

Dr. ALOK JAIN

Professor,
Electronics & Instrumentation Department,
Samrat Ashok Technological Institute,
Vidisha, (MP), 464001, India.

Cell: +91 9425463116
Phone: 07592-471635
Email: alokjain6@rediffmail.com

EDUCATION

07/2001 – 10/2006 **Ph.D.**

Thapar Institute of Engineering & Technology, Patiala, Punjab.

Dissertation: “Analysis and Design of Multirate Systems and Filterbanks”

Advisers: Prof. S.C. Saxena (Director, IIT, Roorkee)
Prof. Rajiv Saxena (Director, BSF Academy, Tekanpur, Gwalior)

07/1990 – 04/1992 **M. Tech.(Computer Science & Technology)**

First Division
(72.85%)

Indian Institute of Technology (formerly University of Roorkee), Roorkee.

Dissertation: “Computerization of University Accounts in dBASE III Plus”

Advisers: Prof. J.P. Gupta, University of Roorkee, Roorkee
Prof. (Mrs.) K. Garg, University of Roorkee, Roorkee

07/1983 – 06/1988 **B. E. (Electronics & Instrumentation)**

First Division
(74.5%)

Bhopal University, Bhopal, India.

EXPERIENCE

Samrat Ashok Technological Institute (Grant in-aid Institute), Vidisha, (MP), India.

Professor, Electronics & Instrumentation Engineering, Oct.2006-Continue

Reader by selection, Electronics & Instrumentation Engineering, Dec.1996-Sept.2006.

Lecturer, Electronics & Instrumentation Engineering, Feb.1989-Feb.1996.

Administrative Experience

Head of the department from 2000 to 2017 (**Electronics & Instrumentation**)

Head of the department from 2000 to 2006 and 2009 to 2012 (**Electronics & Communication**)

Head of the department from 2002 to 2006 (**Biomedical Engineering**)

Head of the department from June 2008 to August 2008 (**Information Technology**)

Research Experience

Indian Institute of Science (IISc), Bengaluru from August 1993 to December 1993.

MAJOR ACHIEVEMENT

Introduced 02 UG and 01 PG Course in the department, viz., B.E. (EC & BM), M.Tech. (EC)

NBA accreditation of UG course B.E. (E&I) during 2011 and 2017, NAAC accreditation

Organized International and National Conference/Seminar

Authored Books, Book Chapters, and Monographs

Dr. Alok Jain

EXTERNAL FUNDING ASSIGNMENTS

- National Conference on Emerging Trends in Engineering and Science, AICTE, 2010.
(Rs. 0.60 lacs)
- Moderization of general Instrumentation laboratory to Instrumentation and Measurement laboratory, MODROBs Project, AICTE, 2007.
(Rs. 9.00 lacs)
- Artificial Neural Network Applications in Design of Human Chromosome Classification (Karyotyping System for Cancer Diagnosis, RPS Project, AICTE, 2004.
(Rs. 8.95 lacs)
- Upgradation and Enhancement of Electronics Laboratory, MODROBs Project, AICTE, 2001.
(Rs. 14.85 lacs)

THESIS DIRECTION/EVALUATION

• Doctoral

Awarded (09):

1. Shilpa Datar, “Design and Performance Evaluation of Filter Banks based on some Linear and Non-linear Optimization Techniques”, Rajiv Gandhi Proudhyogiki Vishwavidyalaya, Bhopal, **March 2023**
2. Divya Jain, “Efficient and Optimal Design of FIR Differentiators”, Rajiv Gandhi Proudhyogiki Vishwavidyalaya, Bhopal, **December 2022**. (adviser Dr. S.N. Sharma)
3. Sandeep Shrivastava, “Analysis and Design of OFDM System based on Filterbank Technique”, Rajiv Gandhi Proudhyogiki Vishwavidyalaya, Bhopal, **November 2022**.(co-adviser Dr. R.K. Soni)
4. Manish Sahajwani, “Performance Analysis of Cooperative Communication in Nakagami-M Channel”, Rajiv Gandhi Proudhyogiki Vishwavidyalaya, Bhopal, **April 2022**. (co-adviserDr. R.S. Ghamad)
5. Vidhi Rawat, “Analysis of Ultrasound Images for Detection of Fetal Abnormality using Biometric Parameters”, Rajiv Gandhi Proudhyogiki Vishwavidyalaya, Bhopal, **April 2021**.(co-adviserDr. VibhakarShrimali)
6. Jyotsana Ogale, “Analysis and Design of Uniform and Non-Uniform Filter Bank,” Rajiv Gandhi Proudhyogiki Vishwavidyalaya, Bhopal. **August 2017**.
7. Preety D. Swami,“Multiresolution Transforms Based Image Denoising Methods,” Rajiv Gandhi Proudhyogiki Vishwavidyalaya, Bhopal, **July 2013**.
8. Ashutosh Datar, “Analysis and Design of ECG Signal Data Compression Techniques using Multi-Rate Signal Processing”, Rajiv Gandhi Proudhyogiki Vishwavidyalaya, Bhopal, **June 2012**. (co-adviser Prof. P.C. Sharma)
9. Ram Kumar Soni, “An Optimized Design of Uniform Transmultiplexers and Non-Uniform Filter Banks,” Rajiv Gandhi Proudhyogiki Vishwavidyalaya, Bhopal, **November 2011**. (adviser Prof. Rajiv Saxena)

