New Binary Description of the Blocks Relocation Problem and Benefits in a Look Ahead Heuristic -- A Plasmid Based Transgenetic Algorithm for the Biobjective Minimum Spanning Tree Problem -- A Tabu Search Algorithm with Direct Representation for Strip Packing -- An ACO Approach to Planning --

An Artificial Immune System for the Multi-Mode Resource-Constrained

Project Scheduling Problem -- Beam-ACO Based on Stochastic Sampling for Makespan Optimization Concerning the TSP with Time

Windows -- Binary Exponential Back Off for Tabu Tenure in Hyperheuristics -- Diversity Control and Multi-Parent Recombination for Evolutionary Graph Coloring Algorithms -- Divide-And-Evolve Facing State-of-the-Art Temporal Planners during the 6 th International Planning Competition -- Exact Solutions to the Traveling Salesperson Problem by a Population-Based Evolutionary Algorithm --Finding Balanced Incomplete Block Designs with Metaheuristics --Guided Ejection Search for the Job Shop Scheduling Problem --Improving Performance in Combinatorial Optimisation Using Averaging and Clustering -- Iterated Local Search for Minimum Power Symmetric Connectivity in Wireless Networks -- Metropolis and Symmetric Functions: A Swan Song -- Robustness Analysis in Evolutionary Multi-Objective Optimization Applied to VAR Planning in Electrical Distribution Networks -- Staff Scheduling with Particle Swarm Optimisation and Evolution Strategies -- University Course Timetabling with Genetic Algorithm: A Laboratory Excercises Case Study.

Sommario/riassunto

This book constitutes the refereed proceedings of the 9th European Conference on Evolutionary Computation in Combinatorial Optimization, EvoCOP 2009, held in Tübingen, Germany, in April 2009. The 21 revised full papers presented were carefully reviewed and selected from 53 submissions. The papers present the latest research and discuss current developments and applications in metaheuristics - a paradigm to effectively solve difficult combinatorial optimization problems appearing in various industrial, economical, and scientific domains. Prominent examples of metaheuristics are evolutionary algorithms, simulated annealing, tabu search, scatter search, memetic algorithms, variable neighborhood search, iterated local search, greedy randomized adaptive search procedures, estimation of distribution algorithms and ant colony optimization.