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Soggetti	Artificial intelligence Artificial Intelligence
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Nota di contenuto	-- Algorithm design. -- Towards an Efficient Innovation Path Seeking Algorithm Using Directed Domination. -- An MaOEA/Local Search Hybrid Based on a Fast, Stochastic BFGS Using Achievement Scalarizing Search Directions. -- Selective evaluations for expediting multi-objective bilevel optimization. -- MOAISDX: A New Multi-objective Artificial Immune System based on Decomposition. -- PAES-25: Local Search, Archiving and Multi/Many-objective PseudoBoolean Functions. -- Weights-Guided Random Bit Climber for Binary Many-objective Optimization. -- Bilevel Optimization-based Decomposition for Solving Single and Multi objective Optimization Problems. -- A Study on Optimistic & Pessimistic Pareto-fronts in Multi objective Bilevel Optimization via $\epsilon$ -Perturbation. -- Cumulative Step Size Adaptation for Adaptive SEMO in Integer Space. -- Adaptive Normal-Boundary Intersection Directions for Evolutionary Many objective Optimization

with Complex Pareto Fronts. -- Encodings for Multi-Objective Free-Form Coverage Path Planning. -- VBEA: Voting-Based Evolutionary Algorithm for Multi-Objective Planning. -- Enhancing NSGA-II with a Knee Point for Constrained Multi-objective Optimization. -- Benchmarking. -- Single and Multi-Objective Optimization Benchmark Problems Focusing on Human-Powered Aircraft Design. -- An Extension of the Welded Beam Problem that Includes Multiple Interactng Design Concepts. -- Extended Results on Analytical Hypervolume Indicator Calculation of Linear and Quadratic Pareto Fronts. -- MO-IOHinspector: Anytime Benchmarking of Multi-Objective Algorithms using IOH profiler. -- Applications. -- Multi-Objective Sequential Decision Making for Holistic Supply Chain Optimization. -- Interactive evolutionary re optimization for ground fish survey planning. -- A Multi-Objective Competitive Co-Evolutionary Framework with Progressive Shrinking for Wargame Scenarios. -- -- Impact of Environmental Changes on Optimized Robotics Collective Motion for Multi-Objective Coverage Tasks.

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#### Sommario/riassunto

This two-volume set LNCS 15512-15513 constitutes the proceedings of the 13th International Conference on Evolutionary Multi-Criterion Optimization, EMO 2025, held in Canberra, ACT, Australia, in March 2025. The 38 full papers and 2 extended abstracts presented in this book were carefully reviewed and selected from 63 submissions. The papers are divided into the following topical sections: Part I : Algorithm design; Benchmarking; Applications. Part II : Algorithm analysis; Surrogates and machine learning; Multi-criteria decision support.

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