

# Duraisamy Jude Hemanth

## List of Publications by Year in descending order

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146  
papers

3,683  
citations

159525

30  
h-index

155592

55  
g-index

156  
all docs

156  
docs citations

156  
times ranked

2917  
citing authors

#	ARTICLE	IF	CITATIONS
1	Deep learning based detection and analysis of COVID-19 on chest X-ray images. Applied Intelligence, 2021, 51, 1690-1700.	3.3	338
2	SSDMNV2: A real time DNN-based face mask detection system using single shot multibox detector and MobileNetV2. Sustainable Cities and Society, 2021, 66, 102692.	5.1	261
3	Convolutional neural network based Alzheimer's disease classification from magnetic resonance brain images. Cognitive Systems Research, 2019, 57, 147-159.	1.9	240
4	An enhanced diabetic retinopathy detection and classification approach using deep convolutional neural network. Neural Computing and Applications, 2020, 32, 707-721.	3.2	181
5	Deep learning based enhanced tumor segmentation approach for MR brain images. Applied Soft Computing Journal, 2019, 78, 346-354.	4.1	167
6	Pneumonia detection in chest X-ray images using convolutional neural networks and transfer learning. Measurement: Journal of the International Measurement Confederation, 2020, 165, 108046.	2.5	138
7	Gastrointestinal diseases segmentation and classification based on duo-deep architectures. Pattern Recognition Letters, 2020, 131, 193-204.	2.6	111
8	Hand posture and gesture recognition techniques for virtual reality applications: a survey. Virtual Reality, 2017, 21, 91-107.	4.1	110
9	An Intelligent IoT-Based Food Quality Monitoring Approach Using Low-Cost Sensors. Symmetry, 2019, 11, 374.	1.1	94
10	A Modified Deep Convolutional Neural Network for Abnormal Brain Image Classification. IEEE Access, 2019, 7, 4275-4283.	2.6	94
11	Early diagnosis of COVID-19-affected patients based on X-ray and computed tomography images using deep learning algorithm. Soft Computing, 2023, 27, 2635-2643.	2.1	87
12	Deep learning-based facial emotion recognition for human-computer interaction applications. Neural Computing and Applications, 2023, 35, 23311-23328.	3.2	85
13	A new approach for classification skin lesion based on transfer learning, deep learning, and IoT system. Pattern Recognition Letters, 2020, 136, 8-15.	2.6	79
14	Automatic Detection of White Blood Cancer From Bone Marrow Microscopic Images Using Convolutional Neural Networks. IEEE Access, 2020, 8, 142521-142531.	2.6	78
15	Recognition of Bloom/Yield in Crop Images Using Deep Learning Models for Smart Agriculture: A Review. Agronomy, 2021, 11, 646.	1.3	78
16	Diabetic Retinopathy Diagnosis from Retinal Images Using Modified Hopfield Neural Network. Journal of Medical Systems, 2018, 42, 247.	2.2	57
17	Remote Monitoring of Physical Rehabilitation of Stroke Patients Using IoT and Virtual Reality. IEEE Journal on Selected Areas in Communications, 2021, 39, 562-573.	9.7	55
18	Modified Genetic Algorithm approaches for classification of abnormal Magnetic Resonance Brain tumour images. Applied Soft Computing Journal, 2019, 75, 21-28.	4.1	53