Ongoing (01):

• Master’s Thesis (04)

1. “Low Complexity Video Compression based on Orthogonal Transform,”Neelesh Choudhary, EC deptt.,SATI, Sept. 2014.
2. “Provenience of Hybrid Transform for Image Compression using Extended Huffman Compression,”Anu Jain, EC deptt.,SATI, Sept. 2014.
3. “Design of FIR Filters using Signed Power of Two Coefficients,” Sangeeta Solanki, Electronics Engg., IT, DAVV, Indore, 2010.
4. “A System for Automatic Industrial Tool Recognition,” Jitendra Shrivastave, Mech. Deptt., SATI, 1997.

THESIS EVALUATION (Ph.D.)

- Mr. Deepak Batham, DAVV, Indore, 2020.
- Ms. Rashmi Soni, AISECT University, Bhopal, 2016.

- Ms. Manisha Tushar Jadhav, Symbiosis International University, Pune, 2016.
- Mr. Patel Chirag Ishwarbhai, Nirma University, Ahmadabad, 2015.
- Col. S.S. Ahluwalia, DAVV, Indore, 2013.

INVITED TALKS

- “Wavelet and Filterbanks”, AICTE sponsored Staff Development Program, SIRTS, Bhopal, Jan. 2012.
- “Multirate Signal Processing and Filterbanks”, AICTE Sponsored Staff Development Program on Current Trends in Signal Processing, SATI, Vidisha, Sept. 2011.

PROFESSIONAL SERVICES/ACTIVITIES

- Editorial advisory board member, Recent Advances in Electrical & Electronics Engineering (Formerly: Recent Patents on Electrical & Electronics Engineering), Bentham Science Publisher.
- Editorial advisory board member, Recent Patents on Electrical Engineering, Bentham Science Publisher.
- Editorial board member, Int. J. of Emerging Technologies and Applications in Engineering, Technology and Sciences
- General Chair, International Conference on Signal Processing (Technically supported by IET), SATI, Vidisha, 7-9, Nov. 2016.
- Course Coordinator, National Workshop on Signal Processing (Technically supported by IET), SATI, Vidisha, Dec. 2015.
- Session Chair, Int. Conf. on Recent Trends in Applied Sciences with Engineering Applications, TRUBA Institute of Engineering & Information Technology, Bhopal, April 2013.
- Advisor, Current Trends in Signal Processing, AICTE Sponsored Staff Development Program, SATI, Vidisha, Sept. 2011.
- Session Chair, Emerging Technological Trends, AICTE Sponsored National Conference, VNS Institute of Technology, Bhopal, March 2010.
- Session Co-chair, 8th world Multi-Conf. on Systemics, Cybernetics and Informatics (SCI 2004), Orlando, USA, 2004.

- **Reviewer:**

- IEEE Trans. on Aerospace and Electronic Systems (**IEEE**)
- IET Image Processing (**IET**)
- Signal, Image and Video Processing (**Springer**)
- Digital Signal Processing (**Elsevier**)
- Int. J. of Adaptive Control and Signal Processing (**Wiley**)
- International Journal of Electronics (**Taylor & Francis**)
- International Journal of Applied Mathematics and Computer Science (**AMCS**)
- Microprocessors and Microsystems (**Butterworth-Heinemann**)
- Maejo International Journal of Science and Technology (**Maejo University**)
- Recent Patents on Electrical Engineering (**Bentham Science**)
- Journal of Mechanical Science and Technology (**Springer**)
- Engineering Science and Technology: an International Journal (**Elsevier**)
- Shock and Vibration (**Hindawi**)
- International Journal of Electronics and Communication (**Elsevier**)

- **Technical program/Paper Review committee member for**

- Int. Conference on Signal Processing, IET, UK (2016).
- Int. Conference on Emerging Trends in Instrumentation, Communication, Electrical & Electronics Engineering, SVITS, Indore, (2014).
- IEEE North Atlantic Test Workshop, Woburn, USA (2012).
- Systemics, Cybernetics and Informatics, Florida, USA (2010, 2009, 2005, 2004).

