Record Nr. UNINA9910551843303321 Frontiers of Algorithmics: International Joint Conference, IJTCS-FAW **Titolo** 2021, Beijing, China, August 16-19, 2021, Proceedings / / edited by Jing Chen, Minming Li, Guochuan Zhang Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2022 **ISBN** 3-030-97099-X Edizione [1st ed. 2022.] Descrizione fisica 1 online resource (102 pages) Collana Theoretical Computer Science and General Issues, , 2512-2029;; 12874 005.1 Disciplina 004 Soggetti Computer science - Mathematics Discrete mathematics Numerical analysis Data structures (Computer science) Information theory Computer engineering Computer networks Software engineering Algorithms Discrete Mathematics in Computer Science **Numerical Analysis** Data Structures and Information Theory Computer Engineering and Networks Software Engineering Design and Analysis of Algorithms Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Insights from the Conscious Turing Machine (CTM) -- Speculative Smart Nota di contenuto Contracts -- Optimization from Structured Samples—An Effective

Approach for Data-Driven Optimization -- Recent Developments in Property Testing of Boolean Functions -- AC0 Circuits, First-Order

Logic, and Well-Structured graphs -- Model-Based Digital Engineering and Verification of Intelligent Systems -- Tight Online Algorithms for Unrelated Machine Load Balancing with Predictions -- Fast Sampling Constraint Satisfaction Solutions via the Lovász Local Lemma -- Pool Block Withholding Attack with Rational Miners -- Approximation Algorithms for the Directed Path Partition Problems -- Faster Algorithms for k-Subset Sum and variations -- Hardness and Algorithms for Electoral Manipulation under Media Influence -- Improved Approximation Algorithms for Multiprocessor Scheduling with Testing.

Sommario/riassunto

This book constitutes the proceedings of the 15th International Workshop on Frontiers in Algorithmics, FAW 2021, held in conjunction with second International Joint Conference on Theoretical Computer Science (IJTCS 2021), as IJTCS-FAW 2021, in Beijing, China, in August 2021. The conference IJTCS-FAW 2021 was held in hybrid mode due to the COVID-19 pandemic. The 5 full papers presented in this volume were carefully reviewed and selected from 9 submissions. The joint conference provides a focused forum on Algorithmic Game Theory, Blockchain, Multi-agent Reinforcement Learning, Quantum Computation, Theory of Machine Learning, Machine Learning, Formal Method, Algorithm and Complexity, and EconCS.