

Author Index

The numbers in this index are paper numbers.

- Abdalla, J.A., 32
Abu Abed, W., 40
Ahmadi-Nedushan, B., 23, 26, 47
Aoues, Y., 44
Awad, A.R., 14
- Babajimopoulos, Ch., 7
Baker, A., 10
Barbat, A.H., 37
Barros, J., 46
Begambre, O., 6
Bernatik, A., 48
Bieroza, M., 10
Boissier, D., 36
Boubou, R., 29
Bridgeman, J., 10
Brisighelli, C.Q., 38, 42
Bruen, M., 43
- Cardona, O.D., 37
Carreño, M.L., 37
Chateauneuf, A., 44, 49
Chaudhary, S., 31
Chen, Y.T., 17
Cheng, L.Y., 38, 39, 42
Conceição António, C.A., 18
Couckuyt, I., 50, 52
Crombecq, K., 50, 52
Csébfalvi, A., 5
Csébfalvi, G., 1
Curt, C., 36
Czyszpak, T., 41
- Dhaene, T., 50, 52
Doglioni, A., 15
- Eliezer, O., 1
Elnashai, A.S., 33
Emeriault, F., 29
Emperador, J.M., 19
- Faddoul, R., 49
Fowler, K., 9
Freitag, S., 28
- Galván, B., 19
Garavelas, A.Th., 45
Georgoussis, H., 7
Ghaboussi, J., 33
Gholizadeh, S., 30
Giustolisi, O., 15
González-Vidosa, F., 24
Gorissen, D., 50, 52
Graf, W., 28
Gray, G.A., 9
Greiner, D., 19
Griffin, J.D., 9
- Harris, A.L.N.C., 42
Hawileh, R.A., 32
Hoecker, M., 16
Hospitaler, A., 24
- Iguchi, T., 35
Iwasawa, H., 22
- Jelinkova, P., 48
- Kaliske, M., 28
Karatzas, G.P., 8, 11
Kastner, R., 29
Kaveh, A., 25
Kazemzadeh Azad, S., 13

Kim, J.H., 33
Kita, E., 22, 35
Koohestani, K., 13
Kuroda, T., 22

Lagaros, N.D., 45
Láng, B., 2
Lepš, M., 20, 21
Levi, R., 4
Lin, W.S., 17
Lo, W., 17
Lourenço, L., 46

Magalhães Mendes, J., 12
Marano, G., 15
Marques, R., 46
Martínez, F.J., 24
Massolino, P.M.C., 38, 42
McCarthy, T.J., 27
McCluskey, S., 27
Milbradt, P., 16, 40
Motezuki, F.K., 39
Moussouliotis, A., 7

Nagpal, A.K., 31
Nasr, A., 43
Nikolos, I.K., 8, 11
Nosek, J., 20

Oliveira, L.H., 38

Papadopoulou, M.P., 8
Papadrakakis, M., 45

Raphael, W., 49

Salajegheh, E., 30
Seyfried, A., 34
Shakiba, M., 23, 47
Shimizu, H., 35
Sickert, J.-U., 28
Sokołowski, A., 41
Soubra, A., 49
Steffen, B., 34
Sucharda, O., 48
Szendrői, E., 3

Taflanidis, A.A., 51
Talatahari, S., 25

Talon, A., 36
Tamaki, T., 35
Trichakis, I., 11

Varaee, H., 26
Vitingerová, Z., 21
Von Poser, I., 14
Vořechovský, M., 53

Wakita, Y., 35
Winter, G., 19

Keyword Index

The numbers in this index are paper numbers.

active learning, 50
activity float, 4
adaptive penalty function, 13
adaptive sample size, 53
adaptive sampling, 52
adaptive tournament selection, 13
adjustment, 16
agricultural nitrate pollution, 8
air loss, 29
air pressure, 29
Alkabir Alshimali catchment data, 14
ant colony, 24, 25
application, 52
automatic design, 15

Backus Naur form, 22
bi-objective models, 1, 2, 4
bioclimatic, 42
building, 38
building components, 36
building design, 42

calibration, 16, 43
cash flow models, 2
catchment characteristics, 43
cellular automata, 34, 35
climate, 42
comfort, 39, 42
comparison, 20
component-based, 33
composite beams, 31
composites, 18
compressed air tunnelling, 29
compressive strength, 47
computational experiment, 1, 2, 3, 4
computational fluid dynamics, 39

concrete, 46, 47
concrete structures, 24
constraint optimization, 23
construction management, 12
corners, 34
correlation, 53
cost optimization, 26
cracking, 31
curve fitting, 21

damage detection, 6
dams, 36
data aggregation, 36
data mining, 46, 47
data quality, 36
data unification, 36
decision analysis, 49
deflection, 31
Delaunay triangulation, 50
derivative-free, 9
design, 31
design of experiments, 53
diagnostics, 41
differential evolution, 8, 11, 23
disinfection by-products, 10
dissipated energy, 32
dome structures, 25
dwelling design, 39
dynamic programming, 49
dynamic responses, 6

