

Leonardo Trujillo

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8048802/publications.pdf>

Version: 2024-02-01

156
papers

1,763
citations

394421

19
h-index

395702

33
g-index

166
all docs

166
docs citations

166
times ranked

1412
citing authors

#	ARTICLE	IF	CITATIONS
1	Semantics in Multi-objective Genetic Programming. Applied Soft Computing Journal, 2022, 115, 108143.	7.2	8
2	Analysis and Detection of Erosion in Wind Turbine Blades. Mathematical and Computational Applications, 2022, 27, 5.	1.3	5
3	AutoML for Feature Selection and Model Tuning Applied to Fault Severity Diagnosis in Spur Gearboxes. Mathematical and Computational Applications, 2022, 27, 6.	1.3	13
4	Prepare for Ludicrous Speed: Marker-based Instantaneous Binocular Rolling Shutter Localization. IEEE Transactions on Visualization and Computer Graphics, 2022, 28, 2201-2211.	4.4	2
5	GSGP-CUDA " A CUDA framework for Geometric Semantic Genetic Programming. SoftwareX, 2022, 18, 101085.	2.6	7
6	Towards fast approximations for the hypervolume indicator for multi-objective optimization problems by Genetic Programming. Applied Soft Computing Journal, 2022, 125, 109103.	7.2	8
7	A Systematic Review of Computer Science Solutions for Addressing Violence Against Women and Children. IEEE Access, 2021, 9, 114622-114639.	4.2	7
8	Random Selection of Parameters in Asynchronous Pool-Based Evolutionary Algorithms. , 2021, , .		0
9	A Novel Approach For Search-Based Program Repair. IEEE Software, 2021, 38, 36-42.	1.8	3
10	Correction of the travel time estimation for ambulances of the red cross Tijuana using machine learning. Computers in Biology and Medicine, 2021, 137, 104798.	7.0	6
11	Transfer learning in constructive induction with Genetic Programming. Genetic Programming and Evolvable Machines, 2020, 21, 529-569.	2.2	16
12	Comparative analysis of relocation strategies for ambulances in the city of Tijuana, Mexico. Computers in Biology and Medicine, 2020, 116, 103567.	7.0	6
13	SOAP: Semantic outliers automatic preprocessing. Information Sciences, 2020, 526, 86-101.	6.9	3
14	Development of Multiobjective High-Level Synthesis for FPGAs. Scientific Programming, 2020, 2020, 1-25.	0.7	1
15	EEG Feature Extraction Using Genetic Programming for the Classification of Mental States. Algorithms, 2020, 13, 221.	2.1	4
16	Modelling the vibration response of a gas turbine using machine learning. Expert Systems, 2020, 37, e12560.	4.5	4
17	Towards an automatic coding of observational studies: Coding neurofeedback therapies of children with autism. Expert Systems, 2020, 37, e12572.	4.5	1
18	On the analysis of hyper-parameter space for a genetic programming system with iterated F-Race. Soft Computing, 2020, 24, 14757-14770.	3.6	4

#	ARTICLE	IF	CITATIONS
19	Special Issue on Integrating numerical optimization methods with genetic programming. Genetic Programming and Evolvable Machines, 2020, 21, 469-470.	2.2	0
20	Unlabeled multi-target regression with genetic programming. , 2020, , .		1
21	Novelty search for automatic bug repair. , 2020, , .		11
22	Is k Nearest Neighbours Regression Better Than GP?. Lecture Notes in Computer Science, 2020, , 244-261.	1.3	1
23	General controllers evolved through grammatical evolution with a divergent search. , 2020, , .		1
24	Classification and Assessment of the Patellar Reflex Response through Biomechanical Measures. Journal of Healthcare Engineering, 2019, 2019, 1-7.	1.9	3
25	Pool-Based Genetic Programming Using Evospace, Local Search and Bloat Control. Mathematical and Computational Applications, 2019, 24, 78.	1.3	2
26	Local search in speciation-based bloat control for genetic programming. Genetic Programming and Evolvable Machines, 2019, 20, 351-384.	2.2	10
27	Untapped Potential of Genetic Programming: Transfer Learning and Outlier Removal. Genetic and Evolutionary Computation, 2019, , 193-207.	1.0	4
28	Evolving multidimensional transformations for symbolic regression with M3GP. Memetic Computing, 2019, 11, 111-126.	4.0	21
29	Applying genetic improvement to a genetic programming library in C++. Soft Computing, 2019, 23, 11593-11609.	3.6	6
30	Design of estimators for restoration of images degraded by haze using genetic programming. Swarm and Evolutionary Computation, 2019, 44, 49-63.	8.1	11
31	Alignment-based genetic programming for real life applications. Swarm and Evolutionary Computation, 2019, 44, 840-851.	8.1	11
32	Comparison of a genetic programming approach with ANFIS for power amplifier behavioral modeling and FPGA implementation. Soft Computing, 2019, 23, 2463-2481.	3.6	10
33	Detecting Epilepsy in EEG Signals Using Time, Frequency and Time-Frequency Domain Features. Studies in Systems, Decision and Control, 2018, , 167-182.	1.0	13
34	Nonlinear speed sensorless control of a surface-mounted PMSM based on a Thau observer. Electrical Engineering, 2018, 100, 177-193.	2.0	6
35	Deploying massive runs of evolutionary algorithms with ECJ and Hadoop: Reducing interest points required for face recognition. International Journal of High Performance Computing Applications, 2018, 32, 706-720.	3.7	3
36	A Scalable Genetic Programming Approach to Integrate miRNA-Target Predictions: Comparing Different Parallel Implementations of M3GP. Complexity, 2018, 2018, 1-13.	1.6	1

