Alex Noel Joseph Raj

List of Publications by Year
in descending order

77 papers	1,051 citations	430442 18 h-index	476904 29 g-index
80 all docs	80 docs citations	80 times ranked	776 citing authors

#	ARTICLE	IF	CITATIONS
1	An RDAU-NET model for lesion segmentation in breast ultrasound images. PLoS ONE, 2019, 14, e0221535.	1.1	103
2	A Customized VGG19 Network with Concatenation of Deep and Handcrafted Features for Brain Tumor Detection. Applied Sciences (Switzerland), 2020, 10, 3429.	1.3	84
3	Schizophrenia detection using MultivariateEmpirical Mode Decomposition and entropy measures from multichannel EEG signal. Biocybernetics and Biomedical Engineering, 2020, 40, 1124-1139.	3.3	74
4	Breast ultrasound tumor image classification using image decomposition and fusion based on adaptive multi-model spatial feature fusion. Computer Methods and Programs in Biomedicine, 2021, 208, 106221.	2.6	50
5	Digital hair removal by deep learning for skin lesion segmentation. Pattern Recognition, 2021, 117, 107994.	5.1	48
6	A supervised blood vessel segmentation technique for digital Fundus images using Zernike Moment based features. PLoS ONE, 2020, 15, e0229831.	1.1	47
7	RDA-UNET-WGAN: An Accurate Breast Ultrasound Lesion Segmentation Using Wasserstein Generative Adversarial Networks. Arabian Journal for Science and Engineering, 2020, 45, 6399-6410.	1.7	45
8	Emotion classification from speech signal based on empirical mode decomposition and non-linear features. Complex & Intelligent Systems, 2021, 7, 1919-1934.	4.0	45
9	Cubic SVM Classifier Based Feature Extraction and Emotion Detection from Speech Signals. , 2018, , .		30
10	Evaluation of brain tumor using brain MRI with modified-moth-flame algorithm and Kapur's thresholding: a study. Evolutionary Intelligence, 2021, 14, 1053-1063.	2.3	28
11	ADID-UNET—a segmentation model for COVID-19 infection from lung CT scans. PeerJ Computer Science, 2021, 7, e349.	2.7	28
12	Cardiac VFM visualization and analysis based on YOLO deep learning model and modified 2D continuity equation. Computerized Medical Imaging and Graphics, 2020, 82, 101732.	3.5	26
13	A Twofold Lookup Table Architecture for Efficient Approximation of Activation Functions. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2020, 28, 2540-2550.	2.1	23
14	Breast ultrasound lesion classification based on image decomposition and transfer learning. Medical Physics, 2020, 47, 6257-6269.	1.6	22
15	Shape and Texture Aware Facial Expression Recognition Using Spatial Pyramid Zernike Moments and Law's Textures Feature Set. IEEE Access, 2021, 9, 52509-52522.	2.6	22
16	An integrated feature frame work for automated segmentation of <scp>COVID</scp>–19 infection from lung <scp>CT images</scp>. International Journal of Imaging Systems and Technology, 2021, 31, 28-46.	2.7	21
17	Nipple Segmentation and Localization Using Modified U-Net on Breast Ultrasound Images. Journal of Medical Imaging and Health Informatics, 2019, 9, 1827-1837.	0.2	21
18	Efficient VLSI implementation of FFT for orthogonal frequency division multiplexing applications. IET Circuits, Devices and Systems, 2014, 8, 526-531.	0.9	20

