

RESUME

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A

Research Publications in Journals

S.No.	Title with Journal details
1.	L. Kaur, R. C. Chauhan, and S. C.Saxena, "Space-Frequency Quantizer Design for Ultrasound Image Compression based on Minimum Description Length Criterion" IEE Jr. of International Federation for Medical & Biological Engineering, vol. 43, pp. 33-39, 2005.
2.	L. Kaur, R. C. Chauhan, and S. C.Saxena, "Performance Improvement of the SPIHT Coder based on the Statistics of Medical Ultrasound Images in Wavelet domain" Taylor & Francis Jr. of Medical Engg. and Technology (JMET), vol. 29, no. 3, pp. 297-301, Dec. 2k5.
3.	L. Kaur, R. C. Chauhan, and S. C.Saxena, "Joint Thresholding and Quantizer Selection for Compression of Medical Ultrasound Images in the Wavelet Domain, Taylor & Francis International Jr. of Medical Engg. and Technology (JMET), vol. 30, no. 1, pp. 17-24, Jan-Feb 2k6. ISBN/ISSN no. 0309-1902, Impact factor: 0.527
4.	L. Kaur, R. C. Chauhan, and S. C.Saxena, "Wavelet based Compression of Medical Ultrasound images using Vector Quantization", Taylor & Francis International Jr. of Medical Engg. and Technology (JMET), vol. 30, no. 3, pages 128-133, May-june 2006. ISBN/ISSN no. 0309-1902, Impact Factor: 0.527.
5.	L. Kaur, R. C. Chauhan, and S. C.Saxena, "Adaptive Compression of Medical Ultrasound Images", Jr. of IEE-Vision Image and signal Processing, pages 185-190. vol. 153, no. 2, April 2006. 1350-245X, Impact Factor: 0.969
6.	Medical ultrasound image compression using joint optimization of thresholding quantization and best-basis selection of wavelet packets, pages 189-198. Elsevier Jr. of Digital signal Processing, vol. 17, 2007. ISBN/ISSN no. 1051-2004. (Impact Factor: 1.317)

7.	A Versatile Technique for Visual Enhancement of Medical Ultrasound Images, Pages 542-560. Elsevier Jr. of Digital signal Processing, vol. 17, Issue 3, May 2007. ISBN/ISSN no. 1051-2004, (Impact Factor: 1.317)
8.	On Bandwidth analysis of Fault tolerant Multistage Interconnection networks, pages 199-202, International review on Computers and software, vol. 3, no. 2, 2008. ISBN/ISSN no. 1828-6003
9.	On Reliability analysis of Fault tolerant Multistage Interconnection networks, pages 1-8. International journal of computer Science and security, vol. 2, no. 4, 2008. ISBN/ISSN no. 1985-1553
10	Design and Bandwidth analysis of Fault-tolerant Multistage Interconnection Network, pages 962-965. Journal of computer Science, vol. 4, no. 11, 2008. ISBN/ISSN no. 1549-3636
11	“Analysis of Intrusion Detection Tools for Wireless Local Area Networks”, pp. 168-177. IJCSNS International Journal of Computer Science and Network Security, VOL.9 No.7, July 2009. ISSN : 1738-7906.
12	A MAC Layer Based Defense Architecture for Reduction-of-Quality (RoQ) Attacks in Wireless Local Area Network (WLAN) pp. 284-291. IJCSIS, International Journal of Computer Science and Information Security, Vol. 7, No. 1, January 2010. ISSN: 1947-5500
13	Taxonomy of Attacks in Wireless Local Area Networks, Journal of Advanced Research in Computer Engineering: An International Journal , Vol. 4, No. 1, May 2010. ISSN: 0974-4320
14	Improving Performance of Anomaly Based Network Intrusion Detection System International Journal of Scientific Computing, Vol.4 No.1, June 2010. ISSN: 0973-578X.
15	Jatinder Singh, Dr. Lakhwinder Kaur and Dr. Savita Gupta, “Comparative study of Intrusion Detection Techniques for Wireless Local Area Networks” International Journal of Advance in Communication Engineering, Vol. 1, No. 1. , June 2009 pp. 53-59. ISSN: 0975-6094.
16	Jatinder Singh, Dr. Lakhwinder Kaur and Dr. Savita Gupta, “A Cross-Layer Based Intrusion Detection Technique for Wireless Networks”, The International Arab Journal of Information Technology, Volume 9, No. 2, January 2012. ISSN: 1683-3198.
17	Multistage Interconnection Networks: A Transition from Electronic to Optical, Special issue on Emerging technologies in Internet Security and Networks of the Journal of emerging technologies in WEB intelligence, VOL. 2, NO. 2, pp. 142-147, MAY 2010. ISSN: 1798-0461
18	Reliability analysis of Fault tolerant irregular Multistage Interconnection Network, pp. 955-962, International Journal of Applied Engineering Research, Vol.4, No.6, 2009. Print ISSN: 0973-4562, online ISSN: 1087-1090.
19	Simulation of Fault-tolerant Multistage Interconnection, pp. 24-28. Networks. International Journal of Recent trends in Engineering, vol. 3, no. 2, 2010. ISSN: 1797-9617
20	Segmentation of Handwritten Hindi Text, International Journal of Computer Applications of USA, Vol. 1 – No. 4, pp. 19-23,.Feb. 2010. DOI: 10.5120/108-222. 0975 – 8887, IF: 0.835