- Int. Conference on Computer, Communication and Control Technologies (2004).
- **Book Review**
 - Electric Circuits and Networks by Suresh Kumar, Pearson Education (ISBN: 9788131713907)
 - Smart Electronic Materials – Fundamentals and Applications by Jasprit Singh, Cambridge University Press (ISBN: 052185027)
 - Digital Signal Processing Simplified manuscript, Penram Int. Publishing India Ltd.
 - Digital Processing of Analog Signals (A first book with MATLAB) manuscript, Penram Int. Publishing India Ltd.
- **Other activities**
 - Chairman, Board of Studies, Electronics & Instrumentation and Biomedical Engineering, RGPV, Bhopal.
 - Chairman, Board of Studies, Electronics & Instrumentation, SATI, Vidisha.
 - Member Academic Council, RGPV, Bhopal. (2012-16)
 - Member, Board of Studies, Electronics & Instrumentation, SGSITS, Indore.
 - Member, Board of Studies, Information Technology, UIT, BU, Bhopal. (2009-10)
 - Member, Board of Studies, Electronics & Communication, MITS, Gwalior.
 - Member, Board of Studies, Electronics & Instrumentation, RGPV, Bhopal. (2001-2010)
 - Subject University Representative, Selection Committee for Principal, Rustamji Institute of Technology, BSF Academy, Tekanpur.
 - Subject Expert, Selection Committee, Electronics & Tele-communication, SVITS, Indore.
 - Subject Expert, Selection Committee, Electronics & Instrumentation Engineering, SGSITS, Indore.
 - Subject Expert, Selection Committee, Electronics & Communication, MANIT, Bhopal (NPIU Faculty)
 - Subject Expert, Selection Committee, Electronics & Instrumentation, MANIT, Bhopal (NPIU Faculty)
 - Subject Expert, Selection Committee, Gandhi Medical College, Bhopal
- **Orientation/refresher/training courses attended:**
 - MCA Training Program on Computer Systems Organisation, MNR Engineering College, Allahabad (22.05.1989–01.07.1989)
 - Computer Aided Electronic Circuit Design, S.P. College of Engineering, Bombay (10.05.1993–21.05.1993)
 - Transputers and their Applications, S.A. Tech. Institute, Vidisha (12.07.1993–23.07.1993)
 - All India Refresh Course in Applied Stochastic Processes, Indian Statistical Institute, New Delhi (05.12.2005–17.12.2005)
 - Management Capacity Enhancement Programme, Indian Institute of Management, Indore (12.01.2014–08.01.2014)
 - Summer training program on Active Learning Workshop, Indian Institute of Technology, Bombay (11.06.2018–15.06.2018)
- **Industrial program attended:**
 - Project Management – Overview of 09 Knowledge Areas, Tata Consultancy Services Limited (03.03.2012)
 - MATLAB & Simulink for Engineering Education, The MathWorks India Private Limited (23.07.2013)
 - Educators Day 2013 (Do Engineering), National Instruments, Chennai (02.09.2013)

PUBLICATIONS

As per Google citations: Total citations 517with h-index 14 and i10-index is 19.