#	ARTICLE	IF	CITATIONS
37	Local Search is Underused in Genetic Programming. Genetic and Evolutionary Computation, 2018, , 119-137.	1.0	15
38	Filtering Outliers in One Step with Genetic Programming. Lecture Notes in Computer Science, 2018, , 209-222.	1.3	1
39	How Am I Driving? Using Genetic Programming to Generate Scoring Functions for Urban Driving Behavior. Mathematical and Computational Applications, 2018, 23, 19.	1.3	3
40	Modeling Uncertainty for the Double Standard Model Using a Fuzzy Inference System. Frontiers in Robotics and AI, 2018, 5, 31.	3.2	2
41	A Genetic Programming Approach for Driving Score Calculation in the Context of Intelligent Transportation Systems. IEEE Sensors Journal, 2018, 18, 7183-7192.	4.7	18
42	Novelty search for software improvement of a SLAM system. , 2018, , .		8
43	Coefficients Estimation of MPM Through LSE, ORLS and SLS for RF-PA Modeling and DPD. Studies in Computational Intelligence, 2018, , 239-262.	0.9	0
44	Augmenting the LSA Technique to Evaluate Ubicomp Environments. Studies in Computational Intelligence, 2018, , 45-64.	0.9	0
45	On the Use of Dynamic GP Fitness Cases in Static and Dynamic Optimisation Problems. Lecture Notes in Computer Science, 2018, , 72-87.	1.3	2
46	Estimation of the 3D Pose of an Object Using Correlation Filters and CMA-ES. Lecture Notes in Computer Science, 2018, , 506-520.	1.3	0
47	Optimization of PPF Control of a Building-like Structure for Vibration Control. Computacion Y Sistemas, 2018, 22, .	0.3	0
48	Análisis Dinámico Estructural de Satélite Educativo CanSat. Computacion Y Sistemas, 2018, 22, .	0.3	1
49	The training set and generalization in grammatical evolution for autonomous agent navigation. Soft Computing, 2017, 21, 4399-4416.	3.6	4
50	Predicting per capita violent crimes in urban areas: an artificial intelligence approach. Journal of Ambient Intelligence and Humanized Computing, 2017, 8, 29-36.	4.9	17
51	Optimizing the location of ambulances in Tijuana, Mexico. Computers in Biology and Medicine, 2017, 80, 107-115.	7.0	40
52	Modeling the adsorption of phenols and nitrophenols by activated carbon using genetic programming. Journal of Cleaner Production, 2017, 161, 860-870.	9.3	31
53	RANSAC-GP: Dealing with Outliers in Symbolic Regression with Genetic Programming. Lecture Notes in Computer Science, 2017, , 114-130.	1.3	9
54	Stochastic Semantic-Based Multi-objective Genetic Programming Optimisation for Classification of Imbalanced Data. Lecture Notes in Computer Science, 2017, , 261-272.	1.3	4

