Will N Browne

List of Publications by Year in Descending Order

119 papers	2,862 citations	18 h-index	51 g-index
152 ext. papers	3,557 ext. citations	3.7 avg, IF	5.79 L-index

#	Paper	IF	Citations
119	L□y-flight moth-flame optimisation algorithm-based micro-grid equipment sizing: An integrated investment and operational planning approach. *Energy and AI*, **2021**, 3, 100047	12.6	7
118	Strategic design optimisation of multi-energy-storage-technology micro-grids considering a two-stage game-theoretic market for demand response aggregation. *Applied Energy*, **2021**, 287, 116563	10.7	6
117	Learning Optimality Theory for Accuracy-Based Learning Classifier Systems. *IEEE Transactions on Evolutionary Computation*, **2021**, 25, 61-74	15.6	5
116	Frames-of-Reference based Learning: Overcoming Perceptual Aliasing in Multi-Step Decision Making Tasks. *IEEE Transactions on Evolutionary Computation*, **2021**, 1-1	15.6	2
115	A Comparison of Learning Classifier Systems□Rule Compaction Algorithms for Knowledge Visualization. *ACM Transactions on Evolutionary Learning*, **2021**, 1, 1-38		2
114	Modelling utility-aggregator-customer interactions in interruptible load programmes using non-cooperative game theory. *International Journal of Electrical Power and Energy Systems*, **2021**, 133, 107183	5.1	4
113	Lateralized Approach for Robustness Against Attacks in Emotion Categorization from Images. *Lecture Notes in Computer Science*, **2021**, 469-485	0.9	2
112	An Out-of-distribution Attack Resistance Approach to Emotion Categorization. *IEEE Transactions on Artificial Intelligence*, **2021**, 1-1	4.7	0
111	Automated Coordination Strategy Design Using Genetic Programming for Dynamic Multipoint Dynamic Aggregation. *IEEE Transactions on Cybernetics*, **2021**, PP,	10.2	2
110	Learning classifier systems **2020**,		1
109	Absumption and subsumption based learning classifier systems **2020**,		2
108	Lateralized learning for robustness against adversarial attacks in a visual classification system **2020**,		3
107	A Game-Theoretic Approach to Model Interruptible Loads: Application to Micro-Grid Planning **2020**,		1
106	Emotion Categorization from Video-Frame Images Using a Novel Sequential Voting Technique. *Lecture Notes in Computer Science*, **2020**, 618-632	0.9	2
105	**2020**,		5
104	A Memetic Algorithm for the Task Allocation Problem on Multi-robot Multi-point Dynamic Aggregation Missions **2020**,		2
103	XCS with Combined Reward Method (XCSCR) for Policy Search in Multistep Problems **2019**,		1

102	How XCS can prevent misdistinguishing rule accuracy **2019**,		3
101	Utility function generated saccade strategies for robot active vision: a probabilistic approach. *Autonomous Robots*, **2019**, 43, 947-966	3	1
100	Online Feature-Generation of Code Fragments for XCS to Guide Feature Construction **2019**,		3
99	Improvement of code fragment fitness to guide feature construction in XCS **2019**,		1
98	Absumption to complement subsumption in learning classifier systems **2019**,		11
97	Identifying Simple Shapes to Classify the Big Picture **2019**,		4
96	Figure-ground image segmentation using feature-based multi-objective genetic programming techniques. *Neural Computing and Applications*, **2019**, 31, 3075-3094	4.8	5
95	Theoretical adaptation of multiple rule-generation in XCS **2018**,		6
94	Adapting Bagging and Boosting to Learning Classifier Systems. *Lecture Notes in Computer Science*, **2018**, 405-420	0.9	4
93	Hierarchical Learning Classifier Systems for Polymorphism in Heterogeneous Niches. *Lecture Notes in Computer Science*, **2018**, 397-409	0.9	
92	Wrapper Feature Construction for Figure-Ground Image Segmentation Using Genetic Programming. *Lecture Notes in Computer Science*, **2017**, 111-123	0.9	
91	Image feature selection using genetic programming for figure-ground segmentation. *Engineering Applications of Artificial Intelligence*, **2017**, 62, 96-108	7.2	22
90	Extending XCS with Cyclic Graphs for Scalability on Complex Boolean Problems. *Evolutionary Computation*, **2017**, 25, 173-204	4.3	8
89	Learned Action SLAM: Sharing SLAM through learned path planning information between heterogeneous robotic platforms. *Applied Soft Computing Journal*, **2017**, 50, 313-326	7.5	7
88	Genetic programming for evolving figure-ground segmentors from multiple features. *Applied Soft Computing Journal*, **2017**, 51, 83-95	7.5	17
87	Learning figure-ground image segmentors by genetic programming **2017**,		3
86	Introduction to Learning Classifier Systems. *SpringerBriefs in Intelligent Systems*, **2017**,	0.2	33
85	Theoretical XCS parameter settings of learning accurate classifiers **2017**,		21