21	Resource availability approximation based scheduling in computing Grid”, Atti della Fondazione Giorgio Ronchi, No. 2, Vol. 65, pp. 155-162, April 2010. ISBN/ISSN no. 03912051
22	Naresh Kumar Garg, Lakhwinder Kaur and M. K. Jindal, “Hazards in segmentation of Handwritten Hindi Text”, International Journal of Computer Applications (IJCA), Vol. 29, No. 2, pp. 30-34, September 2011. DOI: 10.5120/3536-4830. ISBN/ISSN no. 0975 – 8887
23	“Enhanced K-Mean Clustering Algorithm for Liver Image Segmentation to Extract Cyst Region”, IJCA Special Issue on Novel Aspects of Digital Imaging Applications (DIA) (1):59–66, 2011. ISBN/ISSN no. 978-93-80865-47-9.
24	Naresh Kumar Garg, Lakhwinder. Kaur and M. K. Jindal, “Recognition of Offline Handwritten Hindi Text Using SVM”, International Journal of Image Processing (IJIP), pp.395-401, Vol. 7 issue 4, September 2013.
25	Naresh Kumar Garg, Lakhwinder Kaur and M. K. Jindal, “Segmentation of touching modifiers and consonants in middle region of Handwritten Hindi Text international journal of pattern recognition and image analysis, springer, 2014
26	Naresh Kumar Garg, Lakhwinder. Kaur and M. K. Jindal, “Recognition of Offline Handwritten Hindi Text Using SVM”, International Journal of Image Processing (IJIP), pp.395-401, Vol. 7 issue 4, September 2013.
27	Major Singh and L. Kaur, “Fault tolerance task execution through cooperative computing in Grid” Parallel Processing Letters, 23(1), 2013.
28	Major Singh and L. Kaur, “Resource grouping in grid towards availability and reliability of computing service”, Jr. of advanced computing, 1, pp. 1-8, 2013
29	G. Deep, L. Kaur, and S. Gupta, “Lung Nodule Segmentation in CT Images using Rotation Invariant Local Binary Pattern” ACEEE International Journal on Signal & Image Processing, Vol. 4, No. 1, Jan 2013.
30	Harpal Singh, L. Kaur, Kulbir singh, “Robust Digital Image Watermarking using Fractional Discrete Cosine Transform” Jr. of Wulfenia (Austria), vol 20, no. 12, Dec. 2013. (Impact Factor- 0.267),
31	Harpal Singh, L. Kaur, Kulbir singh, “Fractional M-band Dual Tree Complex Wavelet Transform for Digital Watermarking”, Sadhana-Academy proceedings in Engineering Sciences, vol. 39(2), pp. 345-361, April 2014, DOI: 10.1007/s12046-013-0217-2.
32	Harpal Singh, L. Kaur, Kulbir singh, “A Novel Robust Logo Watermarking Scheme Using Fractional M-Band Wavelet Transform”, Journal of The Institution of Engineers (India): Series B. (Impact Factor- 0.3), Publisher: Springer.
33	Harpal Singh, Kulbir Singh and Lakhwinder Kaur (2014), “A Novel Robust Logo Watermarking Scheme Using Fractional M-band Wavelet Transform”, Journal of Communications Technology and Electronics, vol. 59(11), pp. 1234-1246, 2014. DOI: 10.1134/S1064226914110199.
34	S Gupta, L Kaur, “Performance Comparison of Various Filters for Denoising Foggy Images” International Journal of Computer Applications 99 (10), 42-51, 2014

