

BIO-DATA

Name	Dr. Madan Lal	
Designation	Assistant Professor	
Department	Computer Science & Engineering	
Address	Department of Computer Science & Engg. Punjabi University, Patiala-147002	
Phone	9988696700	
Email	madanlal@pbi.ac.in	
Area of Specialisation	Computer Graphics, Digital Image Processing, Machine Learning	

Academic Qualifications:

Sr. No.	Degree Held	Board/University	Percentage	Subject
1	B.Tech.	GNDU, Amritsar	66.77%	Computer Science and Engineering
2	M.Tech.	Punjabi University, Patiala	75.25%	Computer Engineering
3	Ph.D.	Punjabi University, Patiala		Computer Engineering

Details of Experience:

Sr. No.	Name of Institute	Position Held	Duration	Major Job Responsibilities
1	GTBKIET Chhapiawali-Malout	Lecturer	18.08.99 to 30.11.2005	Teaching
2	GTBKIET Chhapiawali-Malout	Lecturer (Sr.Scale)	01.12.2005 to 06.01.2008	Teaching
3	GTBKIET Chhapiawali-Malout	Assistant Professor	07.01.2008 to 19.08.2008	Teaching and research
4	Punjabi Univ. Patiala	Assistant Professor	20.08.2009 to till date	Teaching and research

M.Tech. Students Guided: 23

Number of Students Pursuing Ph. D: 06

Research Papers Published:

(a) In International Journals

1. Ashok Kumar, Madan Lal, Sumandeep Kaur, 'An autonomic resource management system for energy efficient and quality of service aware resource scheduling in cloud environment', **Concurrency and Computation Practice and Experience**, Vol.35, Issue 05, pp.1-12, April 2023. **(Indexing : SCI)**
2. Geetika Sharma, Madan Lal, Kanwal Preet Singh Attwal, ' A Comprehensive Review on Deep Learning Algorithms for Wind Power Prediction'. **International Journal of Next-Generation Computing**, Vol.13, Issues 4, pp. 829-850, Nov.2022. **(UGC Approved Journal)**
3. Mukul, Madan Lal, 'Biometric Technology Advancements and its Associated Security Concerns: A survey', *International Journal of Research and Analytical Reviews*, Vol.8, Issue.04, Oct 2021.
4. Mukul, Madan Lal, 'Fingerprint Liveness Detection Using Convolutional Neural Network Based Hybrid Model', *NeuroQuantology*, Vol. 20, Issue 2, Page 619-633, February 2022
5. Madan Lal, Lakhwinder Kaur, Savita Gupta, 'B-Mode Breast Ultrasound Image Segmentation Techniques: An investigation and comparative analysis', *International Journal of Computational Systems Engineering*, Vol.4, No. 2/3, pp.171-184, 2018. **(Indexing: IET Inspec)**
6. 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**, Vol.26, No.2, pp.209-225, 2018. **(Indexing: SCI Expanded)**
7. Madan Lal, Lakhwinder Kaur, Savita Gupta, 'Modified Spatial Neutrosophic clustering Technique for Boundary Extraction of Tumors in B-Mode Breast Ultrasound Images', **Journal of IET Image processing**. (Accepted for Publication on March 10, 2018). **(Indexing : SCI)**
8. Richa Sharma, Madan Lal, " Skin Cancer Lesion Classification using LBP based Hybrid Classifier", *International Journal of Advanced Research in Computer Science*, Vol.8, No.7, pp. 993-997, 2017.
9. Madan Lal, Lakhwinder Kaur, Savita Gupta, 'Speckle Reduction with Edge Preservation in B-Scan Breast Ultrasound Images', *International Journal of Image, Graphics and Signal Processing*, Vol. 8, No. 9, pp. 60-68, 2016. **(Indexing: IET Inspec)**