earthquake, 30
elastic analysis, 31
electro-magnetics, 52
engineering design, 23
epistemic uncertainty, 49

evolutionary algorithms, 19, 20, 21, 23
evolutionary computation, 6
excavation, 29
expected improvement, 52
experimental database, 46
experimental design, 50
experimental research methodology, 20
explosion, 48
extraordinary events, 48

fatigue life, 32
finite element method, 6
fire, 48
float loss, 17
flow rate, 38
fluorescence spectroscopy, 10
fractional rheological model, 28
frames, 19
functional evaluation, 7
fundamental diagram, 16
fuzzy, 38, 39, 42
fuzzy digital bathymetric model, 40
fuzzy logic, 36, 41
fuzzy number, 40
fuzzy process, 28

Gaussian mutation operator, 13
Gaussian process, 9
genetic algorithms, 12, 15, 16, 17, 18, 30
genetic programming, 22
geology, 29
geometrically nonlinear design, 25
grammatical evolution, 22

hammock activity, 1
harmony search optimization, 1, 2, 3, 4
heuristic techniques, 1, 2, 3, 4
high temperatures, 46
holistic approach, 37
hybrid, 9, 25, 33
hybrid metaheuristic method, 5
hybrid methods, 1, 2, 3, 4
hydraulic head prediction, 11

imprecision, 36
incompleteness, 36
industrial breakdown, 48
inelastic analysis, 31

information-based, 33
integrated force method, 13
inverse problems, 6
irrigation scheduling, 7

k-means fuzzy clustering, 43
k-nearest neighbours, 46, 47
karstic aquifers, 11
Kriging, 50

Latin hypercube, 50, 53
low flow, 43
low-cycle, 32

machine tools, 41
Mahoney Tables, 42
maintenance policy, 49
major accidents, 48
managing projects, 1, 2, 3, 4
Markov processes, 49
mechanical, 33
metaheuristic techniques, 1, 2, 3, 4
metamodel, 52
model calibration, 14
model uncertainty, 51
model-free prediction, 28
moment redistribution, 31
Monte Carlo, 45
morphodynamics, 40
MRCPSP, 12
multicriterion optimization, 19
multimodal, 18
multimode resource-constrained project scheduling, 3
multiobjective evolutionary algorithms, 15
multiobjective optimization, 19, 21
multivariate analysis, 10

natural ventilation, 39
neural network learning, 53
neural networks, 8, 10, 11, 29, 30, 31, 32, 33, 41, 45

opposition based optimization, 23
optimal design, 26
optimization, 9, 17, 18, 20, 21, 24, 25, 26, 52
organic matter removal, 10

parameters estimation, 21
particle swarm optimization, 6, 25, 26, 27
pattern recognition, 10

pedestrian dynamics, 16
pedestrian modelling, 34
pedotransfer functions, 7
penalty functions, 27
performance assessment, 36
performance-based design, 45
piers, 24
prediction accuracy, 47
principle component analysis, 47
progressive sampling, 53
project management, 12

rainfall-runoff modeling, 14
random keys, 12
real-coded genetic algorithm, 13, 14
recurrent neural network, 28
regression, 21
reinforced concrete beam, 27
reliability-based design optimization, 44
reliability-based optimization, 45
resource allocation, 17
resource-constrained project scheduling, 1, 2, 4
response surface, 45, 51, 53
retaining wall, 26
risk assessment, 48
risk evaluation, 37
robust scheduling, 4

Santa Fe trail, 22
scheduling, 12
seismic risk, 37
self driven particles, 34
semi-rigid connection, 33
sensitivity analysis, 31
sequential design, 50, 52
sequential simplex method, 14
service load behaviour, 31
shape optimization, 13
shaping, 5
shower, 38
sick building syndrome, 39
simulated annealing, 53
simulation, 9, 53
size optimization, 13
sizing, 5, 20
social force model, 16
socio-economic vulnerability, 37

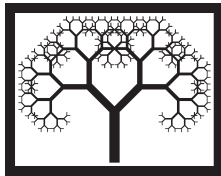
soft-computing methodologies, 8
soil hydraulic properties, 7
space-filling, 50
spatial-temporal fuzzy interpolation, 40
species conservation, 18
stochastic design, 51
stochastic simulation, 51
stochastic subset optimization, 51
structural optimization, 6, 19, 20
structural robustness, 51
submetering, 38
surrogate modelling, 50, 52
swarm intelligence, 26
SWBACROS, 7

textile reinforced concrete, 28
timber structures, 44
time-dependent structural behaviour, 28
time-variant reliability, 44
topology optimization, 5
traffic, 16, 35
truss structures, 13
tunnel, 29

ultrasonic pulse velocity, 46
uncertainty, 36, 40

validation, 43
vehicle following model, 35
visual basic for applications, 27
Voronoi tessellation, 50

water, 38
water distribution systems, 15
water meter, 38
wavelet transform, 30



CIVIL-COMP PRESS
Stirlingshire, Scotland
mmix

