

RESUME

Personal Information:

Name: **PROF. JAI PRAKASH SAINI**

Father's Name: (Late) Sri C. L. Saini

Date of Birth: 26 June, 1966

Address for Communication: Principal,
Madan Mohan Malviya Engineering College
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Academic Qualification:

- B. Tech. in Electronics Engg. from KNIT Sultanpur
- M. Tech. in Electrical Engg. from IIT Kanpur
- Ph.D. in Electronics Engg. from KNIT Sultanpur

Teaching Experience:

- Teaching Asst. from 19.08.87 to 13.12.88 in Kamla Nehru Institute of Tech., Sultanpur (An autonomous Institute of Govt. of U.P.).
- Lecturer from 14.12.88 to 07.02.96 and Lecturer (Sr. Scale) from 08.02.96 to 30.07.99 in Kamla Nehru Institute of Tech., Sultanpur (An autonomous Institute of Govt. of U.P.).
- Reader from 31.07.99 to 27.10.2006 in Bundelkhand Institute of Engineering & Technology, Jhansi (An autonomous Institute of Govt. of U.P.).
- Professor from 28.10.2006 to 13.07.2009 in Bundelkhand Institute of Engineering & Tech., Jhansi (An autonomous Institute of Govt. of U.P.).
- Director from 14.07.2009 to 29.01.2010 in Dr. Ambedkar Institute of Tech. for Handicapped, Kanpur (U.P.) (An autonomous Institute of Govt. of U.P.).
- Principal from 30.01.2010 to till date in Madan Mohan Malviya Engineering College, Gorakhpur (An autonomous Institute of Govt. of U.P.).

No. of Published Research Papers: 57

- In Referred Journals: **18** (International: 15 + National: 03)
(Impact Factor of PIER: 4.735, Optik-Elsevier: 0.52)
- In Proc. of Conferences: **39** (International: 16 + National: 23)

No. of Ph. D. Supervised: 03 (01 Awarded, 02 Submitted)

M. Tech. Theses Supervised: 09

B. Tech. Projects Supervised: More than 30

Reviewer: Progress in Electromagnetics Research (PIER)

Other responsibilities held at University/Institute/Govt. Level:

- Head of Department (Aug. 1999 to Jan. 2001 and Oct. 2004 to Sept. 2007)
- Associated with World Bank assisted TEQIP Project (Nov. 2004 to Sept. 2007)
- Hostel Warden (Aug. 1999 to Jan. 2001)
- Training & Placement officer (Aug.1999 to Jan.2001 & Mar.2005 to Sept. 07)
- Associated as additional / Dy. Examination Controller at U.P. Tech. University, Lucknow from Jan.2001 to July 2004.
- Associated as Coordinator, State Entrance Examination (SEE) 2008, U. P. Technical Univ., Lucknow from Oct.2007 to Aug. 2008.
- Coordinated computerized SEE on-line Counselling from 2004 to 2008.

Last Salary Drawn:

- Pay Scale: Rs. 18400 – 22400, Basic Pay: Rs. 19400 /-

Membership of Professional Bodies:

- Life Member IETE
- Life Member ISTE
- Member IEEE (Ex.)

Member of BOS/RDC:

- Board of Studies of Electronics & Communication Engg./ Electronics & Inst. Engg., U. P. Technical University, Lucknow from 2000 to 2008.
- Board of Studies of Physics (Electronics), Bundelkhand University, Jhansi.
- Research Degree Committee of Electronics Engg., Uttarakhand Tech. Univ.

Member of Governing Bodies of Govt. Institutions:

- Harcourt Butler Technological Institute (HBTI), Kanpur
- Madan Mohan Malaviya Engineering College (MMMEC), Gorakhpur
- Kamla Nehru Institute of Technology (KNIT), Sultanpur
- Bundelkhand Institute of Engineering & Technology (BIET), Jhansi
- Dr. Ambedkar Institute of Technology for Handicapped, U.P., Kanpur
- Dr. Bhim Rao Ambedkar Institute of Information Tech., Banda
- Manyawar Kanshi Ram Engg. College of Information Tech., Azamgarh
- Dr. Bhim Rao Ambedkar Institute of Information Tech., Bijnore