#	ARTICLE	IF	CITATIONS
19	A hierarchical three-step superpixels and deep learning framework for skin lesion classification. <i>Methods</i> , 2022, 202, 88-102.	1.9	51
20	Brain signal based human emotion analysis by circular back propagation and Deep Kohonen Neural Networks. <i>Computers and Electrical Engineering</i> , 2018, 68, 170-180.	3.0	47
21	Clustering approaches for high-dimensional databases: A review. <i>Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery</i> , 2019, 9, e1300.	4.6	47
22	Performance Improved Iteration-Free Artificial Neural Networks for Abnormal Magnetic Resonance Brain Image Classification. <i>Neurocomputing</i> , 2014, 130, 98-107.	3.5	46
23	Monitoring the Impact of Economic Crisis on Crime in India Using Machine Learning. <i>Computational Economics</i> , 2019, 53, 1467-1485.	1.5	42
24	An improved salient object detection algorithm combining background and foreground connectivity for brain image analysis. <i>Computers and Electrical Engineering</i> , 2018, 71, 692-703.	3.0	41
25	IoT Based Heart Activity Monitoring Using Inductive Sensors. <i>Sensors</i> , 2019, 19, 3284.	2.1	39
26	Automatic histologically-closer classification of skin lesions. <i>Computerized Medical Imaging and Graphics</i> , 2018, 68, 40-54.	3.5	37
27	Image Processing Techniques for Analysis of Satellite Images for Historical Maps Classification—An Overview. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4207.	1.3	37
28	Multimodal sentimental analysis for social media applications: A comprehensive review. <i>Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery</i> , 2021, 11, e1415.	4.6	36
29	Frequency domain QR code based image steganography using Fresnelet transform. <i>AEU - International Journal of Electronics and Communications</i> , 2015, 69, 539-544.	1.7	33
30	ABC algorithm based optimization of 1-D hidden Markov model for hand gesture recognition applications. <i>Computers in Industry</i> , 2018, 99, 313-323.	5.7	32
31	A systematic literature review on spam content detection and classification. <i>PeerJ Computer Science</i> , 2022, 8, e830.	2.7	32
32	Emergency Response Cyber-Physical Framework for Landslide Avoidance with Sustainable Electronics. <i>Technologies</i> , 2018, 6, 42.	3.0	28
33	Evaluation of brain tumor using brain MRI with modified-moth-flame algorithm and Kapur's thresholding: a study. <i>Evolutionary Intelligence</i> , 2021, 14, 1053-1063.	2.3	28
34	Performance enhanced image steganography systems using transforms and optimization techniques. <i>Multimedia Tools and Applications</i> , 2017, 76, 415-436.	2.6	25
35	An augmented reality-supported mobile application for diagnosis of heart diseases. <i>Journal of Supercomputing</i> , 2020, 76, 1242-1267.	2.4	24
36	An Integrated Approach for Monitoring Social Distancing and Face Mask Detection Using Stacked ResNet-50 and YOLOv5. <i>Electronics (Switzerland)</i> , 2021, 10, 2996.	1.8	24

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37	A comprehensive review on iris image-based biometric system. <i>Soft Computing</i> , 2019, 23, 9361-9384.	2.1	23
38	Control of singularity trajectory tracking for robotic manipulator by genetic algorithms. <i>Journal of Computational Science</i> , 2019, 30, 55-64.	1.5	23
39	A modified genetic algorithm for performance improvement of transform based image steganography systems. <i>Journal of Intelligent and Fuzzy Systems</i> , 2018, 35, 197-209.	0.8	22
40	Performance prediction of hybrid thermoelectric generator with high accuracy using artificial neural networks. <i>Sustainable Energy Technologies and Assessments</i> , 2019, 33, 53-60.	1.7	22
41	A probabilistic model for state sequence analysis in hidden Markov model for hand gesture recognition. <i>Computational Intelligence</i> , 2019, 35, 59-81.	2.1	21
42	Visual Sentiment Analysis Using Deep Learning Models with Social Media Data. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 1030.	1.3	21
43	Deploying swarm intelligence in medical imaging identifying metastasis, microcalcifications and brain image segmentation. <i>IET Systems Biology</i> , 2015, 9, 234-244.	0.8	18
44	A systematic review on machine learning models for online learning and examination systems. <i>PeerJ Computer Science</i> , 0, 8, e986.	2.7	18
45	Prediction of Electroencephalogram Time Series With Electro-Search Optimization Algorithm Trained Adaptive Neuro-Fuzzy Inference System. <i>IEEE Access</i> , 2019, 7, 15832-15844.	2.6	17
46	Assessing the Effectiveness of Automated Emotion Recognition in Adults and Children for Clinical Investigation. <i>Frontiers in Human Neuroscience</i> , 2020, 14, 70.	1.0	17
47	Image Pre-processing and Feature Extraction Techniques for Magnetic Resonance Brain Image Analysis. <i>Communications in Computer and Information Science</i> , 2012, , 349-356.	0.4	17
48	Distance metric-based time-efficient fuzzy algorithm for abnormal magnetic resonance brain image segmentation. <i>Neural Computing and Applications</i> , 2013, 22, 1013-1022.	3.2	16
49	Investigation and reduction methods of specific absorption rate for biomedical applications: A survey. <i>International Journal of RF and Microwave Computer-Aided Engineering</i> , 2018, 28, e21211.	0.8	16
50	An Intelligent Assistive Tool Using Exergaming and Response Surface Methodology for Patients With Brain Disorders. <i>IEEE Access</i> , 2019, 7, 21502-21513.	2.6	15
51	Prediction of COVID-19 active cases using exponential and non-linear growth models. <i>Expert Systems</i> , 2022, 39, e12648.	2.9	15
52	Bat Algorithm Based Non-linear Contrast Stretching for Satellite Image Enhancement. <i>Geosciences (Switzerland)</i> , 2020, 10, 78.	1.0	15
53	Data augmentation based morphological classification of galaxies using deep convolutional neural network. <i>Earth Science Informatics</i> , 2020, 13, 601-617.	1.6	14
54	Application of Genetic Algorithm and Particle Swarm Optimization techniques for improved image steganography systems. <i>Open Physics</i> , 2016, 14, 452-462.	0.8	13

