

1. Record Nr.	UNISA996465766503316
Titolo	Applications of Evolutionary Computing [[electronic resource]] : EvoWorkshop 2003: EvoBIO, EvoCOP, EvoIASP, EvoMUSART, EvoROB, and EvoSTIM, Essex, UK, April 14-16, 2003, Proceedings / / edited by Günther Raidl, Stefano Cagnoni, Juan J. Romero Cardalda, David W. Corne, Jens Gottlieb, Agnes Guillot, Emma Hart, Colin G. Johnson, Elena Marchiori, Jean-Arcady Meyer, Martin Middendorf
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Descrizione fisica	1 online resource (XXI, 708 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 2611
Disciplina	006.3
Soggetti	Computers Computer programming Algorithms Computer science—Mathematics Artificial intelligence Optical data processing Theory of Computation Programming Techniques Algorithm Analysis and Problem Complexity Discrete Mathematics in Computer Science Artificial Intelligence Computer Imaging, Vision, Pattern Recognition and Graphics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	EvoBIO Contributions -- Artificial Immune System for Classification of Cancer -- Pattern Search in Molecules with FANS: Preliminary Results -- Applying Memetic Algorithms to the Analysis of Microarray Data -- Gene Network Reconstruction Using a Distributed Genetic Algorithm with a Backprop Local Search -- Promoter Prediction with a GP- Automaton -- Chromosomal Breakpoint Detection in Human Cancer --

Discovering Haplotypes in Linkage Disequilibrium Mapping with an Adaptive Genetic Algorithm -- Genetic Algorithms for Gene Expression Analysis -- Comparison of AdaBoost and Genetic Programming for Combining Neural Networks for Drug Discovery -- Cross Validation Consistency for the Assessment of Genetic Programming Results in Microarray Studies -- Algorithms for Identification Key Generation and Optimization with Application to Yeast Identification -- Generalisation and Model Selection in Supervised Learning with Evolutionary Computation -- EvoCOP Contributions -- Genetic Algorithms on NK-Landscapes: Effects of Selection, Drift, Mutation, and Recombination -- Multilevel Heuristic Algorithm for Graph Partitioning -- Experimental Comparison of Two Evolutionary Algorithms for the Independent Set Problem -- New Ideas for Applying Ant Colony Optimization to the Probabilistic TSP -- An Experimental Comparison of Two Different Encoding Schemes for the Location of Base Stations in Cellular Networks -- Landscape State Machines: Tools for Evolutionary Algorithm Performance Analyses and Landscape/Algorithm Mapping -- Constrained Coverage Optimisation for Mobile Cellular Networks -- Combinations of Local Search and Exact Algorithms -- On Confidence Intervals for the Number of Local Optima -- Searching for Maximum Cliques with Ant Colony Optimization -- A Study of Greedy, Local Search, and Ant Colony Optimization Approaches for Car Sequencing Problems -- Evolutionary Computing for the Satisfiability Problem -- Guiding Single-Objective Optimization Using Multi-objective Methods -- A Genetic Algorithm for the Index Selection Problem -- A Template Approach to Producing Incremental Objective Cost Functions for Local Search Meta-heuristics -- Analyzing a Unified Ant System for the VRP and Some of Its Variants -- Adapting to Complexity During Search in Combinatorial Landscapes -- Search Space Analysis of the Linear Ordering Problem -- Ant Algorithms for the University Course Timetabling Problem with Regard to the State-of-the-Art -- EvolASP Contributions -- Multiple Genetic Snakes for Bone Segmentation -- Mobile Robot Sensor Fusion Using Flies -- Anticipating Bankruptcy Reorganisation from Raw Financial Data Using Grammatical Evolution -- GAME-HDL: Implementation of Evolutionary Algorithms Using Hardware Description Languages -- Evolutionary Approach to Discovery of Classification Rules from Remote Sensing Images -- Hybrid Evolution Strategy-Downhill Simplex Algorithm for Inverse Light Scattering Problems -- Accurate L-Corner Measurement Using USEF Functions and Evolutionary Algorithms -- On Two Approaches to Image Processing Algorithm Design for Binary Images Using GP -- Restoration of Old Documents with Genetic Algorithms -- The Effectiveness of Cost Based Subtree Caching Mechanisms in Typed Genetic Programming for Image Segmentation -- Pixel Statistics and False Alarm Area in Genetic Programming for Object Detection -- EvoMUSART Contributions -- The Emergence of Social Learning in Artificial Societies -- Tabula Rasa: A Case Study in Evolutionary Curation -- MusicBlox: A Real-Time Algorithmic Composition System Incorporating a Distributed Interactive Genetic Algorithm -- Towards a Prehistory of Evolutionary and Adaptive Computation in Music -- ArtiE-Fract: The Artist's Viewpoint -- Evolutionary Music and the Zipf-Mandelbrot Law: Developing Fitness Functions for Pleasant Music -- Genophone: Evolving Sounds and Integral Performance Parameter Mappings -- Genetic Improvisation Model A Framework for Real-Time Performance Environments -- On the Development of Critics in Evolutionary Computation Artists -- Genetic Algorithms for the Generation of Models with Micropopulations -- EvoROB Contributions -- Evolution of Collective Behavior in a Team of Physically Linked Robots -- Exploring the T-Maze: Evolving

