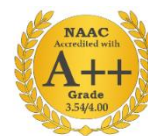





SETHU INSTITUTE OF TECHNOLOGY

(An Autonomous Institution| Accredited with 'A++' Grade by NAAC)

Pulloor, Kariapatti –Taluk. Virudhunagar Dist-626115.



Department of					
Name	A.SHAKIN BANU				
Date of Birth	06.06.1981				
Unique ID	1-9525083882				
Educational Qualifications	M.E				
Designation	ASSISTANT PROFESSOR				
Email ID	shakinbanu@sethu.ac.in				
Alternate Email ID	shakinbanu.a@gmail.com				
Experience	Industry	Teaching	Others	Total	
		21 years 5 months		21 years 5 months	
Date of Joining the Institution	22.02.2021				
Area of Specialization	Power Electronics & Industrial Drives				
Courses taught	Electronic Devices, Antenna & Wave Propagation, Microprocessor, Microcontroller & Applications, Fundamentals of Digital Image Processing, Soft Computing.				
Research Focus	Digital Image Processing				
Research guidance (Number of Scholars)	Nil				
Subject Competency	02				
No. of papers published	National Journals	International Journals		Conferences	
	-	12		38	
PG Specialization	Power Electronics & Industrial Drives				
Ph.D. Specialization	Digital Image Processing				
Projects Carried out	Nil				
Patents (Filed & Granted)	01				
Technology Transfer					
No. of Books published	Nil				



with details (Name of the book, Publisher with ISBN, year of publication, etc.)

Academic Credentials

Level	Degree	Specialization	University	Year of Completion
UG	B.E.,	Electronics & Communication Engineering	Noorul Islam College of Engineering	2002
PG	M.E.,	Power Electronics & Industrial Drives	Sathyabama Institute of Technology	2004
Ph.D.	--			

Details of Journal Publication:

1. A.Shakin Banu, "Rotation Invariant Static And Dynamic Texture Classification With Local Binary Count", International Journal of Scientific and Engineering Research , Volume 4, Issue6, June 2013 Edition (ISSN 2229-5518).
2. A.Shakin Banu, "Reconfigurable Channel Reordering To Reduce Latency In IPTV Networks", International Journal of Innovative Research in Science, Engineering and Technology, Volume 3, Special Issue 3, March 2014
ISSN : 2319 - 8753
3. A.Shakin Banu, "Iris Recognition using Daisy Descriptor with Random Forest Classifier for Human Identification", International Journal of Advanced Research Trends in Engineering and Technology (IJARTET) , Special Issue, Vol. 1, No. 2, April 2015, ISSN 2319-5991
4. A.Shakin Banu, "Video Based Vehicle Detection Using Morphological Operation And Hog Feature Extraction", ARPN Journal of Engineering and Applied Sciences(**Annexure-II**), VOL. 10, NO. 4, MARCH 2015, ISSN 1819-6608.
5. A.Shakin Banu, "Despeckling of SAR Images using Non-Decimated Wavelet and Savitzky Golay Filter", Advances in Natural and Applied Sciences (**Annexure II**), ISSN: 1995-0772, 2017 April 11(4): pages 20-25
6. A.Shakin Banu, "Sparse Representation based Despeckling of SAR Images using STDTCWT", **Elsevier SSRN Digital Library**, <http://dx.doi.org/10.2139/ssrn.3431020>, August 2019
7. A.Shakin Banu, "Target Detection in SAR Images using Bayesian Saliency Map and Morphological Attribute Profiles", Elsevier Computer Communications(**Annexure I**) , Volume 160, 1 July 2020, Pages 738-748,
<https://doi.org/10.1016/j.comcom.2020.03.018>
8. A.Shakin Banu, "Efficient Target Detection and Classification of SAR Images using Z Buffer CNN", **Springer link Book Series**, Vol 182. Springer, Singapore. https://doi.org/10.1007/978-981-15-5224-3_45

9. **A.Shakin Banu, “Target detection in SAR images using bayesian saliency and morphological attribute profiles, Journal of Computer Communications, Volume 160 (2020): 738-748**
10. A.Shakin Banu, "Automatic target detection and recognition of military vehicles in synthetic aperture radar images is fostered by optimizing VGG-googLeNet with the giraffe kicking optimization algorithm." , *Signal, Image and Video Processing* , 18.8 (2024): 6491-6502.
11. A.Shakin Banu, "A Hybrid Deep Learning based Automatic Target Detection and Recognition of Military Vehicles in Synthetic Aperture Radar Images." *International Journal of Industrial Engineering: Theory, Applications and Practice* , 31.6 (2024).