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55	EEG signal based Modified Kohonen Neural Networks for Classification of Human Mental Emotions. Journal of Artificial Intelligence and Systems, 2020, 2, 1-13.	0.7	13
56	A Modified Fuzzy Logic Relation-Based Approach for Electricity Consumption Forecasting in India. International Journal of Fuzzy Systems, 2020, 22, 461-475.	2.3	11
57	Automated multi-level pathology identification techniques for abnormal retinal images using artificial neural networks. British Journal of Ophthalmology, 2012, 96, 220-223.	2.1	10
58	Fast and accurate fuzzy C-means algorithm for MR brain image segmentation. International Journal of Imaging Systems and Technology, 2016, 26, 188-195.	2.7	10
59	Data augmentation on mice liver cirrhosis microscopic images employing convolutional neural networks and support vector machine. Journal of Ambient Intelligence and Humanized Computing, 2019, 10, 4023-4032.	3.3	10
60	Deep Feature Extraction and Feature Fusion for Bi-temporal Satellite Image Classification. Computers, Materials and Continua, 2020, 66, 373-388.	1.5	10
61	A Hybrid Genetic Algorithm based Fuzzy Approach for Abnormal Retinal Image Classification. International Journal of Cognitive Informatics and Natural Intelligence, 2010, 4, 29-43.	0.4	9
62	A Pattern-Based Artificial Bee Colony Algorithm for Motion Estimation in Video Compression Techniques. Circuits, Systems, and Signal Processing, 2018, 37, 1609-1624.	1.2	9
63	Emergency Response Cyber-Physical System for Flood Prevention with Sustainable Electronics. , 2019, , 319-328.		9
64	Automated classification of retinal images into AMD/non-AMD Classâ€”a study using multi-threshold and Gassian-filter enhanced images. Evolutionary Intelligence, 2021, 14, 1163-1171.	2.3	9
65	A comprehensive review on Arabic word sense disambiguation for natural language processing applications. Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery, 2022, 12, .	4.6	9
66	Self Organizing neural network based pathology classification in retinal images. , 2009, , .		8
67	Fusion of artificial neural networks for learning capability enhancement: Application to medical image classification. Expert Systems, 2017, 34, e12225.	2.9	8
68	A secure confident cloud computing architecture solution for a smart campus. , 2018, , .		8
69	Human emotion recognition using intelligent approaches: A review. Intelligent Decision Technologies, 2020, 13, 417-433.	0.6	8
70	Artificial Intelligence Techniques in Smart Cities Surveillance Using UAVs: A Survey. Studies in Computational Intelligence, 2021, , 329-353.	0.7	8
71	Image Steganography using Hybrid Edge Detector and Ridgelet Transform. Defence Science Journal, 2015, 65, 214-219.	0.5	8
72	Neural Computing Based Abnormality Detection in Retinal Optical Images. , 2009, , .		7

