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Nota di contenuto	Call-Based Dynamic Programming for the Precedence Constrained Line Traveling Salesman -- Stable Roommates and Constraint Programming -- Detecting and Exploiting Permutation Structures in MIPs -- Solving the Quorumcast Routing Problem as a Mixed Integer Program -- A New MIP Model for Parallel-Batch Scheduling with Non-identical Job Sizes -- Mining (Soft-) Skypatterns Using Dynamic CSP -- Modelling with Option Types in MiniZinc -- Interactive Design of Sustainable Cities with a Distributed Local Search Solver -- Sliced Table Constraints: Combining

Compression and Tabular Reduction -- The PrePack Optimization Problem -- An Integrated Constraint Programming Approach to Scheduling Sports Leagues with Divisional and Round-Robin Tournaments -- Local Search for a Cargo Assembly Planning Problem -- A Logic Based Benders' Approach to the Concrete Delivery Problem -- Evaluating CP Techniques to Plan Dynamic Resource Provisioning in Distributed Stream Processing -- Disregarding Duration Uncertainty in Partial Order Schedules? Yes, We Can -- An Exact Branch and Bound Algorithm with Symmetry Breaking for the Maximum Balanced Induced Biclique Problem -- Domain k-Wise Consistency Made as Simple as Generalized Arc Consistency -- Representative Encodings to Translate Finite CSPs into SAT -- SAT and Hybrid Models of the Car Sequencing Problem -- Continuously Degrading Resource and Interval Dependent Activity Durations in Nuclear Medicine Patient Scheduling -- Cost Impact Guided LNS -- Proteus: A Hierarchical Portfolio of Solvers and Transformations -- Buffered Resource Constraint: Algorithms and Complexity -- Combining Discrete Ellipsoid-Based Search and Branch-and-Cut for Binary Quadratic Programming Problems -- Parallel Combinatorial Optimization with Decision Diagrams -- A Portfolio Approach to Enumerating Minimal Correction Subsets for Satisfiability Problems -- Parallel Depth-Bounded Discrepancy Search -- Self-splitting of Workload in Parallel Computation -- The Markov Transition Constraint -- New Lower Bounds on the Number of Vehicles for the Vehicle Routing Problem with Time Windows -- Constrained Clustering Using Column Generation -- A Constraint Programming-Based Column Generation Approach for Operating Room Planning and Scheduling -- Dynamic Controllability and Dispatchability Relationships.

Sommario/riassunto

This book constitutes the proceedings of the International Conference on the Integration of Artificial Intelligence (AI) and Operations Research (OR) Techniques in Constraint Programming, CPAIOR 2014, held in Cork, Ireland, in May 2014. The 33 papers presented in this volume were carefully reviewed and selected from 70 submissions. The papers focus on constraint programming and global constraints; scheduling modelling; encodings and SAT logistics; MIP; CSP and complexity; parallelism and search; and data mining and machine learning.