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Descrizione fisica	1 online resource (xv, 522 pages) : illustrations (chiefly color)
Collana	Lecture Notes on Data Engineering and Communications Technologies, , 2367-4520 ; ; 140
Disciplina	005.1
Soggetti	Computational intelligence Machine learning Algorithms Computational Intelligence Machine Learning
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	COVID-19 Chest X-rays Classification through The Fusion of Deep Transfer Learning and Machine Learning Methods -- Quantitative and Qualitative Analysis of Harmony Search Algorithm in Geomechanics and its Applications -- The Robustness of Tuned Liquid Dampers Optimized via Metaheuristic Methods -- Hybrid Generalized Normal Distribution Optimization with Sine Cosine Algorithm for Global Optimization -- Sensivity analysis on Structural Optimization using Jaya Algorithm -- Upgrading urban drainage systems for extreme rainfall events using multi-objective optimization: Case study of Tan Hoa-Lo Gom drainage catchment, HCMC, Vietnam -- Comparative Study on Optimization of Cantilever Retaining Walls via Several Metaheuristics -- Optimal Solving of Uninhabited Combat Air Vehicle Path Planning Using Neural Network Algorithm -- Cost Optimization and Comparison of Rectangular Cross-Section Reinforced Concrete Beams Using TS500, Eurocode 2 and ACI 318 code -- Training Neural Networks with Lévy Flight Distribution Algorithm -- Pressure Management in Water Distribution Networks Using Optimal Locating and Operating of Pressure Reducing Valves -- The Optimal Location and Dimensions of Flood Control Detention Dams

at Kan River Basin, Tehran, Iran -- Minimization the CO2 Emission for Optimum Design of T-Shape Reinforced Concrete (RC) Beam -- Prediction of Minimum CO2 Emission for Rectangular Shape Reinforced Concrete (RC) Beam -- A generative adversarial approach for detecting malware in Android applications using Deep learning.

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#### Sommario/riassunto

The book covers different aspects of real-world applications of optimization algorithms. It provides insights from the Seventh International Conference on Harmony Search, Soft Computing and Applications held at Virtual Conference, Seoul, South Korea, in February 2022. Harmony search (HS) is one of the most popular metaheuristic algorithms, developed in 2001 by Prof. Joong Hoon Kim and Prof. Zong Woo Geem, that mimics the improvisation process of jazz musicians to seek the best harmony. The book consists of research articles on novel and newly proposed optimization algorithms; the theoretical study of nature-inspired optimization algorithms; numerically established results of nature-inspired optimization algorithms; and real-world applications of optimization algorithms and synthetic benchmarking of optimization algorithms.

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