

INDEX

A

Agent 163
Airship control 205
Ant colony optimisation 41, 111
Ant system 41
Arc routing 1

B

Branch-and-cut 1

C

Collaborative learning 215
Combinatorial optimisation problems 41
Composite concave programming 299
Concept map 215
Constructive metaheuristics 111

D

Dairy industry 71
Data envelopment analysis 299, 333
Decision making 149
Decision support system 281, 317
Diffusion models 395
Discrete dynamic game 93
Division-of-labour problems 129
Duality 333

E

Efficiency 299
Electricity market 375

F

FISM 215
Flowshop 21
Forecasting 375

G

Genetic algorithm 93, 149
Global convergence property 227
Graph-partitioning problem 163

Greedy randomised search 111

H

Helicopter operations 405

Heuristics 177, 189

Hyper sensitivity analysis 299

I

Immune cell-cooperation 129

Implicit enumeration 351

Influence diagram 405

Inventory control 243

L

Linear fractional programming 333

Logistics 261

M

Maintenance 177

Management 363

Mateselection 71

Mathematical programming 281, 317

Max-min optimisation 351

MHC and immune network 129

Mixed-model assembly 21

Model management 281, 317

Modelling 281, 317

Multi-agent system 41, 129

Multi-commodity problem 53

Multiple knapsack problem 351

Multiple objective programming 299

N

Nurse scheduling problem 149

O

Open loop 93

Operations scheduling 243

Optimisation 129, 281, 317

P

Parallel algorithm 163

Pareto ranking scheme 149

Planning 363

Precision farming 363
Production planning 243
Productivity 299
Push/pull hybrid production system 189

Q

Queues 395

R

Ranking of fuzzy numbers optimisation 261
Real time recurrent learning 227
Recurrent neural network 227
Reinforcement learning 205
Routing 53
Rural postman problem 1

S

Scheduling 21, 177, 189
Sequencing 21
Simulated annealing 163, 189
Simulation 405
Stochastic modeling 243
Storage 53
System dynamics 405

T

Tabu search 1, 71, 163
Transmission 53
Travelling salesman problems 41
Triangular fuzzy number 261

V

Variable neighbourhood search 1

List of Contributors

Abbass Hussein	Mukohara Tsuyoshi
Brown Alan	Namekata Tsuneyuki
Bulmer Michael	O'Brien G. C.
Burdett Robert	Ohuchi Azuma
Churilov Leonid	Okuno Taku
Corry Paul	Ouveysi Iradj
Driessen Theo	Preston Peter
Endo Satoshi	Randall Marcus
Ferreira Luis	Saito Hajime
Fukushima Masao	Sekiguchi Yasuki
Ghiani Gianpaolo	Sesana L.
Hertz Alain	Sniedovich Moshe
Jan Ahmad	Suzuki Keiji
Kaji Taichi	Takamatsu Kazuki
Kakazu Yukinori	Takeo Yamada
Kawamura Hidenori	Tanino Tetsuzo
Keiko Motoyama	Tatsumi Keiji
Kimura Toshikazu	Tobin Patrick
Kozan Erhan	Toma Naruaki
Lai K. K.	Towsey Michael
Lake Maree	Van der Werf Julius
Laporte Gilbert	Wirth Andrew
Leung Stephen	Wu Lifan
Maeda Takashi	Yamada Koji
McAllister Ryan	Yamamoto Masahito
Miyagi Hayao	Yue Yi