#	Article	IF	Citations
19	Application of fractal theory and fuzzy enhancement in ultrasound image segmentation. Medical and Biological Engineering and Computing, 2019, 57, 623-632.	1.6	20
20	A Multi-Sensor System for Silkworm Cocoon Gender Classification via Image Processing and Support Vector Machine. Sensors, 2019, 19, 2656.	2.1	18
21	Rational filter design for depth from defocus. Pattern Recognition, 2012, 45, 198-207.	5.1	17
22	A Dermoscopic Skin Lesion Classification Technique Using YOLO-CNN and Traditional Feature Model. Arabian Journal for Science and Engineering, 2021, 46, 9797-9808.	1.7	15
23	Tumor classification in automated breast ultrasound (ABUS) based on a modified extracting feature network. Computerized Medical Imaging and Graphics, 2021, 90, 101925.	3.5	15
24	Invariant face recognition using Zernike moments combined with feed forward neural network. International Journal of Biometrics, 2015, 7, 286.	0.3	14
25	Least square estimation-based adaptive complimentary filter for attitude estimation. Transactions of the Institute of Measurement and Control, 2019, 41, 235-245.	1.1	14
26	Efficient wound measurements using RGB and depth images. International Journal of Biomedical Engineering and Technology, 2015, 18, 333.	0.2	13
27	Facial Expression Recognition through person-wise regeneration of expressions using Auxiliary Classifier Generative Adversarial Network (AC-GAN) based model. Journal of Visual Communication and Image Representation, 2021, 77, 103110.	1.7	12
28	Machine Learning-Based Facial Beauty Prediction and Analysis of Frontal Facial Images Using Facial Landmarks and Traditional Image Descriptors. Computational Intelligence and Neuroscience, 2021, 2021, 1-14.	1.1	11
29	Automated evaluation of rheumatoid arthritis from hand radiographs using Machine Learning and deep learning techniques. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2022, 236, 1238-1249.	1.0	11
30	Performance analysis of lightweight CNN models to segment infectious lung tissues of COVID-19 cases from tomographic images. PeerJ Computer Science, 2021, 7, e368.	2.7	10
31	Adaptive parameter based Particle Swarm Optimisation for accelerometer calibration. , 2016, , .		9
32	Efficient dual-precision floating-point fused-multiply-add architecture. Microprocessors and Microsystems, 2018, 57, 23-31.	1.8	9
33	Automatic segmentation for ultrasound image of carotid intimal-media based on improved superpixel generation algorithm and fractal theory. Computer Methods and Programs in Biomedicine, 2021, 205, 106084.	2.6	9
34	Invariant moments based convolutional neural networks for image analysis. International Journal of Computational Intelligence Systems, 2017, 10, 936.	1.6	8
35	Automatic Segmentation of Left Ventricle in Echocardiography Based on YOLOv3 Model to Achieve Constraint and Positioning. Computational and Mathematical Methods in Medicine, 2021, 2021, 1-11.	0.7	7
36	Multiple Faces Tracking Using Feature Fusion and Neural Network in Video. Intelligent Automation and Soft Computing, 2020, 26, 1549-1560.	1.6	7

#	Article	IF	Citations
37	Estimation of Image Magnification Using Phase Correlation. , 2007, , .		6
38	Video-rate calculation of depth from defocus on a FPGA. Journal of Real-Time Image Processing, 2018, 14, 469-480.	2.2	6
39	Prediction of Tensile Strength in Friction Welding Joins Made of SA213 Tube to SA387 Tube Plate through Optimization Techniques. Materials, 2019, 12, 4079.	1.3	6
40	Multi-Features-Based Automated Breast Tumor Diagnosis Using Ultrasound Image and Support Vector Machine. Computational Intelligence and Neuroscience, 2021, 2021, 1-12.	1.1	6
41	MEMS based inertial navigation system: An exploratory analysis. , 2016, , .		5
42	A New Shadow Detection and Depth Removal Method for 3D Text Recognition in Scene Images. , 2018, , .		5
43	A fuzzy clustering based color-coded diagram for effective illustration of blood perfusion parameters in contrast-enhanced ultrasound videos. Computer Methods and Programs in Biomedicine, 2020, 190, 105233.	2.6	5
44	Comparison of LSB based and HS based reversible data hiding techniques. , 2014, , .		4
45	Silkworm cocoon classification using fusion of Zernike moments-based shape descriptors and physical parameters for quality egg production. International Journal of Intelligent Systems Technologies and Applications, 2017, 16, 246.	0.2	4
46	Zernike-Moments-Based Shape Descriptors for Pattern Recognition and Classification Applications. Advances in Computational Intelligence and Robotics Book Series, 2017, , 90-120.	0.4	4
47	Orthogonal Moments Based Texture Analysis of CT Liver Images. , 2007, , .		3
48	A hybrid [ICP and GA] image registration algorithm for depth images. , 2014, , .		3
49	Bilingual text detection in natural scene images using invariant moments. Journal of Intelligent and Fuzzy Systems, 2019, 37, 6773-6784.	0.8	3
50	Transfer learning based convolution neural net for authentication and classification of emotions from natural and stimulated speech signals. Journal of Intelligent and Fuzzy Systems, 2021, 41, 2013-2024.	0.8	3
51	Improved ECG-Derived Respiration Using Empirical Wavelet Transform and Kernel Principal Component Analysis. Computational Intelligence and Neuroscience, 2021, 2021, 1-13.	1.1	3
52	Fusion of ANNs as decoder of retinal spike trains for scene reconstruction. Applied Intelligence, 2022, 52, 15164-15176.	3.3	3
53	A comparison of FFT and DCT based Phase Correlation function for focused and defocused images. , 2012, , .		2
54	Reduced dataset for Allan variance analysis. , 2017, , .		2