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73	Different methodology for image steganography-based data hiding: review paper. International Journal of Information and Communication Technology, 2015, 7, 521.	0.1	7
74	An investigation on specific absorption rate reduction materials with human tissue cube for biomedical applications. International Journal of RF and Microwave Computer-Aided Engineering, 2019, 29, e21960.	0.8	7
75	Detection and Grading of Diabetic Retinopathy in Retinal Images Using Deep Intelligent Systems: A Comprehensive Review. Computers, Materials and Continua, 2021, 66, 2771-2786.	1.5	7
76	Image fusion practice to improve the ischemic-stroke-lesion detection for efficient clinical decision making. Evolutionary Intelligence, 2021, 14, 1089-1099.	2.3	7
77	Hybrid deep convolutional neural models for iris image recognition. Multimedia Tools and Applications, 2022, 81, 9481-9503.	2.6	7
78	Performance Enhanced Hybrid Kohonen-Hopfield Neural Network for Abnormal Brain Image Classification. Communications in Computer and Information Science, 2011, , 356-365.	0.4	7
79	AN EFFICIENT KOHONEN-FUZZY NEURAL NETWORK BASED ABNORMAL RETINAL IMAGE CLASSIFICATION SYSTEM. Neural Network World, 2013, 23, 149-167.	0.5	7
80	Cancer Cell Detection through Histological Nuclei Images Applying the Hybrid Combination of Artificial Bee Colony and Particle Swarm Optimization Algorithms. International Journal of Computational Intelligence Systems, 2020, 13, 1507.	1.6	7
81	Diabetic Retinopathy Diagnosis in Retinal Images Using Hopfield Neural Network. IETE Journal of Research, 2016, 62, 893-900.	1.8	6
82	Brain MR kurtosis imaging study: Contrasting gray and white matter. Cognitive Systems Research, 2019, 55, 135-145.	1.9	6
83	Plantar Pressure and Contact Area Measurement of Foot Abnormalities in Stroke Rehabilitation. Brain Sciences, 2021, 11, 1213.	1.1	6
84	Hybrid Neuro-Fuzzy Approaches for Abnormality Detection in Retinal Images. Advances in Intelligent Systems and Computing, 2016, , 295-305.	0.5	6
85	Application of Adaptive Resonance Theory Neural Network for MR Brain Tumor Image Classification. International Journal of Healthcare Information Systems and Informatics, 2010, 5, 61-75.	1.0	5
86	Performance Improved Hybrid Intelligent System for Medical Image Classification. , 2015, , .		5
87	Evaluation on diabetic plantar pressure data-set employing auto-segmentation technologies. Neural Computing and Applications, 2020, 32, 11041-11054.	3.2	5
88	A Weighted Counter Propagation Neural Network for Abnormal Retinal Image Classification. Lecture Notes in Electrical Engineering, 2014, , 63-69.	0.3	5
89	Quality of experience (QoE) and quality of service (QoS) in UAV systems. , 2020, , 215-245.		5
90	Dual-Modal Transformer with Enhanced Inter- and Intra-Modality Interactions for Image Captioning. Applied Sciences (Switzerland), 2022, 12, 6733.	1.3	5