35	Harpreet Kaur, Lakhwinder Kaur, "Review on Content Based Image Retrieval", International Journal of Advanced Research in Computer Science and Software Engg, vol. 5, Issue 5, May 2015 ISSN: 2277 128X (Available online at: www.ijarcsse.com).
36	Paramvir Singh and Lakhwinder Kaur, "Fingerprint Feature Extraction Using Ridges And Valleys", Published in IJERT, Volume 4, Issue 6, pp 1330-1334, June 2015.
37	Madan Lal and Lakhwinder Kaur, "Comparative Analysis of B-Mode Breast Ultrasound Image Enhancement Techniques", International Journal of Computer Applications 131(17), pp 36-40, December 2015 . Published by Foundation of Computer Science (FCS), NY, USA, ISSN: 0975 – 8887
38	Nirvair Neeru and Lakhwinder Kaur, "Modified SIFT Descriptors for Face Recognition under Different Emotions", Journal of Engineering (Hindawi Publishing) , volume 2016, pp. 1-12, 2016. Article ID 9387545, http://dx.doi.org/10.1155/2016/9387545 , (Emerging SCI List)
39	Nirvair Neeru, Lakhwinder Kaur, "A New Hybrid Filtering Technique Based on Neighboring Pixels to Remove Impulse Noise from Digital Images", International Journal of Signal Processing, Image Processing and Pattern Recognition(IJSIP), SERSC Publications, ISSN 2005- 4254, Volume 9, No 9, September 2016. [EI Compendex]
40	Nirvair Neeru, Lakhwinder Kaur, "A Comparative Analysis for Face Recognition under Different Emotions", American Journal of Engineering Research (AJER) e-ISSN: 2320-0847 p-ISSN: 2320-0936 Volume-5, Issue-12, pp-213-217, 2016.
41	Madan Lal, Lakhwinder Kaur, "Speckle Reduction with Edge Preservation in B-Scan Breast Ultrasound Images", International Journal of Image, Graphics and Signal Processing (IJIGSP), Vol.8, No.9, pp.60-68, 2016. ISSN: 2074-9074 (Print), ISSN: 2074-9082 (Online), available September 2016 in MECS (http://www.mecs-press.org/) DOI: 10.5815/ijigsp.2016.09.08
42	G. Deep, L. Kaur, S. Gupta, "Directional local ternary quantized extrema pattern: A new descriptor for biomedical image indexing and retrieval", Engineering Science and Technology, an International Journal, available on Sciencedirect online June 2016, http://dx.doi.org/10.1016/j.jestch.2016.05.006
43	Sukhwinder Singh Sran, Jagpreet Singh and Lakhwinder Kaur, "Aggregation Aware Early Event Notification Technique for Delay Sensitive Applications in Wireless Sensor Networks", Int Jr of Sensor Networks Accepted May 2017. ((SCI.) (Impact factor: 0.635)
44	Madan Lal, Lakhwinder Kaur, Savita Gupta, "B-mode breast ultrasound image segmentation techniques: an investigation and comparative analysis", Int. J. of Computational Systems Engineering, Inderscience (accepted) May 2017
45	Yadwinder Singh and Lakhwinder Kaur, "Obstacle Detection Techniques in Outdoor Environment: Process, Study and Analysis", MECS I.J. Image, Graphics and Signal Processing, 2017, 5, 35-53, Published Online May 2017 (http://www.mecs-press.org/) DOI: 10.5815/ijigsp.2017.05.05
46	G. Deep, L. Kaur, S. Gupta, "Local Quantized Extrema Quinary Pattern: A New Descriptor for Biomedical Image Indexing and Retrieval", Taylor and Francis journal Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization, pp. 1-17, july 2017. http://dx.doi.org/10.1080/21681163.2017.1344933

47	S. S. Sran, L. Kaur, Evaluation and Comparative Study of Structure Free Aggregation Techniques for Duty Cycled Wireless Sensor Networks, International Journal of Computer Application. (Accepted for publication) july 2017. (UGC Approved Journal.)
48	S. S. Sran, J. Singh, L. Kaur, Energy Management with Structure Free Aggregation in Duty Cycle Sensor Networks for Delay Sensitive Applications, Journal of Parallel and Distributed Computing, (Communicated). (SCI) (Impact factor: 1.930.)
49	Madan Lal, Lakhwinder Kaur, Savita Gupta, 'Automatic segmentation of tumors in B-Mode breast ultrasound images using information gain based neutrosophic clustering', Journal of X-Ray Science and Technology, 2017 (Accepted for publication), Publisher: IOS Press. Indexing: SCI-Expanded.
<ul style="list-style-type: none"> • Papers communicated in international journals 	
50	Madan Lal, Lakhwinder Kaur, Savita Gupta, 'Modified Spatial Neutrosophic clustering Technique for Boundary Extraction of Tumors in B-Mode Breast Ultrasound Images', Communicated in the journal of IET Image processing.
51	Madan Lal, Lakhwinder Kaur, Savita Gupta, 'Automatic segmentation of tumors in B-mode breast ultrasound images using information gain based neutrosophic level set', Communicated in the journal of Artificial Intelligence in Medicine.