PEER-REVIEWED JOURNAL		Total Papers = 63
1.	Suchi Mishra, Rahul Dubey, Preety D. Swami, and Alok Jain ,”Fault Size Estimation of Bearings Using Multiple Decomposition Techniques with Artificial Neural Network, Scientific Programming, vol. 2022, 2022. (Impact factor 1.025) (DOI: 10.1155/2022/3428715) SCOPUS Index	
2.	Sandeep Shrivastava, Alok Jain , Ram Kumar Soni, “Design of Optimal FBMC Subcarrier Index Modulation Based on Optimal Prototype Filter,” Published on-line in Analog Integrated Circuits and Signal Processing, vol. 111, issue 2, pp. 189-199, May 2022, Springer . (Impact factor 1.337) (DOI: 10.1007/s10470-021-01933-9) SCI expended	
3.	Divya Jain, S.N. Sharma, Alok Jain , “Guided Filtering based Efficient Digital Differentiator Design for Electrocardiogram Signal Processing”, Int. Journal of Intelligent Engineering and Systems, vol. 14, no. 6, pp. 137-145, 2021, Intelligent Networks and Systems Society, Japan. (DOI: 10.22266/ijies2021.1231.13) (ISSN: 2185-3118) SCOPUS Index, SCI expended	
4.	Divya Jain, S.N. Sharma, Alok Jain , “Electrocardiogram Transmission over OFDM System”, published on- line in Journal of Optical Communications, Feb. 2021. (Impact factor 0.713) (DOI: 10.1515/joc-2020-0227) De Gruyter Publisher	
5.	Shilpa Datar, Alok Jain , “Design and Performance Analysis of ECG Data Compression using Convolved Window-based Cosine Modulated Filter Bank”, Journal of Engineering Science and Technology, vol. 15, no. 6, pp. 3449-3464, 2020. (ISSN: 1823-4690)(School of Engineering, Tayler’s University) SCOPUS Index, SCI expended	
6.	Sandeep Shrivastava, Alok Jain , Ram Kumar Soni, “Adaptive Reconfigurable FBMC System for IoT Wireless Network”, Int. Journal of Advanced Science and Technology, vol. 29, no. 8, pp. 278-287, 2020. (ISSN: 2005-4238) SCOPUS Index	
7.	Sandeep Shrivastava, Alok Jain , Ram Kumar Soni, “Performance Analysis of FBMC System for Next Generation of Wireless Network”, J. of Advance Research in Dynamic & Control Systems, vol. 11, no. 11, pp. 126-131, 2019. (DOI: 10.5373/JARDCS/V11I11/20193177) Institute of Advanced Scientific Research	
8.	ShilpaDatar and Alok Jain , “Application of Natural Inspired Evolutionary Algorithm Optimization Techniques in Design of Cosine Modulated Filterbanks”, Advanced Science, Engineering and Medicine, vol. 11, pp. 766-774, 2019. (DOI: 10.1166/asem.2019.2416) American Scientific Publishers	
9.	VidhiRawat, Alok Jain , VibhakarShrimali and SammerRaghuwnashi, “Neural Modeling of Fetal Biometric Parameters for Detection of Fetal Abnormality”, IETE Journal of Research , published online, Jan. 2019.(Impact factor 1.125) (DOI:10.1080/03772063.2019.1565948) Taylor & Francis SCI expended	
10.	Manish Sahajwani, Alok Jain , R.S. Gamad, “ <u>Log likelihood ratio based relay selection scheme for amplify and forward relaying with three state Markov channel</u> ,” Future Internet, vol.10, no. 9, pp. 87-92, 2018. SCOPUS Index, SCI expended	
11.	VidhiRawat, Alok Jain and VibhakarShrimali, “Automated Techniques for the Interpretation of Fetal Abnormality: A Review”, Applied Bionics and Biomechanics , vol. 2018, pp. 1-11, May 2018. (Impact factor1.141) (DOI:10.1155/2018/6452050) Hindawi SCI expended	