Details of Conference attended:

1. **A.Shakin Banu, “Effective Face Recognition Using Gabor Filter And LBP Model”, First National Conference on Innovations in Signal Processing, Embedded Systems & Communication Technology, Kumaraguru College of Technology, 2012**
2. A.Shakin Banu, “Rotation Invariant Static and Dynamic Texture Classification with Local Binary Count(LBC)”, National Conference on Communication, Signal and Image Processing In Indian Scenario: Opportunities and Challenges, , Kumaraguru College of Technology, 2013.
3. A.Shakin Banu, “Reconfigurable Channel Reordering to reduce Latency in IPTV Networks, IEEE International Conference On Innovations In Engineering And Technology, K.L.N.College of Engineering, 2014
4. A.Shakin Banu, “Gratious Power Reduction in LTE Networks”, First International Conference in VLSI Computation, Networking and System Design, Sethu Institute of Technology, 2014
A.Shakin Banu, “Extravagant Power Reduction in LTE Networks”, International Conference On Innovations In Information, Embedded And Communication Systems’ 14, Karpagam College of Engineering, 2014
5. A.Shakin Banu, “A Survey on various Despeckling filters for SAR Image”, International Conference on Design, Applications of Structures, Drives, Communicational and Computing Systems, KLN College of Information Technology, 2014
6. A.Shakin Banu, “Classification of Synthetic Radar Images using Fuzzy C- means algorithm”, International Conference on Design, Applications of Structures, Drives, Communicational and Computing Systems, KLN College of Information Technology, 2014
7. A.Shakin Banu, “Vehicle Classification Based on Length using Video Images”, International Conference on Design, Applications of Structures, Drives, Communicational and Computing Systems, KLN College of Information Technology, 2014
8. A.Shakin Banu, Detection and Classification of Vehicles in Video using LGP, Intelligent Techniques in Control Optimization and Signal Processing, Kalasalingam University, 2015
9. A.Shakin Banu, Despeckling of SAR Images using Block Matching 3D Algorithm, Sixth International Conference on Advanced Computing, MIT, Chennai, 2015.
10. A.Shakin Banu, Vehicle Detection in Videos Using Morphological Operation and HOG Feature Extraction, IEEE Sponsored 9th International Conference on Intelligent Systems and Control, Karpagam College of Engineering, 2015
11. A.Shakin Banu, Survey on SAR Image Classification, International Conference on Design, Applications of Structures, Drives, Communicational and Computing Systems, KLN College of Information Technology, 2015
12. A.Shakin Banu, Texture Classification based on Feature Selection with BRINT and GLCM, National Conference on Recent Hasten in Communication Systems, SACS MAVMM College of Engineering, 2015
13. A.Shakin Banu, Rotation Invariant Texture Classification using BRINT and GLCM with SVM Classifier, International Conference on Innovative trends in Electronics Communication and Applications, IIT, Chennai, 2015