84	Feature Construction Using Genetic Programming for Figure-Ground Image Segmentation. *Proceedings in Adaptation, Learning and Optimization*, **2017**, 237-250	0.2	3
83	Visualisation and Optimisation of Learning Classifier Systems for Multiple Domain Learning. *Lecture Notes in Computer Science*, **2017**, 448-461	0.9	7
82	SILVEREYE The Implementation of Particle Swarm Optimization Algorithm in a Design Optimization Tool. *Communications in Computer and Information Science*, **2017**, 151-169	0.3	10
81	Salient object detection via spectral matting. *Pattern Recognition*, **2016**, 51, 209-224	7.7	11
80	Feature Quality-Based Dynamic Feature Selection for Improving Salient Object Detection. *IEEE Transactions on Image Processing*, **2016**, 25, 4298-4313	8.7	9
79	. *IEEE Transactions on Evolutionary Computation*, **2016**, 20, 606-626	15.6	776
78	Multi-objective Genetic Programming for Figure-Ground Image Segmentation. *Lecture Notes in Computer Science*, **2016**, 134-146	0.9	5
77	Human-inspired Scaling in Learning Classifier Systems **2016**,		11
76	Compaction for Code Fragment Based Learning Classifier Systems. *Lecture Notes in Computer Science*, **2016**, 41-53	0.9	4
75	Figure-ground image segmentation using genetic programming and feature selection **2016**,		4
74	A comprehensive strategy for mammogram image classification using learning classifier systems **2016**,		3
73	Adapting learning classifier systems to symbolic regression **2016**,		1
72	Integration of code-fragment based learning classifier systems for multiple domain perception and learning **2016**,		3
71	Learning feature fusion strategies for various image types to detect salient objects. *Pattern Recognition*, **2016**, 60, 106-120	7.7	17
70	Introducing Rule-based Machine Learning **2015**,		1
69	How should learning classifier systems cover a state-action space? **2015**,		2
68	Improving genetic search in XCS-based classifier systems through understanding the evolvability of classifier rules. *Soft Computing*, **2015**, 19, 1863-1880	3.5	7
67	Accurate marker based distance measurement with single camera **2015**,		3

66	An on-line Pittsburgh LCS for the Three-Cornered Coevolution Framework. *Evolutionary Intelligence* , **2015**, 8, 185-201	1.7	
65	A Comprehensive Comparison on Evolutionary Feature Selection Approaches to Classification. *International Journal of Computational Intelligence and Applications*, **2015**, 14, 1550008	1.2	40
64	**2015**,		6
63	A Supervised Figure-Ground Segmentation Method Using Genetic Programming. *Lecture Notes in Computer Science*, **2015**, 491-503	0.9	7
62	Particle swarm optimisation for feature selection in classification: Novel initialisation and updating mechanisms. *Applied Soft Computing Journal*, **2014**, 18, 261-276	7.5	334
61	Salient object detection using learning classifiersystems that compute action mappings **2014**,		12
60	Reusing Building Blocks of Extracted Knowledge to Solve Complex, Large-Scale Boolean Problems. *IEEE Transactions on Evolutionary Computation*, **2014**, 18, 465-480	15.6	90
59	Image Segmentation: A Survey of Methods Based on Evolutionary Computation. *Lecture Notes in Computer Science*, **2014**, 847-859	0.9	9
58	Human-interpretable feature pattern classification system using learning classifier systems. *Evolutionary Computation*, **2014**, 22, 629-50	4.3	4
57	Reusing learned functionality in XCS **2014**,		8
56	Three-cornered coevolution learning classifier systems for classification tasks **2014**,		1
55	BINARY PSO AND ROUGH SET THEORY FOR FEATURE SELECTION: A MULTI-OBJECTIVE FILTER BASED APPROACH. *International Journal of Computational Intelligence and Applications*, **2014**, 13, 1450009	1.2	43
54	Genetic algorithms based feature combination for salient object detection, for autonomously identified image domain types **2014**,		4
53	Reusing Learned Functionality to Address Complex Boolean Functions. *Lecture Notes in Computer Science*, **2014**, 383-394	0.9	6
52	Particle swarm optimization for feature selection in classification: a multi-objective approach. *IEEE Transactions on Cybernetics*, **2013**, 43, 1656-71	10.2	716
51	Evolving optimum populations with XCS classifier systems. *Soft Computing*, **2013**, 17, 503-518	3.5	26
50	Learning complex, overlapping and niche imbalance Boolean problems using XCS-based classifier systems. *Evolutionary Intelligence*, **2013**, 6, 73-91	1.7	11
49	Adaptive artificial datasets through learning classifier systems for classification tasks. *Evolutionary Intelligence*, **2013**, 6, 93-107	1.7	2