12.	Manish Sahajwani, Alok Jain , R.S. Gamad, “An Efficient Diversity Achievement by Opportunistic Relaying in Amplify and Decode and Forward using ZF and MMSE Equalizers”, <i>Int. Journal of Digital Applications and Contemporary Research</i> , vol. 5, issue 7, pp. 1-5, Feb. 2017.
13.	Sandeep Shrivastava, Alok Jain , Ram Kumar Soni, “Survey of Orthogonal Frequency Division Multiplexing”, <i>International journal of Engineering Trends and Technology</i> , vol. 50, issue 1, 2017.
14.	Sandeep Shrivastava, Alok Jain , Ram Kumar Soni, “Design of FIR Filter using Filter Response Masking Technique”, <i>Int. Journal of Electronics, Electrical and Computational System</i> , vol. 6, issue 7, 2017
15.	Preety D. Swami, Rupali Sharma, Alok Jain , Dharendra K. Swami , “Speech Enhancement by Noise Driven Adaptation of Perceptual Scales and Thresholds of Continuous Wavelet Transform Coefficients”, Speech Communication , vol. 70, pp. 1-12, 2015.(Impact factor 1.417) (DOI:10.1016/j.specom.2015.02.007) Elsevier . SCI expanded
16.	Anu Jain and Alok Jain , “Provenience of Hybrid Transform for Image Compression using Extended Huffman Compression, <i>Int. Journal of Computer Applications</i> , vol. 97, no. 18, pp. 21-26, July 2014.
17.	Preety D. Swami, Alok Jain , “Image Denoising by Supervised Adaptive Fusion of Decomposed Images Restored using Wave Atom, Curvelet and Wavelet Transform”, Signal Image and Video Processing , vol.8, no.3, pp. 443-459, 2014. (Impact factor 1.794) (DOI: 10.1007/s11760-012-0343-z) Springer . SCI expanded
18.	Ram kumarSoni, Alok Jain , Rajiv Saxena, “An optimized design of non-uniform filter bank using variable-combinational window function”, Int. Journal of Electronics and Communications , vol. 67, issue 7, pp. 595-601, July 2013. (Impact factor 3.28) (DOI: 10.1016/j.aeue.2013.01.003) Elsevier . SCI expanded
19.	Ram kumarSoni, Alok Jain , Rajiv Saxena, “A design of IFIR prototype filter for Cosine Modulated Filterbank and Transmultiplexer”, Int. Journal of Electronics and Communications , vol. 67, issue 2, pp. 130-135, Feb. 2013. (Impact factor 3.28) (DOI: 10.1016/j.aeue.2012.07.005) Elsevier . SCI expanded
20.	AshutoshDatar, Alok Jain , P.C. Sharma, “Design and Performance Analysis of Adjustable Window Functions based Cosine Modulated Filter Banks”, Digital Signal Processing , vol.23, pp. 412-417, Jan. 2013. (Impact factor 2.871) (DOI:10.1016/j.dsp.2012.07.007) Elsevier . SCI expanded
21.	JyotsnaOgale, Alok Jain , “Cosine Modulated Non-Uniform Filter bank with Improved Computational Efficiency”, Int. Journal of Image, Graphics and Signal Processing , vol. 4, no.2, pp. 1-8, 2012.
22.	Preety D. Swami, Alok Jain , “Segmentation based Combined Wavelet-Curvelet Approach for Image Denoising,” <i>Int. J. of Information Engineering</i> , vol. 2, issue. 1, pp. 32-37, 2012. World Academy
23.	Ram kumarSoni, Alok Jain and Rajiv Saxena, “An Optimized Transmultiplexer using Combinational Window Functions”, Signal, Image and Video Processing , vol. 5, no. 3, pp. 389-397, Sept., 2011. (Impact factor 1.794) (DOI:10.1007/s11760-010-0162-z) Springer . SCI expanded
24.	AshutoshDatar, Alok Jain , P.C. Sharma, “Design of Kaiser Window Based Optimized Prototype Filter for Cosine Modulated Filter Banks”, Signal Processing , vol. 90, no. 5, pp. 1742-1749, May 2010. (Impact factor 4.384) (DOI: 10.1016/j.sigpro.2009.11.011) Elsevier . SCI expanded

25.	Ram kumarSoni, Alok Jain , Rajiv Saxena, “An Improved and Simplified Design of Pseudo-Transmultiplexer using Blackman Window Family”, Digital Signal Processing , vol. 20, pp. 743-749, May 2010. (Impact factor 2.871) (DOI: 10.1016/j.dsp.2009.08.016) Elsevier . SCI expended
26.	Ram kumarSoni, Alok Jain , Rajiv Saxena, “An Optimized Design of Non-uniform Filterbank using Blackman Window Family,” International Journal of Signal & Image Processing, vol. 1, issue 1, 2010.
27.	VidhiRawat, Alok Jain , VibhakarShrimali, “Investigation and Assessment of Disorder of Ultrasound B-mode Images”, Int. Journal of Computer Science and Information Security, vol. 7, no. 2, pp. 289-293, Feb. 2010.
28.	Ram kumarSoni, Alok Jain , Rajiv Saxena, “Design of NPR-Type Cosine Modulated Filterbank Using Combinational Window Functions,” Int. J. of Communication, Network and System Sciences, vol. 3, pp. 934-942, 2010. Scientific Research
29.	JyotsnaOgale, Alok Jain , “Design of an M-Channel Cosine Modulated Filter Bank by New Cosh Window Based FIR Filters,” Word Academy of Science, Engineering and Technology, vol. 4, pp. 191-196, 2010. Word Academy
30.	Ram kumarSoni, Alok Jain , Rajiv Saxena, “Design of M-Band NPR Cosine-Modulated Filterbank Using IFIR Technique,” Journal of Signal and Information Processing, vol. 1, pp. 35-43, 2010. Scientific Research
31.	Ram kumarSoni, Alok Jain , Rajiv Saxena, “New efficient iterative optimization algorithm to design the two channel QMF bank,” Int. J. Appl. Sci. Eng. Tech, vol. 24, pp. 56-60, 2007.
32.	Alok Jain , Rajiv Saxena, S. C. Saxena, “Anti-Image FIR Filters for Large Interpolation Factors”, Signal Processing , vol. 86, pp. 3240-3245, 2006. (Impact factor 4.384) (DOI:10.1016/j.sigpro.2006.01.003) Elsevier . SCI expended
33.	Alok Jain , Rajiv Saxena, S. C. Saxena, “An Improved and Simplified Design of Cosine Modulated Pseudo QMF Filterbanks”, Digital Signal Processing , vol. 16, no. 3, pp. 225-232, May 2006. (Impact factor 2.871) (DOI: 10.1016/j.dsp.2005.11.001) Elsevier . SCI expended
34.	Alok Jain , Rajiv Saxena, S. C. Saxena, “Window Based FIR Half-band Filters: Design and Comparison”, Journal of the Institution of Engineers (India) , Electronics and Telecommunication Engineering Division, vol. 86, pp. 16-20, July 2005.
35.	Alok Jain , Rajiv Saxena, S. C. Saxena, “A Simple Alias-free QMF System with Near Perfect Reconstruction”, Journal of the Indian Institute of Science , vol. 85, no1, pp. 1-10, Jan.-Feb., 2005. (Impact factor 0.8) SCI expended
36.	G. P. Basal, Alok Jain , A. K. Tiwari, P. K. Chande, “Optimization in the Operation of Process Plant through Genetic Programming”, IETE Journal of Research , vol.46, no. 4, pp.251-260, July- Aug., 2000. SCI expended
Conference Proceedings (Published/Presented)	
1.	Sandeep Shrivastava, Alok Jain , Ram Kumar Soni, “Design of FIR Filter using Filter Response Masking Technique”, Proc. of 7 th Int. Conf. on Engineering Technology, Science and Management Innovation (ICETSMI-2017), 16.07.2017, IETE, Delhi.