Knowledge of working on PC / work station and Software Packages:

- | | |
|------------------------------------|---------------------|
| (i) MATLAB | (ii) ORCAD |
| (iii) MATHEMATICA | (iv) FOXPRO |
| (v) C Programming | (vi) Internet |
| (vii) MSOFFICE (MS Word/Excel/PPT) | (viii) LATEX / VTEX |

Short-Term Training Programs Attended:

- (i) *Digital Transmission*, during Dec. 23, 1987 - Jan.2, 1988, at Dept. of Electrical Engg. I.I.T. Kanpur.
- (ii) *Digital Communication Techniques*, during Dec. 19-30, 1988, at Dept. of Elect. Engg., I.I.T. Madras.
- (iii) *Cellular Radio and Mobile Comm.*, during Jan 2-6, 1989, at Dept. of Electrical Engg., I.I.T. Madras.
- (iv) *Object Oriented Programming & C++*, during Dec. 22, 1997 - Jan 03, 1998, at Dept. of Electronics & Computer Science & Engg., M.A.C.T., Bhopal.
- (v) *Advance Topics in Robotics* during July 27-31, 1998, at Dept. of Electrical Engg., I.I.T. Kanpur.
- (vi) *Campus wide Networking Workshop* at Kolkata during August 25-26, 2005.

Short-Term Faculty Development / Community Programs Organized:

- (i) ISTE-AICTE Short term training program on *Neural Networks & Advance Computing Tech* at BIET Jhansi, Dec. 16-30, 2000.
- (ii) AICTE Staff Development Programme (SDP) on *Neurocomputing with Algorithms & Applications* for young teachers at BIET Jhansi, Jan. 08-20, 2007.
- (iii) *Workshop on MATLAB and its Applications*, Oct. 10-11, 2005.

- (iv) Workshop on *Distributed Control System with Dynamic Simulation Models*, Oct.15-16, 2005.
- (v) Community Program on *Utilization of Non-Conventional Energy Resources*, Jan. 27-31, 2006.
- (vi) Community Program on *Mobile Repairing*, April 07-09, 2006.
- (vii) Community Program on *Mobile Repairing*, April 15-17, 2006.
- (viii) Community Program on *TV Repairing*, during May 06-10, 2006.
- (ix) Community Program on *Repair and Maintenance of Appliances used in Non-Conventional Energy*, Aug.31, 2006.
- (x) Faculty Development Program on *Engineering Applications of Mathematica Software*, Sept. 8-10, 2006.
- (xi) Faculty Development Program on *Multisim, CommSim & Ultiboard Electronics Workbench*, Sept. 11, 2006.

List of Publications

Referred Journals

1. **“Modal Analysis of a Super-Elliptical Bragg Waveguide with a Small Number of Periodic Cladding Layers Based on a Very Simple Analytical Technology,”** Y. Prajapati, Vivek Singh and J. P. Saini, *ELSEVIER, ScienceDirect-OPTIK, International Journal for Light and Electron Optics, Germany*, ISSN: 0030–4026, vol. 120, No. 1, January 2009, pp. 14-19, 2009. **Impact Factor of Optik-Elsevier 0.52.**
2. **“Modal Analysis and Dispersion Curves of a Bragg Fiber Having Asymmetric Loop Boundary,”** Y. Prajapati, V. Singh and J. P. Saini, *International Journal of Progress In Electromagnetics Research (PIER), U.S.A.*, ISSN: 1070–4698, E-ISSN: 1559-8985, vol. 87, pp. 117–130, 2008. **Impact Factor of PIER 4.723.**
3. **“Modal Analysis and Dispersion Curves of a New Unconventional Bragg Waveguide Using a Very Simple Method,”** Vivek Singh, Y. Prajapati and J. P. Saini, *International Journal of Progress In Electromagnetics Research, U.S.A.*, ISSN: 1070–4698, E-ISSN: 1559-8985, vol. 64, pp. 191–204, 2006. **Impact Factor of PIER 4.723.**
4. **“Spectral Analysis of Speech: A New Technique,”** Neeta Awasthy, J. P. Saini and D. S. Chauhan, *International Journal of Signal Processing (IJSP)*, ISSN: 2070-397X, vol. 2, no. 1, pp. 19-28, 2005.
5. **“Mfcc APLied Independent Component Analysis (MAPICA): A New Approach to Parametric Representation of Speech,”** Neeta Awasthy, J. P. Saini and D. S. Chauhan, *International Transactions on Engineering, Computing and Technology*, <http://www.enformatika.org/data/v4/v4-45.pdf>, ISSN: 1305-5313 vol. 4, pp.178 – 181, Feb. 2005.
6. **“Broadband Stacked H-shaped Patch Antenna”** D. K. Srivastava, J. P. Saini and D. S. Chauhan, *International Journal of Recent Trends in Engineering (IJRTE)*, ISSN 1797-9617, vol. 2, No. 3, pp. 385-389, Nov. 2009.
7. **“Analysis of Suspended E-Shaped Patch Antenna Loaded with Shorting Pin”** D. K. Srivastava, J. P. Saini and D. S. Chauhan, *International Journal of Electronics & Electrical Engineering (IJEEE)*, ISSN 0974 - 2042, vol. 3, No. 4, pp. 9-15, May 2009.