10. Ramandeep Kaur, Madan Lal, "A Brief Review: Speckle Filtering Methods", Imperial Journal of Inter disciplinary Research, Vol.22, pp 84-91, 2016.
11. Madan Lal, Lakhwinder Kaur, "Comparative Analysis of B-Mode Breast Ultrasound Image Enhancement Techniques", International Journal of Computer Science and Applications, Vol. 131, No.17, pp. 36-40, 2015.
12. Manpreet Kaur, Madan Lal, " Review of code clone detection techniques", International Journal of Advanced Research in Computer Science and Software Engineering, Vol.5, May 2015.
13. Manpreet Kaur, Madan Lal, "Code Clone Detection using Function based similarities and metrics", International Journal of Engineering Research and Management, Vol.4, Issue 7, July 2015.
14. Deepti Kumari, Madan Lal, "A review on Security Issues and Encryption Algorithms in Mobile Ad-hoc Network", International Journal of Science and Research, Vol. 03, Issue 06, pp.146-148, June 2014.
15. Dapinder Singh Virk, Madan Lal, "To Achieve Automatic Image Segmentation of Skin Cancer Lesions using Fuzzy c-Means Clustering with Automatic Image Annotation", International Journal for Multi-Disciplinary Engineering and Business, Volume-2, Issue-2, pp. 19-22, July-September, 2014.
16. Amit Kashyap, Madan Lal, "Implementation of Punjabi Spell Checker, Identifying misspelled words with replace option", published in International Journal of Electrical and Electronics Engineering (IJEEE) Volume 1, Special issue 2, 2014.
17. Sukhpal Kaur, Madan Lal, "Review of Digital watermarking Techniques", International Journal of Computer Science and Information Technology, Vol. 01 Spl. Issue 2, pp-91-94, May 2014.
18. Silky Narang, Madan Lal, Navdeep Kanwal, "A Comparative Survey of Various Segmentation Techniques", International Journal of Innovative research and Development (IJIRD), Vol. 2 Issue 5, pp. 610-622, May 2013.
19. Silky Narang, Madan Lal, " Adaptive Image Enhancement of Echocardiographic Images using Automatic ROI", International Journal of Application or innovation in Engineering and Management, Vol. 2, No. 7, pp. 148-154, 2013.
20. Kuldeep Singh, Madan Lal, "Face Recognition using PCA, LDA and other various distance qualifiers", Journal of Global Research in Computer Science ,Vol 04, pp. 30-35, 2013.
21. Kuldeep Singh, Madan Lal, "Comparative analysis of PCA based face recognition system using different distance classifiers", International Journal of Application or innovation in Engineering and Management, Vol. 2, No. 7, pp.341-348, 2013.

22. Ankur Bansal, Madan Lal, "Comparative study of job satisfaction among teachers in public and private engineering institutions", was published in journal of Global Research in Computer Science (JGRCS), Vol. 02, No.06, June 2011.

(b) In conferences

1. Harshdeep Singh, Kanwalpreet Singh Attwal, Madan Lal, "Sentiment Analysis Tools and Techniques: A Review, In the proceedings of IEEE 13th Annual Information Technology, Electronics and Mobile Communication Conference, IEMCON 2022, pp. 424–427,2022.
2. Shrivankumar Sauda, Lovneet Kaur, , Madan Lal, "Comparison of Pre-trained Deep Model Using Tomato Leaf Disease Classification System". In: Agrawal, S., Kumar Gupta, K., H. Chan, J., Agrawal, J., Gupta, M. (eds) Machine Intelligence and Smart Systems. Algorithms for Intelligent Systems. Springer, Singapore. pp.553-566, 2021. https://doi.org/10.1007/978-981-33-4893-6_47.
3. Navneet Kaur, Madan Lal, "Routing Protocols in Opportunistic Networks: A review, Presented in the IEEE 9th International Conference on Advancements in Engineering and Technology at BGIET, Punjab, India 25-26 June, 2021.
4. Barinder Kaur, Madan Lal, Jagroop Kaur, "An investigation on various content based image retrieval techniques", International Conference on Applications of AI and Machine Learning: Proceedings of ICAML-May 21-22, 2020, PP.319-324.
5. Madan Lal, Lakhwinder Kaur, 'Automatic Seed Point Selection in B-Mode Breast Ultrasound Images'. In the proceedings of Sensors and Image Processing, Springer, Singapore, Vol. 651, pp.131-138, 2018.
6. Madan Lal, "Despeckling of B-Mode Breast Ultrasound Images using Wavelet Shrinkage Filter", presented in International Conference on Recent Trends in Computing at Punjabi University, Patiala on August 30-31, 2016.
7. Madan Lal, "3 Tier Intensified Security for ATM Machine using Iris Recognition System", presented in International Conference on Emerging Trends in Engineering and Technology at Chandigarh on May 28-29, 2016.
8. Sukhpal Kaur, Madan Lal, "An Invisible Watermarking Scheme based on Modified Fast Haar Wavelet Transform and RSGWPT", presented in 2nd International Conference on Recent Advances in Engineering and Computational Sciences, **IEEE 2015**.

9. Rashneet Kaur, Madan Lal "A Survey of AODV under black hole attack", 3rd National Conference, RACET-13 at GNE Ludhiana held on March 21-22, 2013.
10. Ashoak Kumar Bathla, Jagtar Singh, "A Novel Approach to Document Clustering using Frequent Itemset", presented in 3rd national conference on Recent Advances and Future Trends in IT at Punjabi University, Patiala on April 9-10, 2009.
11. Madan Lal, Jagtar Singh "A novel approach for message security using steganography", presented in 3rd international conference on advanced computing and communication technologies at Asia Pacific Institute of Information Technology SD India, Panipat on Nov. 8-9, 2008.

Administrative responsibilities:

1. In charge of Departmental Students Activity Fund.
2. Worked as a member of ACD for the year 2014-15.
3. Worked as co-ordinator of Registration committee for International conference on Recent Trends in Computing, 2016.
4. Worked as member, Tech Fest organizing committee.
5. Worked as a co-ordinator of faculty development programme.

(Dr. Madan Lal)