1.	Record Nr.	UNINA9910483136203321
	Titolo	Applications of Evolutionary Computation : 24th International Conference, EvoApplications 2021, Held as Part of EvoStar 2021, Virtual Event, April 7–9, 2021, Proceedings / / edited by Pedro A. Castillo, Juan Luis Jiménez Laredo
	Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
	ISBN	3-030-72699-1
	Edizione	[1st ed. 2021.]
	Descrizione fisica	1 online resource (836 pages) : illustrations
	Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 12694
	Disciplina	005.1
	Soggetti	Computer science
		Computers
		Education—Data processing
		Computer networks
		Computers, Special purpose
		Computer systems
		Theory of Computation
		Computing Milieux
		Computers and Education
		Computer Communication Networks
		Special Purpose and Application-Based Systems
		Computer System Implementation
		Computació evolutiva
		Congressos
		Llibres electrònics
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	On Restricting Real-Valued Genotypes in Evolutionary Algorithms -- Towards Explainable Exploratory Landscape Analysis: Extreme Feature Selection for Classifying BBOB Functions -- Co-Optimising Robot Morphology and Controller in a Simulated Open-ended Environment --

Multi-objective workforce allocation in construction projects -- Generating Duplex Routes for Robust Bus Transport Network by Improved Multi-objective Evolutionary Algorithm based on Decomposition -- Combining Multi-objective Evolutionary Algorithms with deep generative models towards focused molecular design -- A Multi-Objective Evolutionary Algorithm Approach for Optimizing Part Quality Aware Assembly Job Shop Scheduling Problems -- Evolutionary Grain-Mixing to Improve Profitability in Farming Winter Wheat -- Automatic Modular Design of Behavior Trees for Robot Swarms with Communication Capabilites -- Salp Swarm Optimization Search Based Feature Selection for Enhanced Phishing Websites Detection -- Real Time Optimisation of Traffic Signals to Prioritise Public Transport -- Adaptive Covariance Pattern Search -- Evaluating the Success-History based Adaptive Differential Evolution in the Protein Structure Prediction problem -- Beyond Body Shape and Brain: Evolving the Sensory Apparatus of Voxel-based Soft Robots -- Desirable Objective Ranges in Preference-based Evolutionary Multiobjective Optimization -- Improving Search Efficiency and Diversity of Solutions in Multiobjective Binary Optimization by Using Metaheuristics plus Integer Linear Programming -- Automated, Explainable Rule Extraction from MAP-Elites archives -- EDM-DRL: Toward Stable Reinforcement Learning through Ensembled Directed Mutation -- Continuous Ant-Based Neural Topology -- Playing with Dynamic Systems - Battling Swarms in Virtual Reality -- EvoCraft: A New Challenge for Open-Endedness -- A Profile-Based 'GrEvolutionary' Hearthstone Agent -- Modelling Asthma Patients' Responsiveness to Treatment Using Feature Selection and Evolutionary Computation -- Bayesian Networks for Mood Prediction Using Unobtrusive Ecological Momentary Assessments -- A Multi-Objective Multi-Type Facility Location Problem for the Delivery of Personalised Medicine -- RDE-OP: A Region-Based Differential Evolution Algorithm Incorporation Opposition-Based Learning for Optimising the Learning Process of Multi-Layer Neural Networks -- Estimation of Grain-level Residual Stresses in a Quenched Cylindrical Sample of Aluminum Alloy AA5083 using Genetic Programming -- EDA-based optimization of blow-off valve positions for centrifugal compressor systems -- 3D-2D Registration using X-ray Simulation and CMA-ES -- Lateralized Approach for Robustness AgainstAttacks in Emotion Categorization from Images -- Improved Crowding Distance in Multi-objective Optimization for Feature Selection in Classification -- Deep Optimisation: Multi-Scale Evolution by Inducing and Searching in Deep Representations -- Evolutionary Planning in Latent Space -- Utilizing the Untapped Potential of Indirect Encoding for Neural Networks with Meta Learning -- Effective Universal Unrestricted Adversarial Attacks using a MOE Approach -- Improving Distributed Neuroevolution Using Island Extinction and Repopulation -- An Experimental Study of Weight Initialization and Lamarckian Inheritance on Neuroevolution -- Towards Feature-Based Performance Regression Using Trajectory Data -- Demonstrating the Evolution of GANs through t-SNE -- Optimising diversity in classifier ensembles of classification trees -- WILDA: Wide Learning of Diverse Architectures for Classification of Large Datasets -- Evolving Character-Level DenseNet Architectures using Genetic Programming -- Transfer Learning for Automated Test Case Prioritization using XCSF -- On the Effects of Absumption for XCS with Continuous-Valued Inputs -- A NEAT Visualisation of Neuroevolution Trajectories -- Evaluating Models with Dynamic Sampling Holdout -- Event-driven multi-algorithm optimization: mixing Swarm and Evolutionary strategies -- TensorGP – Genetic Programming Engine in TensorFlow -- A novel evolutionary

approach for IoT-based water contaminant detection -- Evolutionary Algorithms for Roughness Coefficient Estimation in River Flow Analyses -- EA-based ASV Trajectory Planner for Pollution Detection in Lentic Waters.

Sommario/riassunto	This book constitutes the refereed proceedings of the 24th International Conference on Applications of Evolutionary Computation, EvoApplications 2021, held as part of Evo*2021, as Virtual Event, in April 2021, co-located with the Evo*2021 events EuroGP, EvoCOP, and EvoMUSART. The 51 revised full papers presented in this book were carefully reviewed and selected from 78 submissions. The papers cover a wide spectrum of topics, ranging from applications of evolutionary computation; applications of deep bioinspired algorithms; soft computing applied to games; machine learning and AI in digital healthcare and personalized medicine; evolutionary computation in image analysis, signal processing and pattern recognition; evolutionary machine learning; parallel and distributed systems; and applications of nature inspired computing for sustainability and development.