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91	Fuzzy C-Means based on Minkowski distance for liver CT image segmentation. Intelligent Decision Technologies, 2016, 10, 393-406.	0.6	4
92	Forest data visualization and land mapping using support vector machines and decision trees. Earth Science Informatics, 2020, 13, 1119-1137.	1.6	4
93	Performance-enhanced modified self-organising map for iris data classification. Expert Systems, 2021, 38, .	2.9	4
94	Towards a Smarter Surveillance Solution: The Convergence of Smart City and Energy Efficient Unmanned Aerial Vehicle Technologies. Studies in Systems, Decision and Control, 2021, , 109-140.	0.8	4
95	An intelligent medical decision support system for diagnosis of heart abnormalities in ECG signals. Intelligent Decision Technologies, 2021, 15, 19-31.	0.6	4
96	Application of Pseudo 2-D Hidden Markov Model for Hand Gesture Recognition. Advances in Intelligent Systems and Computing, 2017, , 179-188.	0.5	4
97	Comparative Analysis of 1-D HMM and 2-D HMM for Hand Motion Recognition Applications. Advances in Intelligent Systems and Computing, 2018, , 227-234.	0.5	4
98	Multispectral vs hyperspectral imaging for unmanned aerial vehicles: current and prospective state of affairs. , 2020, , 133-155.		4
99	Training feedforward neural network using genetic algorithm to diagnose left ventricular hypertrophy. Telkomnika (Telecommunication Computing Electronics and Control), 2020, 18, 1285.	0.6	4
100	A comprehensive E-commerce customer behavior analysis using convolutional methods. Computers and Electrical Engineering, 2021, 96, 107541.	3.0	4
101	Automated radial basis function neural network based image classification system for diabetic retinopathy detection in retinal images. Proceedings of SPIE, 2010, , .	0.8	3
102	An Intelligent Framework for Online Product Recommendation Using Collaborative Filtering. Lecture Notes in Networks and Systems, 2021, , 249-259.	0.5	3
103	Optimization of Hand Motion Recognition System Based on 2D HMM Approach Using ABC Algorithm. , 2017, , 167-192.		3
104	A HIGH SPEED BACK PROPAGATION NEURAL NETWORK FOR MULTISTAGE MR BRAIN TUMOR IMAGE SEGMENTATION. Neural Network World, 2011, 21, 51-66.	0.5	3
105	Performance Improved Modified Fuzzy C-Means Algorithm for Image Segmentation Applications. Informatica, 2015, 26, 635-648.	1.5	3
106	Explainer: An interactive Agent for Explaining the Diagnosis of Cardiac Arrhythmia Generated by IK-DCBRC. Medical Technologies Journal, 2019, 3, 376-394.	0.5	3
107	Multi-neural Networks Object Identification. Advances in Intelligent Systems and Computing, 2021, , 189-196.	0.5	3
108	Scene Understanding Using Deep Neural Networksâ€”Objects, Actions, and Events: A Review. Advances in Intelligent Systems and Computing, 2020, , 223-231.	0.5	3

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109	An enhanced Counter Propagation Neural Network for abnormal retinal image classification. , 2009, , .		2
110	Textural feature extraction for retinal image analysis. , 2012, , .		2
111	Performance enhanced PSO-based modified Kohonen neural network for retinal image classification. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers, Series A/Chung-kuo Kung Ch'eng Hsueh K'an, 2012, 35, 979-991.	0.6	2
112	Special issue on Decision Support Systems for Medical Applications. Intelligent Decision Technologies, 2016, 10, 329-330.	0.6	2
113	Emergency Response Cyber-Physical System for Disaster Prevention with Sustainable Electronics. , 2017, , .		2
114	Deep Learning for Biomedical Applications. , 0, , .		2
115	Novel Optimization Based Hybrid Self-Organizing Map Classifiers for Iris Image Recognition. International Journal of Computational Intelligence Systems, 2020, 13, 1048.	1.6	2
116	Optimization of SVM-Based Hand Gesture Recognition System Using Particle Swarm Optimization and Plant Growth Simulation Algorithm. , 2019, , 185-200.		2
117	Modelling and simulation of UAV systems. , 2020, , 101-121.		2
118	Open-source software (OSS) and hardware (OSH) in UAVs. , 2020, , 49-66.		2
119	Deep learning-based semantic segmentation of interphase cells and debris from metaphase images. International Journal of Imaging Systems and Technology, 2022, 32, 2017-2033.	2.7	2
120	Application of an enhanced fuzzy algorithm for MR brain tumor image segmentation. Proceedings of SPIE, 2010, , .	0.8	1
121	Hybrid clustering method for optic disc segmentation and feature extraction in retinal images. , 2012, , .		1
122	Discrete ripplelet transform based steganography system for imaging applications. International Journal of Reasoning-based Intelligent Systems, 2015, 7, 130.	0.1	1
123	Analysis of wavelet, ridgelet, curvelet and bandelet transforms for QR code based image steganography. , 2017, , .		1
124	Effect of SAR Impact on a Tissue Cube with Graphene-Dipole for 900MHz. , 2018, , .		1
125	IEEE Access Special Section Editorial: Soft Computing Techniques for Image Analysis in the Medical Industry - Current Trends, Challenges and Solutions. IEEE Access, 2018, 6, 39487-39489.	2.6	1
126	An Optimized Predictive Coding Algorithm for Medical Image Compression. Communications in Computer and Information Science, 2019, , 315-324.	0.4	1



