Record Nr. UNISA996508670803316 Artificial Intelligence and Soft Computing [[electronic resource]]: 21st **Titolo** International Conference, ICAISC 2022, Zakopane, Poland, June 19–23. 2022, Proceedings, Part I / / edited by Leszek Rutkowski, Rafa Scherer, Marcin Korytkowski, Witold Pedrycz, Ryszard Tadeusiewicz, Jacek M. Zurada Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2023 3-031-23492-8 **ISBN** Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (449 pages) Lecture Notes in Artificial Intelligence, , 2945-9141; ; 13588 Collana Disciplina 006.3 Soggetti Artificial intelligence Numerical analysis Algorithms Computer networks Social sciences—Data processing Education—Data processing Artificial Intelligence **Numerical Analysis** Design and Analysis of Algorithms Computer Communication Networks Computer Application in Social and Behavioral Sciences Computers and Education Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto Neural Networks and Their Applications -- A fast learning algorithm for the multilayer neural network -- A new computational approach to the Levenberg-Marquardt learning algorithm -- Training subjective perception biased images of vehicle ambient lights with deep belief networks using backpropagation- and enforcing-rules supervised --An Empirical Study of Adversarial Domain Adaptation on Time Series

Data -- Human-Al-Collaboration to increase the perception of VR --

Portfolio Transformer for Attention-Based Asset Allocation -- Transfer Learning with Deep Neural Embeddings for Music Classification Tasks -- Analysis and detection of DDoS Backscatter using NetFlow data, hyperband-optimised DeepLearning and explainability techniques --BiLSTM deep learning model for heart problems detection -- Short Texts Representations for Legal Domain Classification -- Synthetic slowness shear well-logs prediction using supervised machine learning models -- ARIMA for Short-Term and LSTM for Long-Term in Daily Bitcoin Price Prediction -- Multi-objective Bayesian Optimization for Neural Architecture Search -- Multilayer Perceptrons with Banach-like Perceptrons Based on Semi-Inner Products – About Approximation Completeness -- Fuzzy Systems and Their Applications -- Similarity Fuzzy Semantic Networks and Inference. An application to analysis of radical discourse in Twitter -- An Application of Information Granules to Detect Anomalies in COVID-19 Reports -- Type-2 fuzzy classifier with smooth type-reduction -- Evolutionary Algorithms and Their Applications -- A multi-population-based algorithm with different ways of subpopulations cooperation -- Automated Design of Dynamic Heuristic Set Selection for Cross-Domain Selection Hyper-Heuristics --Evolutionary Approach to Melodic Line Harmonization -- Using Automatic Programming to Improve Gradient Boosting for Classification -- Forced Movement Extensions of the Particle Swarm Optimizers with Inertia Weight -- LQ-R-SHADE: R-SHADE with quadratic surrogate model -- Pattern Classification -- Overload Monitoring System Using Sound Analysis for Electrical Machines -- Employing Convolutional Neural Networks for Continual Learning -- Explaining Machine Learning Predictions In Botnet Detection -- Learning Functional Descriptors Based on the Bernstein Polynomials - Preliminary Studies -- Artificial Intelligence in Modeling and Simulation -- Multiscale Multifractal Detrended Analysis of Speculative Attacks Dynamics in Cryptocurrencies -- A Heuristic Repair Algorithm for the Hospitals/Residents problem with Ties -- The Impact of Data Preprocessing on Prediction Effectiveness -- Convergence of RBF Networks Regression Function Estimates and Classifiers -- A Comparative Study of Genetic Programming Variants -- Optimization of Parameterized Behavior Trees in RTS Games -- Using Answer Set Programming to Improve Sensor Network Lifetime -- Spectroscopy-Based Prediction of In Vitro Dissolution Profile Using Random Decision Forests -- Validation of Labelling Algorithms for Abstract Argumentation Frameworks: The Case of Listing Stable Extensions.

Sommario/riassunto

The two-volume set LNAI 13588 and 13589 constitutes the refereed post-conference proceedings of the 21st International Conference on Artificial Intelligence and Soft Computing, ICAISC 2022, held in Zakopane, Poland, during June 19–23, 2022. The 69 revised full papers presented in these proceedings were carefully reviewed and selected from 161 submissions. The papers are organized in the following topical sections: Volume I: Neural networks and their applications; fuzzy systems and their applications; evolutionary algorithms and their applications; pattern classification; artificial intelligence in modeling and simulation. Volume II: Computer vision, image and speech analysis; data mining; various problems of artificial intelligence; bioinformatics, biometrics and medical applications.