#	ARTICLE	IF	CITATIONS
55	Coefficient extraction for MPM using LSE, ORLS and SLS applied to RF-PA modeling. , 2017, , .		1
56	A comparison of fitness-case sampling methods for genetic programming. Journal of Experimental and Theoretical Artificial Intelligence, 2017, 29, 1203-1224.	2.8	13
57	Towards the development of a complete GP system on an FPGA using geometric semantic operators. , 2017, , .		2
58	An evolutionary system for ozone concentration forecasting. Information Systems Frontiers, 2017, 19, 1123-1132.	6.4	13
59	Local Search Approach to Genetic Programming for RF-PAs Modeling Implemented in FPGA. Studies in Computational Intelligence, 2017, , 67-88.	0.9	2
60	Automatic modeling of a gas turbine using genetic programming: An experimental study. Applied Soft Computing Journal, 2017, 50, 212-222.	7.2	26
61	Automatic Random Tree Generator on FPGA. Studies in Computational Intelligence, 2017, , 89-104.	0.9	1
62	Dynamic GP fitness cases in static and dynamic optimisation problems. , 2017, , .		5
63	Stock index return forecasting: semantics-based genetic programming with local search optimiser. International Journal of Bio-Inspired Computation, 2017, 10, 159.	0.9	1
64	High-Level Synthesis through metaheuristics and LUTs optimization in FPGA devices. AI Communications, 2017, 30, 151-168.	1.2	2
65	Profiting from Several Recommendation Algorithms Using a Scalable Approach. Studies in Computational Intelligence, 2017, , 357-375.	0.9	1
66	Demand-Side Management: Optimising Through Differential Evolution Plug-in Electric Vehicles to Partially Fulfil Load Demand. Studies in Computational Intelligence, 2017, , 155-174.	0.9	3
67	Dow Jones Index Return Forecasting: Semantics Based Genetic Programming with Local Search Optimizer. International Journal of Bio-Inspired Computation, 2017, 10, 1.	0.9	0
68	Evolving genetic programming classifiers with novelty search. Information Sciences, 2016, 369, 347-367.	6.9	10
69	Genetic Programming. , 2016, , .		2
70	Integrating Local Search within neat-GP. , 2016, , .		6
71	Modeling micro-channel plates as astronomical detectors of UV radiation. , 2016, , .		0
72	ECJ+HADOOP: An Easy Way to Deploy Massive Runs of Evolutionary Algorithms. Lecture Notes in Computer Science, 2016, , 91-106.	1.3	10

#	ARTICLE	IF	CITATIONS
73	Regularity and Matching Pursuit feature extraction for the detection of epileptic seizures. Journal of Neuroscience Methods, 2016, 266, 107-125.	2.5	24
74	A Machine Learning Approach for the Integration of miRNA-Target Predictions. , 2016, , .		2
75	Restoration of degraded images using genetic programming. Proceedings of SPIE, 2016, , .	0.8	1
76	Random Tree Generator for an FPGA-based Genetic Programming System. , 2016, , .		1
77	neat Genetic Programming: Controlling bloat naturally. Information Sciences, 2016, 333, 21-43.	6.9	43
78	Prediction of relative position of CT slices using a computational intelligence system. Applied Soft Computing Journal, 2016, 46, 537-542.	7.2	10
79	Prediction of expected performance for a genetic programming classifier. Genetic Programming and Evolvable Machines, 2016, 17, 409-449.	2.2	7
80	Multiclass Classification Through Multidimensional Clustering. Genetic and Evolutionary Computation, 2016, , 219-239.	1.0	7
81	Novelty Search for the Synthesis of Current Followers. Computacion Y Sistemas, 2016, 20, .	0.3	4
82	An Analysis of Geometric Semantic Crossover: A Computational Geometry Approach. , 2016, , .		4
83	Comparison of Local Feature Extraction Paradigms Applied to Visual SLAM. Computacion Y Sistemas, 2016, 20, .	0.3	0
84	Energy Consumption Forecasting Using Semantic-Based Genetic Programming with Local Search Optimizer. Computational Intelligence and Neuroscience, 2015, 2015, 1-8.	1.7	15
85	Prediction of energy performance of residential buildings: A genetic programming approach. Energy and Buildings, 2015, 102, 67-74.	6.7	99
86	Seizure states identification in experimental epilepsy using gabor atom analysis. Journal of Neuroscience Methods, 2015, 241, 121-131.	2.5	4
87	The EvoSpace Model for Pool-Based Evolutionary Algorithms. Journal of Grid Computing, 2015, 13, 329-349.	3.9	30
88	Turbulent models of oil flow in a circular pipe with sudden enlargement. Applied Mathematical Modelling, 2015, 39, 6711-6724.	4.2	14
89	A Local Search Approach to Genetic Programming for Binary Classification. , 2015, , .		13
90	Geometric Semantic Genetic Programming with Local Search. , 2015, , .		31

