

Contents

1	Introduction	1
	Edmund K. Burke and Graham Kendall	
2	Classical Techniques	19
	Kathryn A. Dowsland	
3	Integer Programming	67
	Robert Bosch and Michael Trick	
4	Genetic Algorithms	93
	Kumara Sastry, David E. Goldberg, and Graham Kendall	
5	Scatter Search	119
	Manuel Laguna	
6	Genetic Programming	143
	Riccardo Poli and John Koza	
7	Artificial Immune Systems	187
	Uwe Aickelin, Dipankar Dasgupta, and Feng Gu	
8	Swarm Intelligence	213
	Daniel Merkle and Martin Middendorf	
9	Tabu Search	243
	Michel Gendreau and Jean-Yves Potvin	
10	Simulated Annealing	265
	Emile Aarts, Jan Korst and Wil Michiels	
11	GRASP: Greedy Randomized Adaptive Search Procedures	287
	Mauricio G.C. Resende and Celso C. Ribeiro	

12	Variable Neighborhood Search	313
	Pierre Hansen and Nenad Mladenović	
13	Very Large-Scale Neighborhood Search	339
	Douglas S. Altner, Ravindra K. Ahuja, Özlem Ergun, and James B. Orlin	
14	Constraint Programming	369
	Eugene C. Freuder and Mark Wallace	
15	Multi-objective Optimization	403
	Kalyanmoy Deb	
16	Sharpened and Focused No Free Lunch and Complexity Theory	451
	Darrell Whitley	
17	Machine Learning	477
	Xin Yao and Yong Liu	
18	Fuzzy Reasoning	519
	Costas P. Pappis and Constantinos I. Siettos	
19	Rough-Set-Based Decision Support	557
	Roman Słowiński, Salvatore Greco, and Benedetto Matarazzo	
20	Hyper-heuristics	611
	Peter Ross	
21	Approximations and Randomization	639
	Carla P. Gomes and Ryan Williams	
22	Fitness Landscapes	681
	Colin R. Reeves	
	Index	707

Search Methodologies

Introductory Tutorials in Optimization and Decision

Support Techniques

Burke, E.K.; Kendall, G. (Eds.)

2014, XIV, 716 p. 135 illus., 15 illus. in color., Hardcover

ISBN: 978-1-4614-6939-1