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Nota di contenuto	Convergence of the IGO-Flow of Isotropic Gaussian Distributions on Convex Quadratic Problems / Tobias Glasmachers -- Homogeneous and Heterogeneous Island Models for the Set Cover Problem / Andrea Mambrini, Dirk Sudholt and Xin Yao -- Geometric Semantic Genetic Programming / Alberto Moraglio, Krzysztof Krawiec and Colin G. Johnson -- Efficient Negative Selection Algorithms by Sampling and Approximate Counting / Johannes Textor -- Convergence of the Continuous Time Trajectories of Isotropic Evolution Strategies on Monotonic C22-composite Functions / Youhei Akimoto, Anne Auger and Nikolaus Hansen -- A Parameterized Runtime Analysis of Simple Evolutionary Algorithms for Makespan Scheduling / Andrew M. Sutton and Frank Neumann -- On Algorithm-Dependent Boundary Case Identification for Problem Classes / Chao Qian, Yang Yu and Zhi-Hua Zhou -- Cumulative Step-Size Adaptation on Linear Functions / Alexandre Chotard, Anne Auger and Nikolaus Hansen -- On the Behaviour of the (1, [lambda])-[sigma]SA-ES for a Constrained Linear Problem / Dirk V. Arnold -- An Empirical Evaluation of O(1) Steepest Descent for NK-Landscapes / Darrell Whitley, Wenxiang Chen and Adele Howe -- Experimental Supplements to the Computational

Complexity Analysis of Genetic Programming for Problems Modelling Isolated Program Semantics / Tommaso Urli, Markus Wagner and Frank Neumann.

ACO Beats EA on a Dynamic Pseudo-Boolean Function / Timo Kotzing and Hendrik Molter -- Runtime Analysis of Simple Interactive Evolutionary Biobjective Optimization Algorithms / Dimo Brockhoff, Manuel Lopez-Ibanez, Boris Naujoks and Gunter Rudolph -- Parsimony Pressure versus Multi-objective Optimization for Variable Length Representations / Markus Wagner and Frank Neumann -- An Evolutionary and Graph-Based Method for Image Segmentation / Alessia Amelio and Clara Pizzuti -- Real-Time GPU Based Road Sign Detection and Classification / Roberto Ugolotti, Youssef S.G. Nashed and Stefano Cagnoni -- Acceleration of Evolutionary Image Filter Design Using Coevolution in Cartesian GP / Michaela Sikulova and Lukas Sekanina -- Transfer Learning, Soft Distance-Based Bias, and the Hierarchical BOA / Martin Pelikan, Mark W. Hauschild and Pier Luca Lanzi -- Reinforcement Learning with N-tuples on the Game Connect-4 / Markus Thill, Patrick Koch and Wolfgang Konen -- Efficient Sampling and Handling of Variance in Tuning Data Mining Models / Patrick Koch and Wolfgang Konen -- A Spatial EA Framework for Parallelizing Machine Learning Methods / Uday Kamath, Johan Kaers, Amarda Shehu and Kenneth A. De Jong -- Competing Mutating Agents for Bayesian Network Structure Learning / Olivier Regnier-Coudert and John McCall. A Meta-learning Prediction Model of Algorithm Performance for Continuous Optimization Problems / Mario A. Munoz, Michael Kirley and Saman K. Halgamuge -- Pruning GP-Based Classifier Ensembles by Bayesian Networks / C. De Stefano, G. Folino, F. Fontanella and A. Scotto di Freca -- A Multi-parent Search Operator for Bayesian Network Building / David Iclanzan -- Enhancing Learning Capabilities by XCS with Best Action Mapping / Masaya Nakata, Pier Luca Lanzi and Keiki Takadama -- Using Expert Knowledge to Guide Covering and Mutation in a Michigan Style Learning Classifier System to Detect Epistasis and Heterogeneity / Ryan J. Urbanowicz, Delaney Granizo-Mackenzie and Jason H. Moore -- On Measures to Build Linkage Trees in LTGA / Peter A.N. Bosman and Dirk Thierens -- Evolvability Analysis of the Linkage Tree Genetic Algorithm / Dirk Thierens and Peter A.N. Bosman -- Alternative Restart Strategies for CMA-ES / Ilya Loshchilov, Marc Schoenauer and Michele Sebag -- Are State-of-the-Art Fine-Tuning Algorithms Able to Detect a Dummy Parameter? / Elizabeth Montero, Maria-Cristina Riff, Leslie Perez-Caceres and Carlos A. Coello Coello -- Compressed Network Complexity Search / Faustino Gomez, Jan Koutnik and Jurgen Schmidhuber -- Single Node Genetic Programming on Problems with Side Effects / David Jackson.

Generalized Compressed Network Search / Rupesh Kumar Srivastava, Jurgen Schmidhuber and Faustino Gomez -- Analyzing Module Usage in Grammatical Evolution / John Mark Swafford, Erik Hemberg, Michael O'Neill and Anthony Brabazon -- On the Anytime Behavior of IPOP-CMA-ES / Manuel Lopez-Ibanez, Tianjun Liao and Thomas Stutzle -- HappyCat -- A Simple Function Class Where Well-Known Direct Search Algorithms Do Fail / Hans-Georg Beyer and Steffen Finck -- Differential Gene Expression with Tree-Adjunct Grammars / Eoin Murphy, Miguel Nicolau, Erik Hemberg, Michael O'Neill and Anthony Brabazon -- Analysing the Effects of Diverse Operators in a Genetic Programming System / MinHyeok Kim, Bob (RI) McKay, Kangil Kim and Xuan Hoai Nguyen -- Quantitative Analysis of Locally Geometric Semantic Crossover / Krzysztof Krawiec and Tomasz Pawlak -- Length Scale for Characterising Continuous Optimization Problems / Rachael Morgan and Marcus Gallagher -- Analyzing the Behaviour of Population-Based

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Sommario/riassunto

The two volume set LNCS 7491 and 7492 constitutes the refereed proceedings of the 12th International Conference on Parallel Problem Solving from Nature, PPSN 2012, held in Taormina, Sicily, Italy, in September 2012. The total of 105 revised full papers were carefully reviewed and selected from 226 submissions. The meeting began with 5 workshops which offered an ideal opportunity to explore specific topics in evolutionary computation, bio-inspired computing and metaheuristics. PPSN 2012 also included 8 tutorials. The papers are organized in topical sections on evolutionary computation; machine learning, classifier systems, image processing; experimental analysis, encoding, EDA, GP; multiobjective optimization; swarm intelligence, collective behavior, coevolution and robotics; memetic algorithms, hybridized techniques, meta and hyperheuristics; and applications.