Conference proceedings

S.No.	Title with Details of conference Publications
1.	Lakhwinder Kaur, R. C. Chauhan "New Technique for Faster Generation of Mandelbrot set", Proc. of IEEE conf. on Communications, Computers and devices at IIT Kharagpur ICCCD-2000.
2.	S. Gupta, L. Kaur, S. C. Saxena, "Image Denoising Using Adaptive Thresholding in Wavelet domain", 4th EURASIP International Conference on Video / Image Processing and Multimedia Communications 2-5 July 2003, Zagreb, Croatia (IEEE sponsored)
3.	L. Kaur, S.C. Saxena, "Compression of Ultrasound images using Wavelet Transform and Vector Quantization " IEEE conf. on EMBS, JAPAN, 2k3.
4.	S. Gupta, L. Kaur, S. C. Saxena, "Speckle Reduction in Medical Ultrasound Images via Maximum A Posteriori Estimation of Wavelet Coefficients using Rayleigh Model for Speckle", (Accepted). IEEE-ICPR Conf. on Pattern Recognition, UK, 2004
5.	S. Gupta, L. Kaur, S. C. Saxena, "A Spatially Adaptive Wavelet Thresholding Technique for Speckle Reduction in Medical Ultrasound Images based on Nakagami Speckle Model" IEEE-ICME conf. on Multimedia & Expo, Taiwan, 2004
6.	"A Modified EZW Image Coder for Medical Ultrasound Images", IEEE conference CERA-2005, IIT Roorkee.
7.	"Despeckling of Coherent Images using Wavelets and Spatially Adaptive Thresholding based on Rayleigh Speckle Model", IEEE conference CERA-2005, IIT Roorkee
8.	L. Kaur, "Thresholding Technique for Reducing Blocking Artifacts from the DCT Compressed Natural Images", International Conference on Wireless Networks and Embedded System' (WECON - 2008) at Chitkara Institute of Engg. & Tech., Rajpura, pp. 389-393, 18-19 Oct. 2008.

9.	Performance improvement of Sigma Filter for reducing Blocking Artifacts in JPEG Compressed Images, National conf on Recent Trends in Computer Science and Information Technology at Beant College of Engg. & Tech., Gurdaspur, pp. 77-83, 2008.
10	A New Method for Line Segmentation of Handwritten Hindi Text, Proceedings of Seventh IEEE International Conference on Information Technology at USA, pp.392-397, ISBN: 978-0-7695-3984, 12-14 April 2010
11	An efficient routing to provide Fault tolerance for an irregular Multistage Interconnection Networks. "IEEE International Advance Computing Conference", 20th Feb., 2010
12	Harpal Singh, Kulbir Singh and Lakhwinder Kaur (2010), "Spatial domain techniques for watermark embedding and detection", Proceedings of the International Conference on Engineering Innovations: A fillip to Economic Development, Continental Institute of Engineering & Technology, Javehra, Fatehgarh Sahib, Punjab (India), 2010
13	Naresh Kumar Garg, Lakhwinder. Kaur and M. K. Jindal, "The Segmentation of Half Characters in Handwritten Hindi Text", Proceedings of the Springer, ICISIL 2011, pp.48-53, March 2011.
14	Enhanced Thresholding Algorithm to Extract Tumor region from MR brain images International Conf. Electrical Engineering and Computer Science, June 9, 2012 at Chandigarh.
15	"Trust and Reputation Based Association Among Grid Entities" 11th WSEAS International Conference on Software Engineering and Distributed Systems (SEPADS '12), Cambridge, UK. 22-24 Feb, 2012.
16	"A Consistent System Availability Framework in Computing Grid" Int. Conf. on Advance Computing, Networking and Security (Adcons-11). NIT-Karnatka.16-18, December 2011.
17	Performance Improvement of LDA and PCA algorithms for Image Recognition International Conf. Electrical Engineering and Computer Science, June 9, 2012 at Chandigarh.
18	Naresh Kumar Garg, Lakhwinder Kaur and M. K. Jindal, "Problems in segmentation of lower modifiers in Handwritten Hindi Text", National conference NCITSLR 2012, held at Punjab University Regional Centre, Muktsar.
19	N Singh, L Kaur, "Automated Segmentation of Blood Vessels for Detection of Proliferative Diabetic Retinopathy", Proceedings of the IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI 2012), pp. 232-235, China, 2-7 Jan 2012
20	Naresh Kumar Garg, Lakhwinder. Kaur and M. K. Jindal, "The Segmentation of left Modifiers from consonants in middle zone of Handwritten Hindi Text", Proceedings of the international conference pattern recognition and image analysis PRIA-11-13, pp. 549-551, Sep 2013.
21	Lakhwinder Kaur, "Study of harvesting techniques", National conf. on Electronics, Instrumentation and Embedded systems March 2013.
22	Lakhwinder Kaur, "Performance evaluation of Denoising filters", National conf. on Electronics, Instrumentation and Embedded systems March 2013.
23	S. Sran, J. Singh, L. Kaur, S. Singh, A survey on data aggregation protocols in Wireless Sensor Network, Third International Conference on Biomedical Engineering and Assistive Technologies (BEATS - 2014), 13-14 Feb, 2014.