#	ARTICLE	IF	CITATIONS
91	EEG classification for the detection of mental states. Applied Soft Computing Journal, 2015, 32, 113-131.	7.2	42
92	Systematic selection of tuning parameters for efficient predictive controllers using a multiobjective evolutionary algorithm. Applied Soft Computing Journal, 2015, 31, 326-338.	7.2	25
93	Solving the ambulance location problem in Tijuana-Mexico using a continuous location model. , 2015, , .		2
94	Pattern recognition with composite correlation filters designed with multi-objective combinatorial optimization. Optics Communications, 2015, 338, 77-89.	2.1	11
95	M3GP " Multiclass Classification with GP. Lecture Notes in Computer Science, 2015, , 78-91.	1.3	29
96	Autonomous Demand-Side Management system based on Monte Carlo Tree Search. , 2014, , .		15
97	Feature Extraction and Classification of EEG Signals. The Use of a Genetic Algorithm for an Application on Alertness Prediction. , 2014, , 191-220.		1
98	Hybrid back-propagation training with evolutionary strategies. Soft Computing, 2014, 18, 1603-1614.	3.6	8
99	Facial recognition using composite correlation filters designed with multiobjective combinatorial optimization. Proceedings of SPIE, 2014, , .	0.8	2
100	Environmental Fluid Mechanics: Applications to Weather Forecast and Climate Change. Environmental Science and Engineering, 2014, , 3-36.	0.2	1
101	Classification of EEG Signals by an Evolutionary Algorithm. Studies in Computational Intelligence, 2014, , 133-153.	0.9	1
102	A Comparison of Fitness-Case Sampling Methods for Symbolic Regression with Genetic Programming. Advances in Intelligent Systems and Computing, 2014, , 201-212.	0.6	7
103	Evaluating the Effects of Local Search in Genetic Programming. Advances in Intelligent Systems and Computing, 2014, , 213-228.	0.6	19
104	Randomized Parameter Settings for Heterogeneous Workers in a Pool-Based Evolutionary Algorithm. Lecture Notes in Computer Science, 2014, , 702-710.	1.3	7
105	Generalization in Maze Navigation Using Grammatical Evolution and Novelty Search. Lecture Notes in Computer Science, 2014, , 35-46.	1.3	5
106	Customizable execution environments for evolutionary computation using BOINC + virtualization. Natural Computing, 2013, 12, 163-177.	3.0	6
107	Identification of epilepsy stages from ECoG using genetic programming classifiers. Computers in Biology and Medicine, 2013, 43, 1713-1723.	7.0	11
108	Is there a free lunch for cloud-based evolutionary algorithms?. , 2013, , .		7

#	ARTICLE	IF	CITATIONS
109	Searching for novel regression functions. , 2013, , .		11
110	A behavior-based analysis of modal problems. , 2013, , .		3
111	Searching for novel clustering programs. , 2013, , .		23
112	EvoSpace-i. , 2013, , .		2
113	Detecting mental states of alertness with genetic algorithm variable selection. , 2013, , .		5
114	Using semantics in the selection mechanism in Genetic Programming: A simple method for promoting semantic diversity. , 2013, , .		28
115	Fireworks: Evolutionary art project based on EvoSpace-interactive. , 2013, , .		6
116	Design of composite correlation filters for object recognition using multi-objective combinatorial optimization. , 2013, , .		0
117	Locality in Continuous Fitness-Valued Cases and Genetic Programming Difficulty. Advances in Intelligent Systems and Computing, 2013, , 41-56.	0.6	4
118	EvoSpace-Interactive: A Framework to Develop Distributed Collaborative-Interactive Evolutionary Algorithms for Artistic Design. Lecture Notes in Computer Science, 2013, , 121-132.	1.3	20
119	EvoSpace: A Distributed Evolutionary Platform Based on the Tuple Space Model. Lecture Notes in Computer Science, 2013, , 499-508.	1.3	16
120	Searching for Novel Classifiers. Lecture Notes in Computer Science, 2013, , 145-156.	1.3	13
121	Disparity Map Estimation by Combining Cost Volume Measures Using Genetic Programming. Advances in Intelligent Systems and Computing, 2013, , 71-86.	0.6	0
122	Analysis and Classification of Epilepsy Stages with Genetic Programming. Advances in Intelligent Systems and Computing, 2013, , 57-70.	0.6	1
123	A comparative study of an evolvability indicator and a predictor of expected performance for genetic programming. , 2012, , .		4
124	Epilepsy Ictal Stage Identification by 0-1 Test of Chaos*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 126-131.	0.4	4
125	An image analysis procedure for measuring the surface tension of pendant micro-drops. Journal of Computational Methods in Sciences and Engineering, 2012, 12, 371-382.	0.2	2
126	Interest point detection through multiobjective genetic programming. Applied Soft Computing Journal, 2012, 12, 2566-2582.	7.2	34

