

Contents

An Evolutionary Optimization Approach for Path Planning of Arrival Aircraft for Optimal Sequencing	1
Md Shohel Ahmed, Sameer Alam and Michael Barlow	
A Game-Theoretic Approach to the Analysis of Traffic Assignment. . . .	17
Caixia Li, Sreenatha G. Anavatti, Tapabrata Ray and Hyungbo Shim	
Impact of ALife Simulation of Darwinian and Lamarckian Evolutionary Theories.	31
Yuliya Betkher, Nuno Nabais and Vitor Santos	
A Local Search Algorithm for Saving Energy Cost in Duty-Cycle Wireless Sensor Network	45
Huynh Thi Thanh Binh, Vo Khanh Trung, Ngo Hong Son, Eryk Dutkiewicz and Diep N. Nguyen	
Obstacle Avoidance for Multi-agent Path Planning Based on Vectorized Particle Swarm Optimization	61
Sumana Biswas, Sreenatha G. Anavatti and Matthew A. Garratt	
Resource Constrained Multi-project Scheduling: A Priority Rule Based Evolutionary Local Search Approach	75
Ripon K. Chakraborty, Ruhul A. Sarker and Daryl L. Essam	
Genetic Programming with Embedded Feature Construction for High-Dimensional Symbolic Regression.	87
Qi Chen, Mengjie Zhang and Bing Xue	
The Convolutional Neural Network Model Based on an Evolutionary Approach For Interactive Picture Book	103
Saya Fujino, Taku Hasegawa, Miki Ueno, Naoki Mori and Keinosuke Matsumoto	

Semi-automatic Picture Book Generation Based on Story Model and Agent-Based Simulation	117
Kiyohito Fukuda, Saya Fujino, Naoki Mori and Keinosuke Matsumoto	
<i>Where Does My Brand End? An Overlapping Community Approach</i>	133
Ademir C. Gabardo, Regina Berretta, Natalie J. de Vries and Pablo Moscato	
Analysis of Parameter-Less Population Pyramid on the Local Distribution of Inferior Individuals	149
Taku Hasegawa, Yuta Araki, Naoki Mori and Keinosuke Matsumoto	
Integrating Class Information and Features in Cluster Analysis Based on Evolutionary Distance Metric Learning	165
Wasin Kalintha, Satoshi Ono, Masayuki Numao and Ken-ichi Fukui	
Multiple Additional Sampling by Expected Improvement Maximization in Efficient Global Optimization for Real-World Design Problems	183
Masahiro Kanazaki, Taro Imamura, Takashi Matsuno and Kazuhisa Chiba	
Dynamic Job Shop Scheduling Under Uncertainty Using Genetic Programming	195
Deepak Karunakaran, Yi Mei, Gang Chen and Mengjie Zhang	
Similarity Analysis of Survey on Employment Trends in Japan	211
Masao Kubo, Hiroshi Sato, Akihiro Yamaguchi and Yuji Aruka	
On Deriving a Relationship Between Complexity and Fidelity in Rule Based Multi-agent Systems	223
Erandi Lakshika and Michael Barlow	
Feature Construction Using Genetic Programming for Figure-Ground Image Segmentation	237
Yuyu Liang, Mengjie Zhang and Will N. Browne	
Estimation of Distribution Algorithms with Graph Kernels for Graphs with Node Types	251
Kenta Maezawa and Hisashi Handa	
Generating Hub-Spoke Network for Public Transportation: Comparison Between Genetic Algorithm and Cuckoo Search Algorithm	263
Takahiro Majima, Keiki Takadma, Daisuke Watanabe and Mitujiro Katuhara	

Randomising Block Sizes for BlockCopy-Based Wind Farm Layout Optimisation	277
Michael Mayo, Maisa Daoud and Chen Zheng	
Optimization of Aircraft Landing Route and Order Based on Novelty Search	291
Akinori Murata, Hiroyuki Sato and Keiki Takadama	
Design Strategy Generation for a Sounding Hybrid Rocket via Evolutionary Rule-Based Data Mining System	305
Masaya Nakata and Kazuhisa Chiba	
A Novel Binary Particle Swarm Optimization Algorithm and Its Applications on Knapsack and Feature Selection Problems	319
Bach Hoai Nguyen, Bing Xue and Peter Andreae	
Particle Swarm Optimization for Yard Truck Scheduling in Container Terminal with a Cooperative Strategy	333
Ben Niu, Fangfang Zhang, Li Li and Lang Wu	
A Method to Reduce the Amount of Inventoried Stock in Thai Supply Chain	347
Tomohito Okada, Akira Namatame, Hiroshi Sato and Saori Iwanaga	
Increasing Stability of Human Interaction Against Time Delay on Perceptual Crossing Experiment	361
Sohtaroh Saitoh, Hiroyuki Iizuka and Masahito Yamamoto	
Differential Evolution with Landscape-Based Operator Selection for Solving Numerical Optimization Problems	371
Karam M. Sallam, Saber M. Elsayed, Ruhul A. Sarker and Daryl L. Essam	
The Effect of Word-of-Mouth in U-Mart Artificial Futures Market	389
Hiroshi Sato, Tomohiro Shirakawa and Daisuke Nakagawa	
Multiple Imputation and Ensemble Learning for Classification with Incomplete Data	401
Cao Truong Tran, Mengjie Zhang, Peter Andreae, Bing Xue and Lam Thu Bui	
CMA-ES with Surrogate Model Adapting to Fitness Landscape	417
Kento Tsukada, Taku Hasegawa, Naoki Mori and Keinosuke Matsumoto	
An Evolutionary Simulating Annealing Algorithm for Google Machine Reassignment Problem	431
Ayad Turkey, Nasser R. Sabar and Andy Song	

Mobile Agent Based Obstacle Avoidance in Multi-robot Hunting. 443
Shiyou Uehara, Munehiro Takimoto and Yasushi Kambayashi

Communication-Less Cooperative Q-Learning Agents in Maze Problem 453
Fumito Uwano and Keiki Takadama

Autonomous Task Allocation for Swarm Robotic Systems Using Behavioral Decomposition 469
Yufei Wei, Toshiyuki Yasuda and Kazuhiro Ohkura

Acquisition of Cooperative Action by Rescue Agents with Distributed Roles 483
Mengchun Xie, Mitsutoshi Murata and Shoma Sato

An Evolutionary Framework for Bi-objective Dynamic Economic and Environmental Dispatch Problems 495
Forhad Zaman, Saber M. Elsayed, Tapabrata Ray and Ruhul A. Sarker

Author Index. 509

Intelligent and Evolutionary Systems

The 20th Asia Pacific Symposium, IES 2016, Canberra,
Australia, November 2016, Proceedings

Leu, G.; Singh, H.K.; Elsayed, S. (Eds.)

2017, XIV, 510 p., Hardcover

ISBN: 978-3-319-49048-9