24	N Singh, L Kaur, "A survey on blood vessel segmentation methods in retinal images", IEEE conf. on Electronic Design, Computer Networks & Automated Verification (EDCAV), pp. 23 – 28, 29-30 Jan. 2015 (ISBN 978-1-4799-6207-5).
25	Singh, Paramvir, Lakhwinder Kaur, "Fingerprint feature extraction using morphological operations", Published in IEEE conf. on International Conference on Advances in Computer Engineering and Applications (ICACEA), pp. 764 – 767, 2015 , 19-20 March 2015.
26	N. Neeru, L. Kaur, "Face recognition based on LBP and CS-LBP technique under different emotions", IEEE International Conference on Computational Intelligence and Computing Research (ICCIC) at Madurai, India, pp. 1 – 4, 10-12 Dec. 2015 (ISBN: 978-1-4799-7848-9).
27	Navpreet Kaur, Sukhwinder Singh Sran, L. Kaur, "BERP: Balanced Energy Routing Protocol for routing around Connectivity holes in Wireless Sensor" Proceedings of IEEE conf PU Chd., 21-22 Dec 2015.
28	Madan Lal, Lakhwinder Kaur, 'Automatic Seed Point Selection in B-Mode Breast Ultrasound Images', paper presented at 50th Annual Golden Jubilee Convention, organized by Computer Society of India, 02-05 December- 2015. (Proceeding to be published by Springer)
29	Mandeep Kaur and L. Kaur, "Concealed weapon detection from Images using SIFT and SURF", ", 3rd IEEE International Conference on Innovations in Information, Embedded, and communication systems at Coimbatore Mar. 17-18, 2016 (presentation Thru Skype)
30	Mandeep Kaur and L. Kaur, "A Survey of Concealed weapon detection Techniques from Images", IEEE International Conference on Engg. and Technology at Coimbatore Mar. 17-18, 2016 (presentation Thru Skype)
31	Nirvair Neeru, Lakhwinder Kaur, "An Experimental Analysis on Removal of Salt and Pepper Noise from Digital Images", International Conference on Smart Trends for Information Technology and Computer Communications (Smart Com), Jaipur, Springer Proceeding (LNNS), August 2016.
32	Madan Lal , Lakhwinder Kaur, 'De-speckling of B-Mode Breast Ultrasound Images Using Wavelet shrinkage filters: A Comparative Analysis', paper presented at International Conference on Recent Trends in Computing-2016, organized by Department of Computer Engineering, Punjabi University, Patiala
33	X S. S. Sran, J. Singh, L. Kaur, Energy Efficient Aggregation Aware Routing Techniques for Low Duty Cycled Wireless Sensor Networks, Fourth IEEE International Conference on Computing for Sustainable Global Development (IndiaCom - 2017), 1-3 March, 2017.

Books Published

S.No.	Title with page nos.	Type of book and authorship	Publisher & ISBN/ISSN no.
1	A text book of Operating System, pages 962.	Text book and Authors: Lakhwinder Kaur, Savita Gupta, Jatinder Singh,	ISBN :9788190744812, Khanna Book Publisher, New Delhi, 2008
2	A systematic Approach to Software Engg., pages 646.	Text book, Lakhwinder Kaur, Savita Gupta, Jatinder Singh,	ISBN: 81-89253-84-0, Paragon International Publisher, 2009