2.	VidhiRawat, Alok Jain , VibhakarShrimali and AbhishekRawat,“Automatic Detection of Fetal Abnormality using Head and Abdominal Circumference”, ICCCI 2016, pp. 525-534, 2016. (DOI : 10.1007/978-3-319-54246-3_50), Springer .
3.	ShilpaDatar, Alok Jain , “Design of Filterbank based on Convolved Blackman Window for Minimization of Aliasing Error,” Proc. of Int. Conf. on Signal Processing, pp. 1-3, Nov. 2016, Vidisha, India. (ISBN: 978-1-78561-783-6) (DOI : 10.1049/cp.2016.1440), IET Press .
4.	ShilpaDatar, Alok Jain , “Application of Convolved Hanning Window in Designing Filterbanks with Reduced Aliasing Error”, Proc. of Int. Conf. on Signal and Image Processing Applications, pp. 22-26,19-21 Oct. 2015, Kuala Lumpur, Malaysia, IEEE Press .
5.	Preety D Swami, Alok Jain , D. K. Swami, “Region Classification Based Image Denoising using Shearlet and Wavelet Transforms”, Third International Conference on Signal and Image Processing, pp. 241-248, Jan. 2-4, 2014, Zurich, Switzerland . (DOI : 10.5121/csit.2014.4122).
6.	AshutoshDatar, ShilpaDatar, Alok Jain , “An Improved and Efficient Thresholding Scheme for Subband Signals in ECG Data Compression”, Proc. of Int. conf. on communications, networking and signal processing, 19-21 Sept. 2013,VIT University, Vellore.
7.	Preety D Swami, Alok Jain , “Adaptive Fusion based Hybrid Denoising Method for Texture Images”, Proc. of Second International Conference on Advances in Computing and Information Technology (ACITY), vol. 2, pp. 699-707, July 13 - 15, 2012, Chennai, Springer .
8.	Preety D. Swami, Alok Jain , “Spatial Segmentation based Combined Wavelet and Curvelet Approach for Image Denoising”, National Conference on Emerging Technological Trends,, Mar. 19-20, 2010, VNS Institute of Technology, Bhopal.
9.	Preety D. Swami, Alok Jain , “Subband Adaptive Image Denoising using Curvelets”, 3 rd CSI National Conference on Education and Research, 6-7 March, 2010,JIET, Raghogarh, Guna.
10.	Preety D. Swami, Alok Jain , JyotiSinghai, “A Multilevel Shrinkage Approach for CurveletDenoising”,Int. Conf. on Information and Multimedia Technology (ICIMT 2009), pp. 268-272, 18-19 Dec. 2009, Jeju Island, South Korea . (DOI: 10.1109/ICIMT.2009.78) IEEE Press .
11.	AshutoshDatar, Alok Jain , P.C. Sharma, “Performance of Blackman Window Family in M-channel Cosine Modulated Filter Banks for ECG Signals”, Int. Conf. on Multimedia, Signal Processing and Communication Technologies, 14-15 March, 2009, AMU, Aligarh. (DOI: 10.1109/MSPCT.2009.5164183) IEEE Press .
12.	AshutoshDatar, Alok Jain , P.C. Sharma, “Two-channel FIR QMF Based Decomposition and Reconstruction of ECG Signal using Window Technique”, Proc. of Int. Conf. on Digital Factory (ICDF 2008), pp. 1059-1063, Aug. 11-13, 2008,Coimbatore.
13.	NitinSaxena, K.C. Pradhan, Alok Jain , “Matrix Converter: A Generalized Technique”, Proc. of National conf. on Advances in Electrical Engineering (AEE06), pp. 71-74, Nov. 2006,Gwalior.
14.	Alok Jain , Rajiv Saxena, S. C. Saxena, “Design of FIR Compaction Filters using Lag Windows” , Proc. of 7 th Int. Conf. on Signal Processing (ICSP’04), vol. 1, pp. 18-20, July-August 2004, Beijing, China . (DOI: 10.1109/ICOSP.2004.11452569) IEEE Press .
15.	Alok Jain , Rajiv Saxena, S. C. Saxena, “Design of Two-Channel Quadrature Mirror Filterbank using Papoulis-cos ⁴ (n π /N) Combinational Window Function”, Proc. of National Conf. on Electronics Circuits and Communication Systems (ECCS-2004), Patiala, Punjab, Sept. 2004.
16.	Alok Jain , Rajiv Saxena, S. C. Saxena, “An Improved and Simplified Design of Prototype Filters for Cosine Modulated filterbanks using Kaiser Window”, 8 th world Multi-Conf. on Systemics, Cybernetics and Informatics (SCI 2004), July 18-21, 2004, Orlando, USA .