#	ARTICLE	IF	CITATIONS
127	Evolving estimators of the pointwise Hölder exponent with Genetic Programming. Information Sciences, 2012, 209, 61-79.	6.9	19
128	Speciation in Behavioral Space for Evolutionary Robotics. Journal of Intelligent and Robotic Systems: Theory and Applications, 2011, 64, 323-351.	3.4	28
129	Genetic programming with one-point crossover and subtree mutation for effective problem solving and bloat control. Soft Computing, 2011, 15, 1551-1567.	3.6	5
130	Evolutionary-computer-assisted design of image operators that detect interest points using genetic programming. Image and Vision Computing, 2011, 29, 484-498.	4.5	59
131	Predicting problem difficulty for genetic programming applied to data classification. , 2011, , .		11
132	How many neurons?. , 2011, , .		2
133	An Empirical Study of Functional Complexity as an Indicator of Overfitting in Genetic Programming. Lecture Notes in Computer Science, 2011, , 262-273.	1.3	9
134	Estimating Classifier Performance with Genetic Programming. Lecture Notes in Computer Science, 2011, , 274-285.	1.3	2
135	Optimization of the Hölder image descriptor using a genetic algorithm. , 2010, , .		1
136	Backpropagation learning with a (1+1) ES. , 2010, , .		2
137	The estimation of Hölderian regularity using genetic programming. , 2010, , .		5
138	Improvement of the Backpropagation Algorithm Using (1+1) Evolutionary Strategies. Studies in Computational Intelligence, 2010, , 287-302.	0.9	1
139	Development of Modular Neural Networks with Fuzzy Logic Response Integration for Signature Recognition. Fuzzy Information and Engineering, 2009, 1, 345-355.	1.7	0
140	Increasing GP Computing Power for Free via Desktop GRID Computing and Virtualization. , 2009, , .		12
141	A Genetic Programming Approach to the Design of Interest Point Operators. Studies in Computational Intelligence, 2009, , 49-65.	0.9	4
142	Modular Neural Networks with Fuzzy Response Integration for Signature Recognition. Studies in Computational Intelligence, 2009, , 81-91.	0.9	2
143	Detecting Scale-Invariant Regions Using Evolved Image Operators. Studies in Computational Intelligence, 2009, , 21-40.	0.9	0
144	Signature Recognition with a Hybrid Approach Combining Modular Neural Networks and Fuzzy Logic for Response Integration. Studies in Computational Intelligence, 2009, , 185-201.	0.9	1

#	ARTICLE	IF	CITATIONS
145	Facial Expression Recognition in Nonvisual Imagery. , 2009, , 213-239.		1
146	Multiobjective design of operators that detect points of interest in images. , 2008, , .		7
147	Automated Design of Image Operators that Detect Interest Points. Evolutionary Computation, 2008, 16, 483-507.	3.0	87
148	Behavior-based speciation for evolutionary robotics. , 2008, , .		6
149	Regularity based descriptor computed from local image oscillations. Optics Express, 2007, 15, 6140.	3.4	16
150	Visual learning of texture descriptors for facial expression recognition in thermal imagery. Computer Vision and Image Understanding, 2007, 106, 258-269.	4.7	86
151	Evolutionary feature selection for probabilistic object recognition, novel object detection and object saliency estimation using GMMs. , 2007, , .		3
152	Using Evolution to Learn How to Perform Interest Point Detection. , 2006, , .		20
153	Multiple Objective Genetic Algorithms for Path-planning Optimization in Autonomous Mobile Robots. Soft Computing, 2006, 11, 269-279.	3.6	111
154	Synthesis of interest point detectors through genetic programming. , 2006, , .		56
155	MULTIPLE OBJECTIVE GENETIC ALGORITHMS FOR AUTONOMOUS MOBILE ROBOT PATH PLANNING OPTIMIZATION. , 2004, , .		0
156	Advances in Adaptive Composite Filters for Object Recognition. , 0, , .		3