14. A.Shakin Banu, Survey on Despeckling of SAR Images, Fifth International Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems, KLN College of Information Technology, 2016
15. A.Shakin Banu, An Efficient Point Matching Algorithm using Modified SIFT, National Conference on communication, computing, Telemedicine & VLSI, KLNCIT, 2016
16. A.Shakin Banu, Image Denoising With Edge-Preserving and Segmentation Based on Mask NHA, National Conference on communication, computing, Telemedicine & VLSI, KLNCIT, 2016
17. A.Shakin Banu, Despeckling of SAR Images using Non-Decimated Wavelet Transform, IEEE Sponsored International Conference on Innovations in Informations, Embedded and Communication Systems, Karpagam College of Engineering and Technology, 2017
18. A.Shakin BANu, Identification Of Transfaulty Nodes During Attackers Using Bat Algorithm And Aodv Protocol In Wireless Sensor Networks, 4th International Conference On Emerging Trends In Engineering & Technology'17 [ICETET'17], Pandiyan Saraswathy Yadav Engineering College, Arasanoor, 2017
19. A.Shakin BANu, Comparsion Of Edge Detection Techniques For SAR Images, 4th International Conference On Emerging Trends In Engineering & Technology'17 [ICETET'17], Pandiyan Saraswathy Yadav Engineering College, Arasanoor, 2017
20. A.Shakin BANu, Despeckling Of Sar Images Using Savitzky Golay And Median Filter, 4th International Conference On Emerging Trends In Engineering & Technology'17 [ICETET'17], Pandiyan Saraswathy Yadav Engineering College, Arasanoor, 2017
21. A,Shakin Banu, Despeckling of SAR Images using Shearlet Transform with Preconditioned Conjugate Gradient, 2nd International Conference on Applied Soft Computing Techniques, Kalasalingam University, 2018
22. A.Shakin Banu, Saliency based Automatic Target Detection of SAR Images using Superpixel Segmentation, 7th International Conference on "Design and Application of Structures, Drives, Communicational and Computing Systems", K.L.N. College of Information Technology, 2019
23. A.Shakin Banu, Survey on Automatic Target Recognition Methods of SAR Images, 7th International Conference on "Design and Application of Structures, Drives, Communicational and Computing Systems", K.L.N. College of Information Technology, 2019
24. A.Shakin Banu, Survey of Features Extraction and Matching Algorithms for Image Processing, 7th International Conference on "Design and Application of Structures, Drives, Communicational and Computing Systems", K.L.N. College of Information Technology, 2019
25. A.Shakin Banu, Despeckling of Synthetic Aperture Radar Images Using Trilateral Weighted Sparse Coding Filter, 7th International Conference on "Design and Application of Structures, Drives, Communicational and Computing Systems", K.L.N. College of Information Technology, 2019
26. A.Shakin Banu, Change Detection of Accurate Waterline Mapping in SAR Images Using Novel Waterline Mapping Method, One Day Virtual Conference on "Recent Trends in Engineering and Information Technology" RTEIT'20
27. A.Shakin Banu, Image Processing Based Vehicle Detection and Tracking Using Gaussian Mixture Model and Blob Detection, One Day Virtual Conference on "Recent Trends in Engineering and Information Technology" RTEIT'20
28. A.Shakin Banu, Automated Complete Blood Cell Count and Malaria Pathogen Detection Using Convolution Neural Network, One Day Virtual Conference on "Recent Trends in Engineering and Information Technology" RTEIT'20
29. A.Shakin Banu, Contrast Enhancement in Digital Image Processing using Adaptive Histogram Equalization, One Day Virtual Conference on "Recent Trends in Engineering and Information Technology" RTEIT'20
30. A.Shakin Banu, Image Restoration Techniques using Spatial Domain Filters, One Day Virtual Conference on "Recent Trends in Engineering and Information Technology" RTEIT'20

31. A.Shakin Banu, Automatic Wireless Heart Beat Counting for Checking Abnormalities in Hospitals for Patients, One Day Virtual Conference on “Recent Trends in Engineering and Information Technology”RTEIT’20
32. A.Shakin Banu, ADespeckling and Classification of SAR Images using Adaptive Morphological Filter and Googlenet Convolutional Neural Networks, One Day Virtual Conference on “Recent Trends in Engineering and Information Technology”RTEIT’20
33. A.Shakin Banu, Autonomous Drone Navigation and Classification using for Scene Detection using Convolutional Neural Networks, One Day Virtual Conference on “Recent Trends in Engineering and Information Technology”RTEIT’20
34. A.Shakin Banu, Signature Forgery Detection and Recognition using Deep Convolutional Network, International Conference on Emerging Trends in Information and Communication Technologies, SIT, 2023
35. A.Shakin Banu, DETECTION AND CLASSIFICATION OF LIVER CANCER USING IMAGE PROCESSING TECHNIQUES, International Conference on Emerging Trends in Information and Communication Technologies, SIT, 2023
36. A.Shakin Banu, Multi Classification of Hybrid BCI Signal, 10th International Conference on , IISC BangaloreBusiness Analytics & Intelligence, IISC, Bangalore, 2023
37. A.Shakin Banu, Forest Fire Detection System based on Zigbee Wireless Sensor Network, ETICT 2K23, SIT, 2023
38. A.Shakin Banu, Smart Road Safety and Accident Prevention system in Mountain Roads Avoidance System, ETICT 2K23, SIT, 2023

Details of Book Chapter and Books Published:Nil

Details of Patents Filed and Granted:

Level	Application No	Title of the Patent	Status	Date of Status	Author Details
National	434928-001	Wearable Communication Device with Gesture Controlled Interface	Filed	20-10-2024	A.Shakin Banu , Assistant Professor , ECE , Sethu Institute of Technology , Tamil Nadu , India

Expert Lecture Delivered:

- 1. Delivered lecture and give Hands on Training in Workshop on Introduction to Image Analysis with MATLAB on 11-12-2024**
- 2. Give hands on training in Industry Designed Course on Arduino Programming on 18-03-2025.**