#	Article	IF	Citations
55	UAV attitude estimation based on the dual filtering methods. International Journal of Intelligent Unmanned Systems, 2018, 6, 21-31.	0.6	2
56	Thermal IR Face Recognition Using Zernike Moments and Multi Layer Perceptron Neural Network (MLPNN) Classifier. Advances in Intelligent Systems and Computing, 2018, , 213-222.	0.5	2
57	Medical Image Segmentation and Classification Using MKFCM and Hybrid Classifiers. International Journal of Intelligent Engineering and Systems, 2017, 10, 9-19.	0.8	2
58	Nipple Localization in Automated Whole Breast Ultrasound Coronal Scans Using Ensemble Learning. Ultrasonic Imaging, 2021, 43, 29-45.	1.4	2
59	A Simplified Measurement Configuration for Evaluation of Relative Permittivity Using a Microstrip Ring Resonator with a Variational Method-Based Algorithm. Sensors, 2022, 22, 928.	2.1	2
60	Accuracy Enhancement of Action Recognition Using Parallel Processing. Lecture Notes in Electrical Engineering, 2018, , 221-234.	0.3	1
61	Sensor-Assisted Assessment of the Tribological Behavioral Patterns of Al–SiCp Composites under Various Environmental Temperature Conditions. Materials, 2019, 12, 4004.	1.3	1
62	Performance Improvement of Vector-Radix Decimation-in-Frequency 3D-DCT/IDCT Using Variable Word Length. Circuits, Systems, and Signal Processing, 2021, 40, 1818-1831.	1.2	1
63	The 3D-DTW Custom IP based FPGA Hardware Acceleration for Action Recognition. Journal of Imaging Science and Technology, 2021, 65, 10401-1-10401-10.	0.3	1
64	Hardware Implementation of Pyramidal Histogram of Oriented Gradients. Advances in Intelligent Systems and Computing, 2022, , 61-69.	0.5	1
65	Bilingual text detection from natural scene images using faster R-CNN and extended histogram of oriented gradients. Pattern Analysis and Applications, 0, , 1.	3.1	1
66	Optimum selection of features for 2D (color) and 3D (depth) face recognition using modified PCA (2D). , 2014, , .		0
67	A vision-based non-contact area and volume estimation of irregular structures towards applications in wound measurement. International Journal of Computational Vision and Robotics, 2017, 7, 489.	0.2	0
68	Swarm bots: System design for ECHOLOCATION. , 2017, , .		0
69	A time-efficient video stabilization algorithm based on Block Matching in a restricted search space. , 2017, , .		0
70	Integrated Guidance System of a Commercial Launch Vehicle. MATEC Web of Conferences, 2018, 179, 03002.	0.1	0
71	Finding Facial Emotions From the Clutter Scenes Using Zernike Moments-Based Convolutional Neural Networks. Advances in Computational Intelligence and Robotics Book Series, 2021, , 241-265.	0.4	0
72	Layer-Wise Tumor Segmentation of Breast Images Using Convolutional Neural Networks. Advances in Computational Intelligence and Robotics Book Series, 2021, , 70-84.	0.4	0

#	Article	IF	Citations
73	DESIGN OF 8 x 8 2D-DCT PROCESSOR FOR HIGH ACCURACY HIGH PERFORMANCE APPLICATIONS. Far East Journal of Electronics and Communications, 2015, 15, 151-170.	0.2	0
74	Reconstruction of 3-Dimensional Scenes Using Depth from Defocus and Artificial Neural Networks Trained on Fractals. Advances in Intelligent Systems and Computing, 2018, , 121-129.	0.5	0
75	A Comparative Study of Preprocessing Techniques for Marker Based Localization in UAVs. Advances in Intelligent Systems and Computing, 2018, , 419-428.	0.5	0
76	Shape Reconstruction from a Monocular Defocus Image Using CNN. Advances in Intelligent Systems and Computing, 2020, , 821-831.	0.5	0
77	FPGA-based systolic deconvolution architecture for upsampling. PeerJ Computer Science, 0, 8, e973.	2.7	0