8. **“Tunnel Diode Loaded Tunable Circular Microstrip Antenna”** D. K. Srivastava, J. P. Saini and D. S. Chauhan, *International Journal Computer Engineering & Information Technology (IJCEIT)*, ISSN 0974 - 2034 (accepted).
9. **“ECG Analysis Using Artificial Neural Networks,”** Shahnaz Ayub, Pramod Kumar and J. P. Saini, *Progressive Research*, vol. 4(1), pp. 106-109, 2009.
10. **“Classification of ECG Beats Using Neural Networks,”** Shahnaz Ayub, Pramod Kumar and J.P. Saini, *International Journal of Flora and Fauna*, vol. 15, pp. 347-351, 2009, ISSN 0971–6920.
11. **“A Neural Computational Approach: An Application To Bandwidth Efficient Data Transmission,”** J. P. Saini, *Journal of IT & Management, Synergy*, ISSN 0972-7361, pp. 39-47, Sept. 2005.
12. **“Study of Intelligent System for Fault Dictionary Techniques,”** Mahendra Kumar, J. P. Saini & D. S. Chauhan, *Journal of IT & Management, Synergy*,ISSN 0972-7361, pp. 33-40, Jan. 2007.
13. **“Wavelet Skeleton Neural Network for Temporal Behaviour of Speech,”** Neeta Awasthy, J. P. Saini and D. S. Chauhan, *International Journal of Modelling & Simulation* (accepted).
14. **“ECG Analysis Using Weightless Neural Networks,”** Shahnaz Ayub, Pramod Kumar, M. A. Ansari and J. P. Saini, *IEEE Transactions on Biomedical Engineering* (communicated).
15. **“Effect of Eccentricity on the Modal Characteristic Equation and Dispersion Relation for an Elliptical Bragg Waveguide with a Small Number of Claddings,”** Y. Prajapati, V. Singh and J. P. Saini, *IEEE Journal of Lightwave Technology* (communicated).
16. **“Arrhythmia Analysis Using Weightless Neural Networks,”** Shahnaz Ayub, Pramod Kumar & J.P.Saini, *International Research Journal of Biological Sciences Flora & Fauna* (communicated).
17. **“Modal Characteristic Equation and Dispersion Relation for an Elliptical Bragg Waveguide with a Small Number of Claddings,”** Y. K. Prajapati, V. Singh and J. P. Saini, *International Journal of Progress In Electromagnetics Research (PIER)*, U.S.A., ISSN: 1070 – 4698, E-ISSN: 1559-8985, **Impact Factor of PIER 4.735** (under review).
18. **“Modal Analysis and Dispersion Cruve of Unconventional Bragg Waveguide Using Galerkin Method,”** Y. K. Prajapati, V. Singh and J. P. Saini, *Journal of Infrared, Millimeter, and Terahertz Wave*, (communicated).

