

# Contents

Algorithm Portfolios for Noisy Optimization: Compare Solvers Early . . . . .	1
<i>Marie-Liesse Cauwet, Jialin Liu, and Olivier Teytaud</i>	
Ranking Algorithms by Performance . . . . .	16
<i>Lars Kotthoff</i>	
Portfolio Approaches for Constraint Optimization Problems . . . . .	21
<i>Roberto Amadini, Maurizio Gabbrielli, and Jacopo Mauro</i>	
AClib: A Benchmark Library for Algorithm Configuration . . . . .	36
<i>Frank Hutter, Manuel López-Ibáñez, Chris Fawcett, Marius Lindauer, Holger H. Hoos, Kevin Leyton-Brown, and Thomas Stützle</i>	
Algorithm Configuration in the Cloud: A Feasibility Study . . . . .	41
<i>Daniel Geschwender, Frank Hutter, Lars Kotthoff, Yuri Malitsky, Holger H. Hoos, and Kevin Leyton-Brown</i>	
Evaluating Instance Generators by Configuration. . . . .	47
<i>Sam Bayless, Dave A.D. Tompkins, and Holger H. Hoos</i>	
An Empirical Study of Off-Line Configuration and On-Line Adaptation in Operator Selection . . . . .	62
<i>Zhi Yuan, Stephanus Daniel Handoko, Duc Thien Nguyen, and Hoong Chuin Lau</i>	
A Continuous Refinement Strategy for the Multilevel Computation of Vertex Separators . . . . .	77
<i>William W. Hager, James T. Hungerford, and Ilya Safro</i>	
On Multidimensional Scaling with City-Block Distances . . . . .	82
<i>Nerijus Galiauskas and Julius Žilinskas</i>	
A General Approach to Network Analysis of Statistical Data Sets . . . . .	88
<i>Valery A. Kalygin, Alexander P. Koldanov, and Panos M. Pardalos</i>	
Multiple Decision Problem for Stock Selection in Market Network . . . . .	98
<i>Petr A. Koldanov and Grigory A. Bautin</i>	
Initial Sorting of Vertices in the Maximum Clique Problem Reviewed. . . . .	111
<i>Pablo San Segundo, Alvaro Lopez, and Mikhail Batsyn</i>	

Using Comparative Preference Statements in Hypervolume-Based Interactive Multiobjective Optimization . . . . .	121
<i>Dimo Brockhoff, Youssef Hamadi, and Souhila Kaci</i>	
Controlling Selection Area of Useful Infeasible Solutions in Directed Mating for Evolutionary Constrained Multiobjective Optimization. . . . .	137
<i>Minami Miyakawa, Keiki Takadama, and Hiroyuki Sato</i>	
An Aspiration Set EMOA Based on Averaged Hausdorff Distances. . . . .	153
<i>Günter Rudolph, Oliver Schütze, Christian Grimme, and Heike Trautmann</i>	
Deconstructing Multi-objective Evolutionary Algorithms: An Iterative Analysis on the Permutation Flow-Shop Problem . . . . .	157
<i>Leonardo C.T. Bezerra, Manuel López-Ibáñez, and Thomas Stützle</i>	
MOI-MBO: Multiobjective Infill for Parallel Model-Based Optimization . . . .	173
<i>Bernd Bischl, Simon Wessing, Nadja Bauer, Klaus Friedrichs, and Claus Weihs</i>	
Two Look-Ahead Strategies for Local-Search Metaheuristics . . . . .	187
<i>David Meignan, Silvia Schwarze, and Stefan Voß</i>	
An Evolutionary Algorithm for the Leader-Follower Facility Location Problem with Proportional Customer Behavior . . . . .	203
<i>Benjamin Biesinger, Bin Hu, and Günther Raidl</i>	
Towards a Matheuristic Approach for the Berth Allocation Problem . . . . .	218
<i>Eduardo Anibal Lalla-Ruiz and Stefan Voß</i>	
GRASP with Path-Relinking for the Maximum Contact Map Overlap Problem . . .	223
<i>Ricardo M.A. Silva, Mauricio G.C. Resende, Paola Festa, Filipe L. Valentim, and Francisco N. Junior</i>	
What is Needed to Promote an Asynchronous Program Evolution in Genetic Programing? . . . . .	227
<i>Keiki Takadama, Tomohiro Harada, Hiroyuki Sato, and Kiyohiko Hattori</i>	
A Novel Hybrid Dynamic Programming Algorithm for a Two-Stage Supply Chain Scheduling Problem . . . . .	242
<i>Jun Pei, Xinbao Liu, Wenjuan Fan, Panos M. Pardalos, and Lin Liu</i>	
A Hybrid Clonal Selection Algorithm for the Vehicle Routing Problem with Stochastic Demands . . . . .	258
<i>Yannis Marinakis, Magdalene Marinaki, and Athanasios Migdalas</i>	
Bayesian Gait Optimization for Bipedal Locomotion . . . . .	274
<i>Roberto Calandra, Nakul Gopalan, André Seyfarth, Jan Peters, and Marc Peter Deisenroth</i>	

Robust Support Vector Machines with Polyhedral Uncertainty of the Input Data. . . . .	291
<i>Neng Fan, Elham Sadeghi, and Panos M. Pardalos</i>	
Raman Spectroscopy Using a Multiclass Extension of Fisher-Based Feature Selection Support Vector Machines (FFS-SVM) for Characterizing In-Vitro Apoptotic Cell Death Induced by Paclitaxel . . . . .	306
<i>Michael Fenn, Mario Guarracino, Jiaying Pi, and Panos M. Pardalos</i>	
HIPAD - A Hybrid Interior-Point Alternating Direction Algorithm for Knowledge-Based SVM and Feature Selection. . . . .	324
<i>Zhiwei Qin, Xiaocheng Tang, Ioannis Akrotirianakis, and Amit Chakraborty</i>	
Efficient Identification of the Pareto Optimal Set. . . . .	341
<i>Ingrida Steponavičė, Rob J. Hyndman, Kate Smith-Miles, and Laura Villanova</i>	
GeneRa: A Benchmarks Generator of Radiotherapy Treatment Scheduling Problem. . . . .	353
<i>Juan Pablo Cares, María-Cristina Riff, and Bertrand Neveu</i>	
The Theory of Set Tolerances. . . . .	362
<i>Gerold Jäger, Boris Goldengorin, and Panos M. Pardalos</i>	
Strategies for Spectrum Allocation in OFDMA Cellular Networks. . . . .	378
<i>Bereket Mathewos Hambebo, Marco Carvalho, and Fredric Ham</i>	
A New Existence Condition for Hadamard Matrices with Circulant Core . . . .	383
<i>Ilias S. Kotsireas and Panos M. Pardalos</i>	
<b>Author Index</b> . . . . .	391

Learning and Intelligent Optimization

8th International Conference, Lion 8, Gainesville, FL,

USA, February 16-21, 2014. Revised Selected Papers

Pardalos, P.M.; Resende, M.G.C.; Vogiatzis, C.; Walteros,

J.L. (Eds.)

2014, XIII, 392 p. 80 illus., Softcover

ISBN: 978-3-319-09583-7