

1. Record Nr.	UNISA996418220303316
Titolo	Applications of Evolutionary Computation [[electronic resource]] : 23rd European Conference, EvoApplications 2020, Held as Part of EvoStar 2020, Seville, Spain, April 15–17, 2020, Proceedings // edited by Pedro A. Castillo, Juan Luis Jiménez Laredo, Francisco Fernández de Vega
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-43722-1
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (xvii, 704 pages) : illustrations (some colour)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 12104
Disciplina	005.432
Soggetti	Computer science Computer networks Computer systems Computers Education—Data processing Theory of Computation Computer Communication Networks Computer System Implementation Computing Milieux Computers and Education
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Applications of Evolutionary Computation -- A Local Search for Numerical Optimisation based on Covariance Matrix Diagonalisation -- EvoCluster: An Open-Source Nature-Inspired Optimization Clustering Framework in Python -- Optimizing the Hyperparameters of a Mixed Integer Linear Programming Solver to Speed Up Electric Vehicle Charging Control -- Automatic rule extraction from access rules using Genetic Programming -- Search Trajectory Networks of Population-based Algorithms in Continuous Spaces -- Evolving-controllers versus learning-controllers for morphologically evolvable robots -- Simulation-driven multi-objective evolution for traffic light

optimization -- Automatic Generation of Adversarial Metamorphic Malware Using MAP-Elites -- EvoDynamic: a framework for the evolution of generally represented dynamical systems and its application to criticality -- A Decomposition-Based Evolutionary Algorithm with Adaptive Weight Vectors for Multi- and Many-objective Optimization -- Differential Evolution Multi-Objective for Tertiary Protein Structure Prediction -- Particle Swarm Optimization: A Wrapper-based Feature Selection Method for Ransomware Detection and Classification -- A method for estimating the computational complexity of multimodal functions -- Locating Odour Sources with Geometric Syntactic Genetic Programming -- Designing cable-stayed bridges with Genetic Algorithms -- A fast, scalable meta-heuristic for network slicing under traffic uncertainty -- What is Your MOVE: Modeling Adversarial Network Environments -- Using evolution to design modular robots: An empirical approach to select module designs -- Iterated Granular Neighborhood Algorithm for the Taxi Sharing Problem -- Applications of Bio-inspired techniques on Social Networks -- Multiobjective Optimization of a Targeted Vaccination Scheme in the Presence of Non-diagnosed Cases -- Community Detection in Attributed Graphs with Differential Evolution -- Applications of Deep Bioinspired Algorithms -- Fake news detection using time series and user features classification -- Social Learning vs Self-teaching in a Multi-agent Neural Network System -- Evolving Instinctive Behaviour in Resource-Constrained Autonomous Agents Using Grammatical Evolution -- An Adversarial Optimization Approach for the Development of Robust Controllers -- Soft Computing Applied to Games -- Efficient Heuristic Policy Optimisation for a Challenging Strategic Card Game -- Finding Behavioural Patterns Among League of Legends Players Through Hidden Markov Models -- Learning the Designer's Preferences to Drive Evolution -- Testing hybrid computational intelligence algorithms for general game playing -- Evolutionary Computation in Digital Healthcare and Personalized Medicine -- Accelerated Design of HIFU Treatment Plans Using Island-based Evolutionary Strategy -- Using Genetic Algorithms for the prediction of cognitive impairments -- Short and Medium Term Blood Glucose Prediction using Multi-Objective Grammatical Evolution -- Evolutionary Machine Learning -- A Greedy Iterative Layered Framework for Training Feed Forward Neural Networks -- Evolution of Scikit-Learn Pipelines with Dynamic Structured Grammatical Evolution -- An Empirical Exploration of Deep Recurrent Connections Using Neuro-Evolution -- Using Skill Rating as Fitness on the Evolution of GANs -- A Local Search with a Surrogate Assisted Option for Instance Reduction -- Evolutionary Latent Space Exploration of Generative Adversarial Networks -- Neuro-Evolutionary Transfer Learning through Structural Adaptation -- Ant-based Neural Topology Search (ANTS) for Optimizing Recurrent Networks -- Parallel and Distributed Systems -- A MIMD interpreter for Genetic Programming -- Security Risk Optimization for Multi-Cloud Applications -- Using evolutionary algorithms for server hardening via the moving target defense technique -- An Event-based Architecture for Cross-Breed Multi-population Bio-inspired Optimization Algorithms.

Sommario/riassunto

This book constitutes the refereed proceedings of the 23rd European Conference on Applications of Evolutionary Computation, EvoApplications 2020, held as part of Evo*2020, in Seville, Spain, in April 2020, co-located with the Evo*2020 events EuroGP, EvoMUSART and EvoCOP. The 44 full papers presented in this book were carefully reviewed and selected from 62 submissions. The papers cover a wide spectrum of topics, ranging from applications of bio-inspired

techniques on social networks, evolutionary computation in digital healthcare and personalized medicine, soft-computing applied to games, applications of deep-bioinspired algorithms, parallel and distributed systems, and evolutionary machine learning.