IEEE Publications

19. **“A Modular Polynomial Perceptron Approach to Channel Equalization and ACI Suppression,”** J. P. Saini and M. C. Srivastava, *IEEE Publication, Proc. Personal Wireless Communication 1999, IEEE ICPWC*, Jaipur, India, ISBN: 0-7803-4912-1, <http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=00759623>, vol. 1, pp. 236-239,17-19 Feb., 1999.
20. **“A New Polynomial Structure for Channel Equalization and ACI Suppression in 64-QAM Reception,”** J. P. Saini and M. C. Srivastava, *IEEE Publication, ISCS,1998*, Monterrey, California, U.S.A., ISBN: 0-7803-4455-3, <http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=00698926>, vol. 4, pp. 457-460, 31/5-3/6 May-June 1998.
21. **“Multi-Stage Complex Fractionally Spaced Bilinear Perceptron and Its Application to MQAM System for Channel Equalization in FSRF and CCI Environment,”** J. P. Saini, et.al., *IEEE Publication, Proc. Neural Networks 1998*, IEEE WCCI, Anchorage, Alaska, ISBN: 0-7803-4859-1, <http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=00685890>, vol. 2, pp. 913-917, 4-9 May, 1998.

TMH Publications

22. **“Channel Equalization and CCI Suppression in 16-QAM Receiver System Using a New Multistage Complex FSBLP Model,”** J. P. Saini, et. al., *Proc. NCC*, Indian Institute of Science, Bangalore, Communication 98, ISBN 10: 0074630210/0-07-463021-0, ISBN 13: 9780074630211, publisher: Tata McGraw-Hill Pub. Co., New Delhi, pp. 24 – 28, Jan. 29–31, 1998.
23. **“On Application of Combinatorial Sets in Signal Encryption Using Transform Domain Technique,”** S. Mathur, J. P. Saini, Y. K. Mishra and M. C. Srivastava, *Proc. NCC.*, Indian Institute of Science, Bangalore, Communication 98 ISBN 10: 0074630210 / 0-07-463021-0, ISBN 13: 9780074630211, publisher: Tata McGraw-Hill Pub. Co., New Delhi, pp. 163–167, Jan. 29–31, 1998.

Other International Conferences / Seminars

24. **“Analysis of Elliptical Optical Waveguide by Galerkin Methods,”** Y. Prajapati, Vivek Singh and J. P. Saini, *Proc. International Conference on Signals, Systems and Communication (ICSSC)*, Anna University, Chennai, Tamil Nadu, India, Dec. 21–23 , 2009.
25. **“Dispersion Characteristics of an Optical Fibre With a Core Slightly Flattened on One Side by Galerkin Method,”** Y. Prajapati, Vivek Singh and J. P. Saini, *International Conference on Computer and Communication Engineering*, Kuala Lumpur, Malaysia, May 11–13, 2010 (accepted paper ID-284).
26. **“Investigation of Effect of Substrate Thickness and Permittivity of Rectangular Microstrip Antenna for Bandwidth Enhancement,”** D. K. Srivastava, B. R. Vishwakarma, R. C. Saraswat and J. P. Saini, *Proc. IET-UK International Conference on Information and Communication Technology in Electrical Sciences (ICTES 2007)*, Dr. M.G.R. University, Chennai, Tamil Nadu, India, ISSN: 0537 – 9989, [http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=4735934 & isnumber=4735760](http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=4735934&isnumber=4735760), vol. 1, pp. 970–973, Dec. 20–22 , 2007,.
27. **“Simulation of Image Enhancement Techniques Using Matlab,”** Atul Bansal, Rochak Bajpai, and J. P. Saini, *Proc. AMS 2007 ,First Asia International Conference on Modelling & Simulation*, Phuket, Thailand, ISBN: 0–7695–2845–7, [http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=4148676 & isnumber=4148616](http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=4148676&isnumber=4148616), vol. 1, pp. 296–301, Mar. 27–30, 2007.
28. **“Design and Application of an Analog Neurofuzzy Logic Controller,”** Neeraj Gupta, J.P.Saini, S.N.Saran & Gajendra Singh, *Int. Conf. on ACEE 2007*, Bikaner, Mar.25-26, 2007.
29. **“Study of Fault Dictionary Techniques for Electronics Circuits,”** Mahendra Kumar, J.P.Saini and D. S. Chauhan, *Proc. International Conference on Intelligent systems & Networks IISN-2007*, Jagadhri, Harayana, pp 412-415, Feb. 23-25, 2007.
30. **“Maximum Likelihood Viterbi Algorithm and MAP Algorithm for Turbo Codes,”** Navneet Upadhyay and J. P. Saini, *International Workshop on Electromagnetic Studies Related to Earthquakes and Volcanoes (IWEMSEV-2006)*, Agra, 20-22, P 14, November, 2006
31. **“Better spectral Analysis of Speech By Improved Preprocessing,”** Neeta Awasthy, J.P.Saini and D.S.Chauhan, *Proc. IEEE BENELUX / DSP Valley signal Processing Symposium*, Het Provinciehuis, Antwerp, Belgium, vol.1, pp. 15-18, April 19-20, 2005.
32. **“Mfcc Applied Independent Component Analysis (MAPICA): A new approach to parametric representation of speech,”** Neeta Awasthy, J. P. Saini and D. S. Chauhan, *Proc. Enformatika*, World Multi-Conference on Enformatika Istanbul Turkey, Feb. 25-27, 2005.
33. **“A Neural Computation Approach for Interference Suppression in Mobile Communication Receiver,”** J. P. Saini and M. C. Srivastava, *Proc. International Conf. on Advances in*

