

# Alex Noel Joseph Raj

## List of Publications by Year in descending order

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77  
papers

1,051  
citations

430754

18  
h-index

477173

29  
g-index

80  
all docs

80  
docs citations

80  
times ranked

776  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hardware Implementation of Pyramidal Histogram of Oriented Gradients. Advances in Intelligent Systems and Computing, 2022, , 61-69.	0.5	1
2	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
3	Fusion of ANNs as decoder of retinal spike trains for scene reconstruction. Applied Intelligence, 2022, 52, 15164-15176.	3.3	3
4	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
5	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
6	An integrated feature frame work for automated segmentation of COVID-19 infection from lung CT images. International Journal of Imaging Systems and Technology, 2021, 31, 28-46.	2.7	21
7	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
8	ADID-UNET a segmentation model for COVID-19 infection from lung CT scans. PeerJ Computer Science, 2021, 7, e349.	2.7	28
9	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
10	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
11	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
12	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
13	Emotion classification from speech signal based on empirical mode decomposition and non-linear features. Complex & Intelligent Systems, 2021, 7, 1919-1934.	4.0	45
14	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
15	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
16	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
17	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
18	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

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19	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
20	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
21	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
22	Digital hair removal by deep learning for skin lesion segmentation. Pattern Recognition, 2021, 117, 107994.	5.1	48
23	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
24	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
25	Improved ECG-Derived Respiration Using Empirical Wavelet Transform and Kernel Principal Component Analysis. Computational Intelligence and Neuroscience, 2021, 2021, 1-13.	1.1	3
26	Nipple Localization in Automated Whole Breast Ultrasound Coronal Scans Using Ensemble Learning. Ultrasonic Imaging, 2021, 43, 29-45.	1.4	2
27	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
28	Breast ultrasound lesion classification based on image decomposition and transfer learning. Medical Physics, 2020, 47, 6257-6269.	1.6	22
29	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
30	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
31	Schizophrenia detection using Multivariate Empirical Mode Decomposition and entropy measures from multichannel EEG signal. Biocybernetics and Biomedical Engineering, 2020, 40, 1124-1139.	3.3	74
32	A Customized VGG19 Network with Concatenation of Deep and Handcrafted Features for Brain Tumor Detection. Applied Sciences (Switzerland), 2020, 10, 3429.	1.3	84
33	A supervised blood vessel segmentation technique for digital Fundus images using Zernike Moment based features. PLoS ONE, 2020, 15, e0229831.	1.1	47
34	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
35	Multiple Faces Tracking Using Feature Fusion and Neural Network in Video. Intelligent Automation and Soft Computing, 2020, 26, 1549-1560.	1.6	7
36	Shape Reconstruction from a Monocular Defocus Image Using CNN. Advances in Intelligent Systems and Computing, 2020, , 821-831.	0.5	0

#	ARTICLE	IF	CITATIONS
37	An RDAU-NET model for lesion segmentation in breast ultrasound images. PLoS ONE, 2019, 14, e0221535.	1.1	103
38	Bilingual text detection in natural scene images using invariant moments. Journal of Intelligent and Fuzzy Systems, 2019, 37, 6773-6784.	0.8	3
39	A Multi-Sensor System for Silkworm Cocoon Gender Classification via Image Processing and Support Vector Machine. Sensors, 2019, 19, 2656.	2.1	18
40	Prediction of Tensile Strength in Friction Welding Joints Made of SA213 Tube to SA387 Tube Plate through Optimization Techniques. Materials, 2019, 12, 4079.	1.3	6
41	Sensor-Assisted Assessment of the Tribological Behavioral Patterns of Al <sup>Si</sup> Cp Composites under Various Environmental Temperature Conditions. Materials, 2019, 12, 4004.	1.3	1
42	Application of fractal theory and fuzzy enhancement in ultrasound image segmentation. Medical and Biological Engineering and Computing, 2019, 57, 623-632.	1.6	20
43	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
44	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
45	Video-rate calculation of depth from defocus on a FPGA. Journal of Real-Time Image Processing, 2018, 14, 469-480.	2.2	6
46	Efficient dual-precision floating-point fused-multiply-add architecture. Microprocessors and Microsystems, 2018, 57, 23-31.	1.8	9
47	UAV attitude estimation based on the dual filtering methods. International Journal of Intelligent Unmanned Systems, 2018, 6, 21-31.	0.6	2
48	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
49	A New Shadow Detection and Depth Removal Method for 3D Text Recognition in Scene Images. , 2018, , .		5
50	Cubic SVM Classifier Based Feature Extraction and Emotion Detection from Speech Signals. , 2018, , .		30
51	Integrated Guidance System of a Commercial Launch Vehicle. MATEC Web of Conferences, 2018, 179, 03002.	0.1	0
52	Accuracy Enhancement of Action Recognition Using Parallel Processing. Lecture Notes in Electrical Engineering, 2018, , 221-234.	0.3	1
53	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
54	A Comparative Study of Preprocessing Techniques for Marker Based Localization in UAVs. Advances in Intelligent Systems and Computing, 2018, , 419-428.	0.5	0

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55	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
56	Swarm bots: System design for ECHOLOCATION. , 2017, , .		0
57	A time-efficient video stabilization algorithm based on Block Matching in a restricted search space. , 2017, , .		0
58	Reduced dataset for Allan variance analysis. , 2017, , .		2
59	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
60	Invariant moments based convolutional neural networks for image analysis. International Journal of Computational Intelligence Systems, 2017, 10, 936.	1.6	8
61	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
62	Medical Image Segmentation and Classification Using MKFCM and Hybrid Classifiers. International Journal of Intelligent Engineering and Systems, 2017, 10, 9-19.	0.8	2
63	Adaptive parameter based Particle Swarm Optimisation for accelerometer calibration. , 2016, , .		9
64	MEMS based inertial navigation system: An exploratory analysis. , 2016, , .		5
65	Invariant face recognition using Zernike moments combined with feed forward neural network. International Journal of Biometrics, 2015, 7, 286.	0.3	14
66	Efficient wound measurements using RGB and depth images. International Journal of Biomedical Engineering and Technology, 2015, 18, 333.	0.2	13
67	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
68	A hybrid [ICP and GA] image registration algorithm for depth images. , 2014, , .		3
69	Optimum selection of features for 2D (color) and 3D (depth) face recognition using modified PCA (2D). , 2014, , .		0
70	Efficient VLSI implementation of FFT for orthogonal frequency division multiplexing applications. IET Circuits, Devices and Systems, 2014, 8, 526-531.	0.9	20
71	Comparison of LSB based and HS based reversible data hiding techniques. , 2014, , .		4
72	A comparison of FFT and DCT based Phase Correlation function for focused and defocused images. , 2012, , .		2

#	ARTICLE	IF	CITATIONS
73	Rational filter design for depth from defocus. Pattern Recognition, 2012, 45, 198-207.	5.1	17
74	Estimation of Image Magnification Using Phase Correlation. , 2007, , .		6
75	Orthogonal Moments Based Texture Analysis of CT Liver Images. , 2007, , .		3
76	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
77	FPGA-based systolic deconvolution architecture for upsampling. PeerJ Computer Science, 0, 8, e973.	2.7	0