17.	N. Ganesh, B. Sanyal, A. Datar, Alok Jain , “Design and Implementation of cost effective Automated Karyotyping System for Genetic Diagnosis”, 29 th Annual Conf. of Indian Society of Human Genetics (ISHG 2004), Bangalore.
18.	Alok Jain , Rajiv Saxena, S. C. Saxena, “Compaction Filters – A Review”, National Seminar on Cutting Edge Technologies in Electronics Communication, Longowal, March, 2004.
19.	S. N. Sharma, Rajiv Saxena, Alok Jain , “FIR Digital Filter Design with Parzen and Cos ⁶ (π) Combinational Window Family”, Sixth Int. conf. on Signal Processing (ICSP ‘02’), August, 2002, Beijing, China, IEEE Press. (DOI: 10.1109/ICOSP.2002.1180993)
20.	S. N. Sharma, Alok Jain , Rajiv Saxena, “Non- Recursive Digital Filter Design using Combinational Window Function”, Proc. of National Conf. on Trends in Industrial Electronics, Transducers Controls & Communication, Nov., 2000,Patiala.
21.	S. N. Sharma, G.P. Basal, Alok Jain , “Microprocessor Based On-line pH Measurement”, Proc. of National Conf. on Intelligent Systems, Feb. 2000, Gwalior.
22.	Alok Jain , S. N. Sharma, G. P. Basal, AvnishVerma, “A Fuzzy Controller for Thyristor Control of DC Motor”, Proc. of Int. Conf. on Cognitive Systems, ICCS’98, Dec. 1998,New Delhi.
23.	G. P. Basal, Alok Jain , A. K. Tiwari, P. K. Chande, “A Novel Approach of Genetic Programming to Alarms in a Process Plant”, Proc. of Int. Conf. on Cognitive Systems, ICCS’97, Dec. 1997,New Delhi.
24.	Alok Jain , S. Markhdkar,G. P. Basal, V. Rajput, M. Sheorey, “Microprocessor based Speed Control of DC Motor with Armature Voltage and Field Weakening Control”, Proc. of National Conf. on Electric Drives & Control for Transport Systems, EDCOTS’97, Jan. 1997,Vidisha.
25.	Pravas Pradhan, Alok Jain , “Efficient method for Sensitivity Evaluation of Electronic Circuits”, Proc. of Int. Conf. on Cognitive Systems, ICCS’96, Dec. 1996,New Delhi.
26.	Alok Jain , G. P. Basal, K. C. Pradhan, An Efficient Knowledge based Expert System for Problem Solving in Medical Science”, Proc. of Int. Conf. on Instrumentation, ICI’96, Aug. 1996, Bangalore.
27.	Alok Jain , S.C. Jain, “Towards a Science of Expert Database Systems”, Proc. of AUTOFACT’ 94, Sec. 23, Nov. 13-17, 1994, Detroit, Michigan, USA.