48	Steps to increase student engagement and retention in first year engineering **2013**,		5
47	PSO for feature construction and binary classification **2013**,		9
46	Optimizing visual attention models for predicting human fixations using Genetic Algorithms **2013**,		3
45	Combining object-based local and global feature statistics for salient object search **2013**,		4
44	Learning overlapping natured and niche imbalance boolean problems using XCS classifier systems **2013**,		11
43	Extending learning classifier system with cyclic graphs for scalability on complex, large-scale boolean problems **2013**,		21
42	Adaptive artificial datasets through learning classifier systems for classification tasks **2013**,		2
41	Comparison of two methods for computing action values in XCS with code-fragment actions **2013**,		4
40	MULTI-OBJECTIVE EVOLUTIONARY ALGORITHMS FOR FILTER BASED FEATURE SELECTION IN CLASSIFICATION. *International Journal on Artificial Intelligence Tools*, **2013**, 22, 1350024	0.9	40
39	Novel Initialisation and Updating Mechanisms in PSO for Feature Selection in Classification. *Lecture Notes in Computer Science*, **2013**, 428-438	0.9	23
38	Prediction of success in engineering study **2012**,		6
37	Integration of Learning Classifier Systems with simultaneous localisation and mapping for autonomous robotics **2012**,		1
36	Multi-objective particle swarm optimisation (PSO) for feature selection **2012**,		45
35	Extracting and using building blocks of knowledge in learning classifier systems **2012**,		19
34	Two-cornered learning classifier systems for pattern generation and classification **2012**,		4
33	New fitness functions in binary particle swarm optimisation for feature selection **2012**,		6
32	A multi-objective particle swarm optimisation for filter-based feature selection in classification problems. *Connection Science*, **2012**, 24, 91-116	2.8	77
31	XCS-based versus UCS-based feature pattern classification system **2012**,		4

30	XCSR with Computed Continuous Action. *Lecture Notes in Computer Science*, **2012**, 350-361	0.9	19
29	Confusion matrices for improving performance of feature pattern classifier systems **2011**,		2
28	Automatically defined functions for learning classifier systems **2011**,		8
27	Transparent, Online Image Pattern Classification Using a Learning Classifier System. *Lecture Notes in Computer Science*, **2011**, 183-193	0.9	7
26	Memory-Based Cognitive Framework: A Low-Level Association Approach to Cognitive Architectures. *Lecture Notes in Computer Science*, **2011**, 402-409	0.9	4
25	Evolution of aesthetically pleasing images without human-in-the-loop **2010**,		8
24	New crossover operators in linear genetic programming for multiclass object classification **2010**,		4
23	Particle swarm optimisation for outlier detection **2010**,		11
22	Using unrestricted loops in genetic programming for image classification **2010**,		12
21	Engaging Robots: Innovative Outreach for Attracting Cybernetics Students. *IEEE Transactions on Education*, **2010**, 53, 105-113	2.1	11
20	Sampling Methods in Genetic Programming for Classification with Unbalanced Data. *Lecture Notes in Computer Science*, **2010**, 273-282	0.9	8
19	Evolutionary Algorithms for the Multi Criterion Minimum Spanning Tree Problem. *Adaptation, Learning, and Optimization*, **2010**, 423-452	0.7	1
18	Extending evolutionary algorithms to discover tri-criterion and non-supported solutions for the minimum spanning tree problem **2009**,		2
17	EMOTIONAL COGNITIVE STEPS TOWARDS CONSCIOUSNESS. *International Journal of Machine Consciousness*, **2009**, 01, 203-211		2
16	Cognitive robotics: new insights into robot and human intelligence by reverse engineering brain functions [From the Guest Editors]. *IEEE Robotics and Automation Magazine*, **2009**, 16, 17-18	3.4	4
15	Consumer Robotic Products. *IEEE Robotics and Automation Magazine*, **2008**, 15, 71-79	3.4	2
14	A Hybridised Evolutionary Algorithm for Multi-Criterion Minimum Spanning Tree Problems **2008**,		3
13	Investigating Scaling of an Abstracted LCS Utilising Ternary and S-Expression Alphabets. *Lecture Notes in Computer Science*, **2008**, 46-56	0.9	3

12	The Role of Algorithms in Profiling **2008**, 65-87		7
11	Investigating scaling of an abstracted LCS utilising ternary and s-expression alphabets **2007**,		9
10	A Knowledge-Based Evolution Strategy for the Multi-Objective Minimum Spanning Tree Problem **2006**,		2
9	Knowledge-elicitation and data-mining: Fusing human and industrial plant information. *Engineering Applications of Artificial Intelligence*, **2006**, 19, 345-359	7.2	8
8	Design, implementation and testing of an intelligent knowledge-based system for the supervisory control of a hot rolling mill. *Journal of Process Control*, **2005**, 15, 615-628	3.9	10
7	An abstraction agorithm for genetics-based reinforcement learning **2005**,		5
6	An autonomous explore/exploit strategy **2005**,		5
5	Balancing Specificity and Generality in a Panmictic-Based Rule-Discovery Learning Classifier System. *Lecture Notes in Computer Science*, **2003**, 1-19	0.9	
4	Expert System for Taphole Plugging in a Blast Furnace. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2003**, 36, 65-70		
3	An industrial Learning Classifier System: the importance of pre-processing real data and choice of alphabet. *Engineering Applications of Artificial Intelligence*, **2000**, 13, 25-36	7.2	3
2	Uncanny valley revisited		18
1	Visualizations for rule-based machine learning. *Natural Computing*,1	1.3	2