Computing and Communications ADCOM'99, Univ. of Roorkee, India, ISBN 10: 0074637452, publisher: Tata McGraw-Hill Pub. Co., New Delhi, vol. 1, pp. 65-69, Dec. 1999.

34. “**Arithmetic and Logic Implementation of RBSD Number System**,” K. Raj, J. P. Saini and B. P. Singh, *Proc. International Conf. on Cognitive Systems (ICCS'99)*, Phoenix Publishing House Pvt. Ltd., New Delhi, vol. 1, pp. 541 – 549, 1999.
35. “**Fault Diagnosis of HVDC System Using Neural Network**,” Y. K. Mishra, J. P. Saini and S. Mathur, *Proc. International Conference on Computer Application in Electrical Engineering – Recent Advances*, Univ. of Roorkee, Vol. 1, pp. 454-458, 1997.
36. “**Recovery of Noisy ECG Signal Using Artificial Neural Network**,” J. P. Saini and M. C. Srivastava, *Proc. International Conference on Biomedical Engineering*, C.I.T. Coimbatore, vol. 1, pp. vii9–13, Dec. 12-14, 1996.

Other National Conferences / Seminars

37. “**LP Mode Field Intensity of Optical Waveguide by Galerkin Methods**,” Y. Prajapati, Vivek Singh and J. P. Saini, *Proc. Optical and Wireless Communication*, DAVIET, Jalandhar, India, Nov. 27–28, 2008.
- 38 “**ECG Analysis Using Artificial Neural Networks**”, Shahnaz Ayub, J. P. Saini, and Pramod Kumar, National Workshop *on Scientific Computing in Biomedical Engineering, SCOMBME 2008*, VLSI Hindustan College of Science & Technology, Mathura, 30–31 August, 2008.
39. “**Modal Characteristics of Optical Bragg Waveguide with Alternating Cladding Layers**,” Y. Prajapati, Vivek Singh and J. P. Saini, *Proc. National Conference on Recent Trends in Electronics & Communication*, Tangori, Mohali, India, pp. 281–284, April 10–11, 2008.
- 40 “**Wavelet Neural Network for Temporal Behaviour of Speech**,” Awasthy Neeta, Saini J. P. and Chauhan D. S., *Proceedings of Conference on Modern Trends in Electronics and Communication Systems, MTECS 2008*, AMU Aligarh, pp 43-46, March 8-9, 2008.
41. “**Design of Fuzzy CMOS Chip**”, J. P. Saini, S.N. Sharan, Ekata, and Neeraj Gupta, National Conference *on DTVC 2007*, VLSI Society of India (VSI), NIT Hamirpur, 14 – 15 May, 2007.
42. “**Maximum Likelihood Viterbi Algorithm and MAP Algorithm for Turbo Codes**,” Navneet Upadhyay and J. P. Saini, *National Conference on Emerging Trends in Technology Management-EMTECHMAN*, GLAITM, Mathura, Feb. 18-19, 2006.
43. “**Clinical Aspects of Artificial Neural Networks**,” V.K. Deolia, D. S. Gangwar, J. P. Saini and D. S. Chauhan, *National Conference on Emerging Trends in Technology Management-EMTECHMAN*, GLAITM, Mathura, Feb. 18-19, 2006.
44. “**Study on Development of Microstrip Radiators**,” D. K. Srivastava, R. C. Saraswat, B. R. Vishwakarma and J. P. Saini, *National Conference on Emerging Trends in Technology Management-EMTECHMAN*, GLAITM, Mathura, Feb. 18-19, 2006.
45. “**A New Polynomial Perceptron Structure for Channel Equalization**,” J. P. Saini, *National Conf. TIET. COM – 2000*, Thapar Inst. of Engg. & Tech., Patiala, pp. 254-257, Nov.14-15, 2000.
46. “**ANN application in Channel Equalization: An Overview**,” J. P. Saini, et. al., *IETE Conf. on Intelligent Systems – 2000*, M.I.T.S. Gwalior, pp. 41-46, Feb. 5 – 6, 2000.
47. “**Design of Fuzzy Logic Controller**,” J. P. Saini, et.al., *IETE Conf. on Intelligent Systems – 2000*, M.I.T.S. Gwalior, pp. 47-56, Feb. 5 – 6, 2000.
48. “**Fading Channel Equalization: Artificial Neural Network Approach**,” J. P. Saini and M. C. Srivastava, *National Seminar on Emerging Trends in Electronics and Computers*, Dr. R.M.L. Avadh Univ., Faizabad, Mar. 11 – 12, 1999.

