1.	Record Nr.	UNINA9910427717503321
	Titolo	Principles and practice of constraint programming : 26th International Conference, CP 2020 : Louvain-la-Neuve, Belgium, September 7-11, 2020 : proceedings / / Helmut Simonis (editor)
	Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2020] ©2020
	ISBN	3-030-58475-5
	Edizione	[1st ed. 2020.]
	Descrizione fisica	1 online resource (XV, 972 p. 532 illus., 140 illus. in color.)
	Collana	Programming and Software Engineering ; ; 12333
	Disciplina	005.11
	Soggetti	Constraint programming (Computer science)
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	Technical Track -- Dashed strings and the replace(-all) constraint -- Combinatorial Search in CP-Based Iterated Belief Propagation -- Replication-Guided Enumeration of Minimal Unsatisfiable Subsets -- Solving Satisfaction Problems using Large-Neighbourhood Search -- Quantum-accelerated global constraint ltering -- Pure MaxSAT and Its Applications to Combinatorial Optimization via Linear Local Search -- Tractable Fragments of Temporal Sequences of Topological Information -- Strengthening neighbourhood substitution -- Effective Encodings of Constraint Programming Models to SMT -- Watched Propagation of 0-1 Integer Linear Constraints -- Bounding Linear Programs by Constraint Propagation: Application to Max-SAT -- On Relation Between Constraint Propagation and Block-Coordinate Descent in Linear Programs -- DPMC: Weighted Model Counting by Dynamic Programming on Project-Join Trees -- Aggregation and Garbage Collection for Online Optimization -- Treewidth-Aware Quantifier Elimination and Expansion for QCSP -- A Time Leap Challenge for SAT-Solving -- Breaking Symmetries with RootClique and LexTopsort -- Towards Faster Reasoners by using Transparent Huge Pages -- The argmax constraint -- A branch-and-bound algorithm to rigorously enclose the round-off errors -- Certifying Solvers for Clique and Maximum Common (Connected) Subgraph Problems -- Solving the Group Cumulative Scheduling Problem with CPO and ACO -- Phase

Transition Behaviour in Knowledge Compilation -- A Faster Exact Algorithm to Count X3SAT Solutions -- Visualizations to Summarize Search Behavior -- Parallelization of TSP solving in CP -- Using Resolution Proofs to Analyse CDCL Solvers -- Large Neighborhood Search for Temperature Control with Demand Response -- Core-Guided Model Reformulation -- Filtering rules for ow time minimization in a Parallel Machine Scheduling Problem -- MaxSAT-Based Postprocessing for Treedepth -- Effective Perturbations for Constraint Solving -- Finding the Hardest Formulas for Resolution -- HADDOCK: A Language and Architecture for Decision Diagram Compilation -- Towards a Generic Interval Solver for Differential-Algebraic CSP -- abstractXOR: A global constraint dedicated to differential cryptanalysis -- In Pursuit of an Efficient SAT Encoding for the Hamiltonian Cycle Problem -- Application Track -- Leveraging Reinforcement Learning, Constraint Programming and Local Search: A Case Study in Car Manufacturing -- Computing the Local Aromaticity of Benzenoids Thanks to Constraint Programming -- Using Constraint Programming to Generate Benzenoid Structures in Theoretical Chemistry -- RobTest: A CP Approach to Generate Maximal Test Trajectories for Industrial Robots -- A Two-Phase Constraint Programming Model for Examination Timetabling at University College Cork -- Exact Approaches to the Multi-Agent Collective Construction Problem -- The Confidence Constraint: A Step Towards Stochastic CP Solvers -- Parity (XOR) Reasoning for the Index Calculus Attack -- Constraint-Based Software Diversification for Efficient Mitigation of Code-Reuse Attacks -- CP and Data Science and Machine Learning -- Pushing data into CP models using Graphical Model Learning and Solving -- Generating Random Logic Programs Using Constraint Programming -- Towards Formal Fairness in Machine Learning -- Verifying Equivalence Properties of Neural Networks with ReLU Activation Functions -- Learning the Satisfiability of Pseudo-Boolean Problem with Graph Neural Networks -- A Machine Learning based Splitting Heuristic for Divide-and-Conquer Solvers -- Theoretical and Experimental Results for Planning with Learned Binarized Neural Network Transition Models -- Omissions in Constraint Acquisition -- Computing Optimal Decision Sets with SAT.

| Sommario/riassunto | This book constitutes the proceedings of the 26th International Conference on Principles and Practice of Constraint Programming, CP 2020, held in Louvain-la-Neuve, Belgium, in September 2020. The conference was held virtually due to the COVID-19 pandemic. The 55 full papers presented in this volume were carefully reviewed and selected from 122 submissions. They deal with all aspects of computing with constraints including theory, algorithms, environments, languages, models, systems, and applications such as decision making, resource allocation, scheduling, configuration, and planning. The papers were organized according to the following topics/tracks: technical track; application track; and CP and data science and machine learning. |