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127	A Comprehensive Review on Design of Autonomous Robotic Boat for Rescue Applications. Mathematical Problems in Engineering, 2021, 2021, 1-17.	0.6	1
128	An automatic screening approach for obstructive sleep apnea from photoplethysmograph using machine learning techniques. Telkomnika (Telecommunication Computing Electronics and Control), 2021, 19, 1260.	0.6	1
129	Novel image enhancement approaches for despeckling in ultrasound images for fibroid detection in human uterus. Open Computer Science, 2021, 11, 399-410.	1.3	1
130	Application of Adaptive Resonance Theory Neural Network for MR Brain Tumor Image Classification. , 2012, , 154-167.		1
131	Moments-Based Feature Vector Extraction for Iris Recognition. Advances in Intelligent Systems and Computing, 2020, , 255-263.	0.5	1
132	Fibroid Detection in Ultrasound Uterus Images Using Image Processing. Advances in Intelligent Systems and Computing, 2020, , 173-179.	0.5	1
133	Computational Intelligence Techniques for Pattern Recognition in Biomedical Image Processing Applications. , 0, , 710-724.		1
134	Efficient Visual Sentiment Prediction Approaches Using Deep Learning Models. Communications in Computer and Information Science, 2021, , 260-272.	0.4	1
135	Data hiding in gray scale images using Integer Wavelet Transform. , 2014, , .		0
136	Medical Image Analysis Using Soft Computing Techniques. Studies in Computational Intelligence, 2014, , 131-139.	0.7	0
137	Analysis of Daubechies Wavelet Transform Based Human Detection Approaches in Digital Videos. , 2018, , .		0
138	Investigation of SAR Exposure Assessment in Vital Human Tissues at GSM Frequency. Communications in Computer and Information Science, 2019, , 366-372.	0.4	0
139	Investigation of Nanomaterial Dipoles for SAR Reduction in Human Head. Frequenz, 2019, 73, 189-201.	0.6	0
140	Pyramid-Based Multi-scale Enhancement Method for Iris Images. Advances in Intelligent Systems and Computing, 2019, , 13-21.	0.5	0
141	Coherence and Adaptivity in Frameless Rendering-A Practical and Information Theoretic Analysis. IEEE Access, 2021, 9, 67752-67760.	2.6	0
142	Reversible Data Hiding Based on Varying Radix Numeral System. Computers, Materials and Continua, 2021, 69, 283-300.	1.5	0
143	Fibroid Segmentation in Ultrasound Uterus Images Using Wavelet Filter and Active Contour Model. Lecture Notes on Data Engineering and Communications Technologies, 2021, , 509-517.	0.5	0
144	Computational Intelligence Techniques for Pattern Recognition in Biomedical Image Processing Applications. , 2012, , 195-209.		0

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145	Performance Enhanced Hybrid Artificial Neural Network for Abnormal Retinal Image Classification. Advances in Intelligent Systems and Computing, 2013, , 367-378.	0.5	0
146	Evaluating YOLOv5 Deep Learning Models for the Detection of Tomato Berries for Crop Yield Estimation. Frontiers in Artificial Intelligence and Applications, 2022, , .	0.3	0