Learning-Like Robot Behaviors Using CTRNNs -- Competitive Co-evolution of Predator and Prey Sensory-Motor Systems -- Evolving Spiking Neuron Controllers for Phototaxis and Phonotaxis -- Evolving Neural Networks for the Control of a Lenticular Blimp -- Evolving Symbolic Controllers -- Evolving Motion of Robots with Muscles -- Behavioural Plasticity in Autonomous Agents: A Comparison between Two Types of Controller -- EvoSTIM Contributions -- DNA Based Algorithms for Some Scheduling Problems -- Learning Action Strategies for Planning Domains Using Genetic Programming -- Routing Using Evolutionary Agents and Proactive Transactions.

Sommario/riassunto

This book constitutes the joint refereed proceedings of six workshops, EvoWorkshops 2003, held together with EuroGP 2003 in Essex, UK in April 2003. The 63 revised full papers presented were carefully reviewed and selected from a total of 109 submissions. In accordance with the six workshops covered, the papers are organized in topical sections on bioinformatics, combinatorial optimization, image analysis and signal processing, evolutionary music and art, evolutionary robotics, and scheduling and timetabling.

2. Record Nr.

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Titolo

Dynamics of disasters : impact, risk, resilience, and solutions // Ilias S. Kotsireas [and three others], editors

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Collana

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Soggetti

Emergency management
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Lingua di pubblicazione

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Formato

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Livello bibliografico

Monografia

Nota di bibliografia

Includes bibliographical references.

Preface -- DEA for the Assessment of Regions Ability to Cope with Disasters (F. Aleskerov, S. Demin) -- Perishable Food Supply Chain Networks with Labor in the Covid-19 Pandemic (A. Nagurney) -- Capacitated Human Migration Networks and Subsidization (A. Nagurney, P. Daniele, G. Cappello) -- Drone Routing for Post-disaster Damage Assessment (B. Adsanver, E. Coban, B. Balcik) -- A simulation model for the Analysis of the consequences of extreme weather conditions to the traffic status of the city of Thessaloniki, Greece (G. Tsaples, J.M.S. Grau, G. Aifadopoulou, P. Tzenos) -- The Crisis Classification component to strengthen the early warning, risk assessment and decision support in extreme climate events -- (G. Antzoulatos, A. Karakostas, S. Vrochidis, I. Kompatsiaris) -- Toward Decentralized Decision Making for Interdependent Infrastructure Network Resilience (B. Cilalia, N. Ghorbani-Renania, K. Barkera, A.D. González) -- Natural disasters and their impact on business units: The Greek case (J.A. Mpekiaris, G.D. Tsiotras) -- Land Property Data Logging on Blockchain Ledger (S. Papangelou, Z.A. Charalampidis) -- A General Framework and Control Theoretic Approach for Adaptive Interactive Learning Environments (A. Streicher, R. Schonbein, S.W. Pickl) -- Disaster Preparedness at the Municipality Level: A Scenario-Based Multi-stage Measurement Methodology (M. Ghazanfari, M. Hakimifar, T. Wakolbinger, F. Toyasaki) -- Wavelets in multiscale time series analysis: an application to seismic data? (S. Corsaro, P. L. De Angelis, U. Fiore, Z. Marino, F. Perla, M. Pietroluongo) -- Effectiveness of investments in prevention of geological disasters? (U. Fiore, Z. Marino, F. Perla, M. Pietroluongo, S. Scognamiglio, P. Zanetti) -- Universal Maximum Flow with Intermediate Storage for Evacuation Planning (U. Pyakurel, S. Dempe) -- Development of Flood Disaster Prevention Simulation Smartphone Application Using Gamification (Y. Matsuno, F. Fukanuma, S. Tsuruoka) -- Cyber Crises and Disaster Preparation in Austria: A Survey of Research Projects (B. Garn, K. Kieseberg, D. Schreiber, D.E. Simos).

Sommario/riassunto

Based on the "Fourth International Conference on Dynamics of Disasters" (Kalamata, Greece, July 2019), this volume includes contributions from experts who share their latest discoveries on natural and unnatural disasters. Authors provide overviews of the tactical points involved in disaster relief, outlines of hurdles from mitigation and preparedness to response and recovery, and uses for mathematical models to describe natural and man-made disasters. Topics covered include economics, optimization, machine learning, government, management, business, humanities, engineering, medicine, mathematics, computer science, behavioral studies, emergency services, and environmental studies will engage readers from a wide variety of fields and backgrounds.