e-Books

- | | |
|----|--|
| 1. | Power Electronics: Devices, Circuits and MATLAB Simulations, 2nd edition
Penram International Publishing (India) Ltd. Mumbai, India, 2023
Alok Jain |
|----|--|

Books

- | | |
|----|--|
| 1. | Power Electronics and Its Applications, 3rd edition
Penram International Publishing (India) Ltd., Mumbai, India, 2016
(ISBN-13: 978-8187972617)
Alok Jain |
| 2. | Power Electronics: Devices, Circuits and MATLAB Simulations
Penram International Publishing (India) Ltd. Mumbai, India, 2010
(ISBN-13: 978-8187972389 Soft Bound)
(ISBN-13: 978-8187972396 Hard Bound)
Alok Jain |
| 3. | Power Electronics and Its Applications, 2nd edition
Penram International Publishing (India) Ltd., Mumbai, India, 2004
(ISBN-13: 978-8187972136 Soft Bound)
(ISBN-13: 978-8187972228 Hard Bound)
Alok Jain |
| 4. | Power Electronics and Its Applications
Penram International Publishing (India) Ltd., Mumbai, India, 2002
(ISBN: 8187972068)
Alok Jain |

Book Chapters	
1.	Automatic Detection of Fetal Abnormality using Head and Abdominal Circumference Computational Collective Intelligence, vol. 9876 of the series Lecture notes in Computer Science, pp. 525-534, Sept. 2016. Springer. (ISBN:978-3-319-45246-6) VidhiRawat, Alok Jain , VibhakarShrimali and AbhishekRawat
2.	Detection of Fetal Abnormality using ANN Techniques, Biomedical Signal and Image Processing with Artificial Intelligence, pp 259-270, Jan. 2023 Springer. (ISBN:978-3-031-15816-2) VidhiRawat, VibhakarShrimali, Alok Jain and AbhishekRawat

Monographs	
1.	Image Denoising: Methods Based on Multiresolution Transforms and their Fusion Lambert Academic Publishing, AG & Co., Germany, 2014 (ISBN-13: 9783659575891) Preety D. Swami, Alok Jain
2.	Design of Transmultiplexer and Filterbank: NPR Type Design Approach Lambert Academic Publishing, AG & Co., Germany, 2012 (ISBN-13: 9783848417223) RamkumarSoni, Alok Jain , Rajiv Saxena
3.	Multirate Systems and Filterbanks: Window Based Approach LAP Lambert Academic Publishing, AG & Co., Germany, August 2011 (ISBN-13: 9783844386240) Alok Jain , Rajiv Saxena, S.C. Saxena
Lecturer Notes	
1.	Performance Analysis of Different Learning Algorithms of Feed Forward Neural Network Regarding Fetal Abnormality Detection, Traction on Computational Collection XXX, Lecture Notes in Computer Science, vol. 11120, pp. 118-132, 2018. Springer. (DOI : 10.1007/978-3-319-99810-7_6) VidhiRawat, Alok Jain , V. Shrimali and SammerRaghuvansi

REFERENCES

- Dr. S.C. Saxena, (Former Director, IIT, Roorkee) Pro-Chancellor, JIIT, Noida.
Email: saxenasuresh@yahoo.co.in (M) 07838189999
- Dr. J. P. Gupta, Former Professor, University of Roorkee and Former Member Secretary, AICTE, New Delhi.
Email: jaip.gupta@gmail.com (M) 9810024107
- Dr. Rajiv Saxena, Former Vice-Chancellor, Jaypee University, Anoopshahr, India.
Email: rsaxena2001@yahoo.com (M) 09758491547
- Dr. Ramesh Gaonkar, Professor & Chair, Electrical & Computer Engineering Technology, SUNY OCC, Syracuse, New York, USA.
Email: ramesh.gaonkar@verizon.net

RESEARCH INTEREST

- Digital Signal Processing
- Image Processing
- Multirate Signal Processing
- Filter banks
- Power Electronics

PERSONNEL INFORMATION

Date of Birth: 09 December 1966

Father's Name: Prof. Satish Chandra Jain

Mother's Name: Late. Smt. Prem Shree Jain

Home Address: A-2, Street No. 1,
Near Yash Computers,
Rajiv Nagar, Vidisha (MP), 464001
India.

Scale: 37400-67000 + Grade pay 10000 as per 6th Pay Scale

Last Basic: 62550 + 10000 AGP+ DA + HRA

(Dr.Alok Jain)