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Soggetti	Numerical analysis Algorithms Computer science Artificial intelligence Computer networks Numerical Analysis Models of Computation Artificial Intelligence Computer Communication Networks
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	On the effect of scalarising norm choice in a ParEGO implementation -- Multi-objective big data optimization with Metal and Spark -- An empirical assessment of the properties of inverted generational distance indicators on multi- and many-objective optimization -- Solving the Bi-objective traveling thief problem with multi-objective evolutionary algorithms -- Automatically Configuring multi-objective local search using multi-objective optimization -- The multi-objective shortest path problem is NP-hard, or is it -- Angle-based preference models in multi-objective optimization -- Quantitative performance assessment of multi-objective optimizers: The average runtime

attainment function -- A multi-objective strategy to allocate roadside units in a vehicular network with guaranteed levels of service -- An approach for the local exploration of discrete many objective optimization problems -- A note on the detection of outliers in a binary outranking relation -- Classifying meta-modeling methodologies for evolutionary multi-objective optimization: First results -- Weighted stress function method for multi-objective evolutionary algorithm based on decomposition -- Timing the decision support for real-world many-objective problems -- On the influence of altering the action set on PROMETHEE II's relative ranks -- Peek { Shape { Grab: a methodology in three stages for approximating the non-dominated points of multi-objective discrete combinatorial optimization problems with a multi-objective meta-heuristic -- A new reduced-length genetic representation for evolutionary multi-objective clustering -- A fast incremental BSP tree archive for non-dominated points -- Adaptive operator selection for many-objective optimization with NSGA-III -- On using decision maker preferences with ParEGO -- First investigations on noisy model-based multi-objective optimization -- Fusion of many-objective non-dominated solutions using reference points -- An expedition to multi-modal multi-objective optimization landscapes -- Neutral neighbors in Bi-objective optimization: Distribution of the most promising for permutation problems -- Multi-objective adaptation of a parameterized GVGAI agent towards several games -- Towards standardized and seamless integration of expert knowledge into multi-objective evolutionary optimization algorithms -- Empirical investigations of reference point based methods when facing a massively large number of objectives: First results -- Building and using an ontology of preference-based multi-objective evolutionary algorithms -- A fitness landscape analysis of pareto local search on Bi-objective permutation flow-shop scheduling problems -- Dimensionality reduction approach for many-objective vehicle routing problem with demand responsive transport -- Heterogeneous evolutionary swarms with partial redundancy solving multi-objective tasks -- Multiple meta-models for robustness estimation in multi-objective robust optimization -- Predator-Prey techniques for solving multi-objective scheduling problems for unrelated parallel machines -- An overview of weighted and unconstrained scalarizing functions -- Multi-objective representation setups for deformation-based design optimization -- Design perspectives of an evolutionary process for multi-objective molecular optimization -- Towards a better balance of diversity and convergence in NSGA-III: First results -- A comparative study of fast adaptive preference-guided evolutionary multi-objective optimization -- A population-based algorithm for learning a majority rule sorting model with coalitional veto -- Injection of extreme points in evolutionary multio-objective optimization algorithms -- The impact of population size, number of children, and number of reference points on the performance of NSGA-III -- Multi-objective optimization for liner shipping fleet repositioning -- Surrogate-assisted partial order-based evolutionary optimization -- Hyper-volume indicator gradient ascent multi-objective optimization -- Toward step-size adaptation in evolutionary multi-objective optimization -- Computing 3-D expected hyper-volume improvement and related integrals in asymptotically optimal time.

Sommario/riassunto

This book constitutes the refereed proceedings of the 9th International Conference on Evolutionary Multi-Criterion Optimization, EMO 2017 held in Münster, Germany in March 2017. The 33 revised full papers presented together with 13 poster presentations were carefully reviewed and selected from 72 submissions. The EMO 2017 aims to

discuss all aspects of EMO development and deployment, including theoretical foundations; constraint handling techniques; preference handling techniques; handling of continuous, combinatorial or mixed-integer problems; local search techniques; hybrid approaches; stopping criteria; parallel EMO models; performance evaluation; test functions and benchmark problems; algorithm selection approaches; many-objective optimization; large scale optimization; real-world applications; EMO algorithm implementations.