49. **“Pulse Processing Time Discriminant Neural Network for Signal Demodulation,”** J. P. Saini, et. al., *Proc. National Conference on Information and Communication Tech.*, M.B.M. Engg. College, J. N. Vyas Univ., Jodhpur, pp. 169 – 173, Mar. 23 – 24, 1998.
50. **“ANN Based Approach for Vector Quantization of Speech Signals,”** Y. K. Mishra, J. P. Saini, S. Mathur and M. C. Srivastava, *Proc. National Conference on Information and Communication Technology*, M.B.M. Engg. College, J. N. Vyas Univ., Jodhpur, pp. 97 – 100, Mar. 23–24, 1998.
51. **“A Neural Network Implementation for Signal Encryption Using Transform Domain Technique,”** S. Mathur, J. P. Saini, Y. K. Mishra and M. C. Srivastava, *Proc. National Conference on Information and Communication Technology*, M.B.M. Engg. College, J. N. Vyas Univ., Jodhpur, pp. 93–96, March 23 – 24, 1998.
52. **“Diagnosis of Viral Fever” An ANN Approach,”** Y. K. Mishra, J. P. Saini and S. Mathur, *Conference on Impact of Electronics on Automation : The Indian Scenario*, Univ. of Roorkee, Jan. 20 – 21, 1997.
53. **“ANN Based Vector Quantization for Speech Coding,”** J. P. Saini, et. al., *Conference on Impact of Electronics on Automation: The Indian Scenario*, Roorkee Univ, Jan. 20–21, 1997.
54. **“Fuzzy Logic Concepts and Techniques for Engineering with an Application to PID Controller,”** R. K. Nagaria and J. P. Saini, *Proc. Sixth Annual Conf. on Vijnana Parishad of India*, B.I.E.T. Jhansi, Dec. 26–28, 1996.
55. **“Signal Encryption with Self Error Correcting Capability Using Discrete Cosine Transformer,”** S. Mathur, J. P. Saini and M. C. Srivastava, *Proc. National Conf. on Communication Highways*, M.A.C.T. Bhopal, pp. 76 – 79, Oct. 11 – 13, 1996.
56. **“Sickness in Small Scale Industries: Problem of Entrepreneurs,”** *Proc. Workshop on Opportunity Profiles and Science and Technology Entrepreneurship Development*, K.N.I.T. Sultanpur, Sept. 21 – 22, 1990.
57. **“A Novel Low Cost Communication System”,** J. P. Saini and R. S. Prasad, *National Symposium on Energy Trends in Communication Tech.*, Jodhpur Univ., Mar. 16–17, 1990.